

# EXCAVATIONS AT UNDERHOULL, UNST, SHETLAND

by ALAN SMALL, F.S.A.SCOT.

## INTRODUCTION

THE density of ancient monuments in Shetland is well-known<sup>1</sup> and the Island of Unst (fig. 1), the most northerly inhabited isle of the group, excluding Muckle Flugga lighthouse, is no exception. Although a number of the more obvious sites were dug into many decades ago for relics to sell in England, most lie relatively undisturbed, as extensive areas of the island have never been deeply ploughed. Excavation commenced in 1962 at the invitation of R.A.F. Saxa Vord whose education officer, Flt.-Lt. Sawyer, was keen to see a practical interest taken in the archaeology of the island. While the Royal Air Force have continued as the chief organisers of the excavation during the succeeding four seasons' work, the enthusiasm of the islanders has led to the formation of the Unst Field Club which has contributed largely to the success of the project; this, in turn, has grown big enough to require the assistance of students from Aberdeen University Geographical Society.

The selection of a site was based on the belief of some islanders that prehistoric structures existed at a previously unrecorded site in the Westing. The site is located on the E. shore of Burga Sand, a small bay in the SW. part of the island (fig. 1).

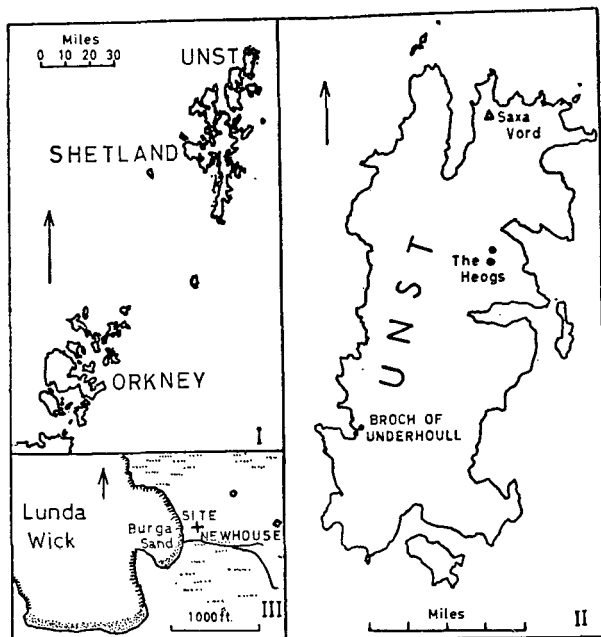


FIG. 1. General location of site

<sup>1</sup> *Inventory of Shetland.*

It lies some 45 yds. inland on the margin of a narrow, gently rising area of well-drained land along the cliff-tops. Between the site and the Broch of Underhoull the land rises much more steeply, in fact too steeply to permit settlement (Pl. XXXII, 1). Surface indications were almost negligible, the hummocky nature of the terrain being suggestive of an old field boundary somewhat masked by solifluction and soil creep features, although a number of stone piles, apparently collected to improve the surrounding pasture, suggested a stonier soil than in the contiguous fields. Although the area had been cultivated in the past it has not been dug over for many years but the number of relics recorded during excavation in the upper 9 in. of the soil suggested that many had probably been found before and since lost, which would account for the local belief in the antiquity of the site.

The Broch of Underhoull (fig. 2), occasionally known also as the Broch of Overbrough, stands on a rock outcrop some 250 yds. to the E. of Burga Sand, about 160 ft. above sea-level and commanding extensive views in all directions although somewhat restricted by rising land towards the NE. On the SW. the steepness of

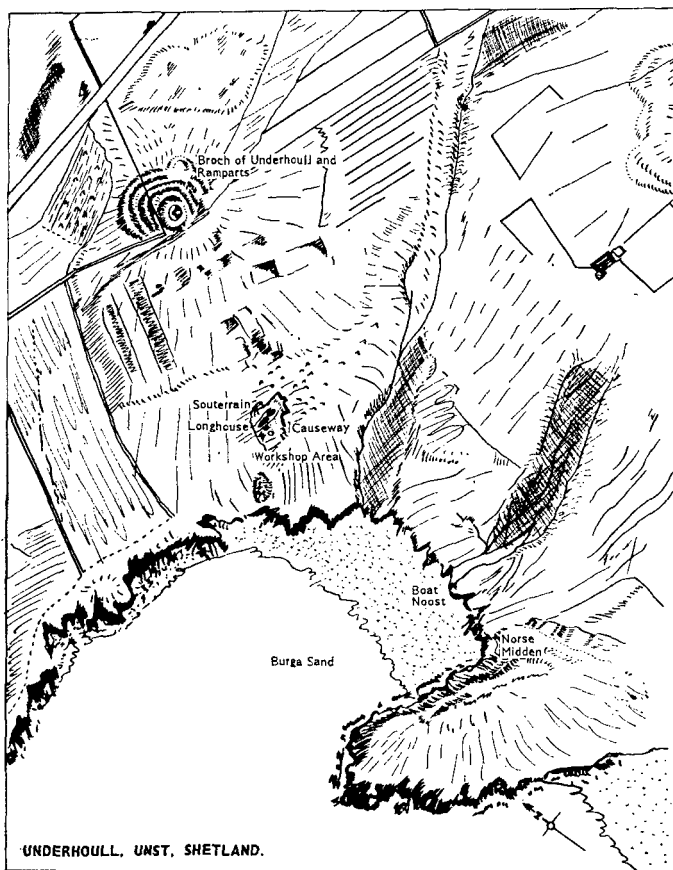


FIG. 2. Sketch plan of site area. (Scale approx. 1 in. = 400 ft.)

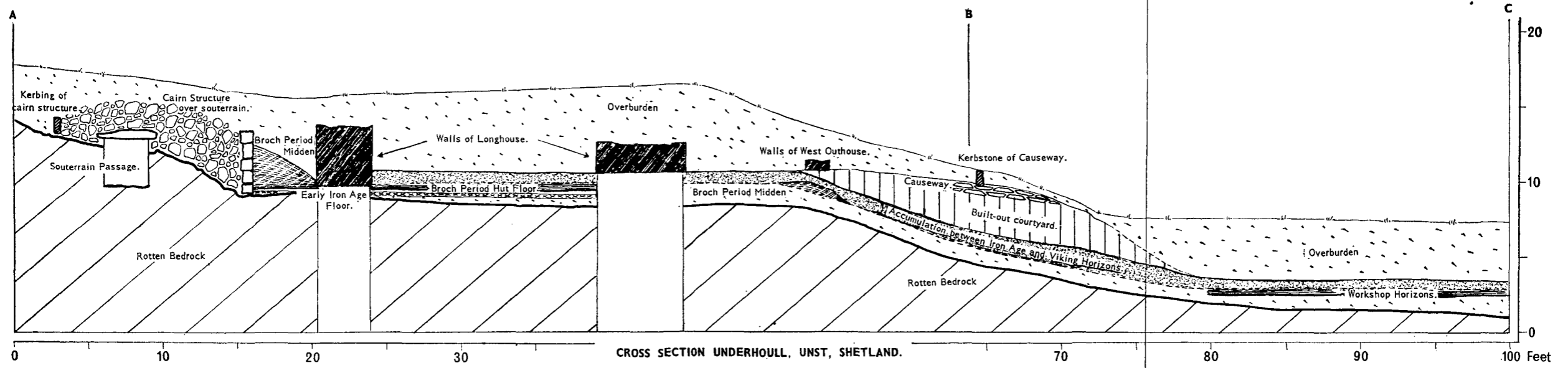


FIG. 3. Cross-section of site (N.-S.) along line shown in fig. 10

the rock outcrop provides admirable defence while the remaining sides are protected by two concentric earthen ramparts separated by a wide ditch. The site is now completely grassed over but sufficient traces are visible to show that it is a normal broch some 55 ft. in external diameter with walls nearly 15 ft. thick at the base.<sup>1</sup>

In 1865 Irvine noted signs of another structure lying outside the broch to the E. and suggested that this might be later than the broch.<sup>2</sup> No surface evidence has been found during the present excavation, though air photographs support Irvine's observation. Another site some 200 yds. to the S. of the broch, near Newhouse, has also been noted, but there is no previous record of any remains lying to the SW. between the broch and the sea.

After four seasons' excavation, three distinct periods of occupation have been recognised on stratigraphical evidence supported by an abundance of small finds. The earliest occupation of the site is associated with a hut floor and attached souterrain datable to the early Iron Age. The second occupation, indicated by a hut floor and workshop, has revealed broch period artifacts, while a Viking farmstead was established on the deserted ruins of this settlement in the ninth century and survived for some considerable time before it became ruinous<sup>3</sup> (fig. 3).

#### THE EARLY IRON AGE SETTLEMENT

On a site where sequent occupation covers some two thousand years, where the rate of build up of overburden is small and where building stone is none too easily obtainable, it is natural to expect the extensive destruction of the remains of the earlier periods. Further, the massive remains of the Viking period are some of the finest of their type in Scotland and the necessity to preserve them has prevented the full excavation of the Iron Age horizons. However, the fragmentary remains of the primary occupation suggest a hut with a flat floor paved with flagstones. This structure is apparently approached by a kerbed pathway 39 in. wide, some 7 ft. of which has been exposed to the SE. of the hut (fig. 4).

To the NW. of the hut and apparently attached to it lies a souterrain which sweeps round for 26 ft. in an almost complete semicircle. The W. end has been very much destroyed by quarrying for building stone for the Viking longhouse. In fact there can be little doubt that the unusually large boulders used as foundation stones in the Viking structure at the point nearest the souterrain are either roof or side-wall stones plundered from the earlier structure. The earth-house has been constructed by digging a trench some 2 ft. into the rotted bedrock of the hillside sloping gently up from the hut floor. Large stones were then used to cover this trench which is about 3 ft. in average width. Where the loosely compacted material would not support the weight of these stones, large side stones or three courses of flattish stones were occasionally used to support the roof stones. An elaborate entrance was constructed protected by two pillars on either side with well coursed neat dry-stone walling sweeping outwards with a sharp curvature to left and right

<sup>1</sup> *Inventory of Shetland*, Vol. III, 133.

<sup>2</sup> *Inventory of Shetland*, Vol. III, 133.

<sup>3</sup> A full catalogue of small finds recovered during the excavation has been prepared and copies deposited in the University library, Aberdeen, the National Museum of Antiquities of Scotland and Shetland County Museum.

(Pl. XXXII, 2). A double wall existed on the W. side. The forecourt and the entrance to the souterrain are roughly paved but there is hardly any paving in the interior. The construction was completed by covering the souterrain cairn-fashion with a mound of smaller stones retained by a kerbing of large stones set on edge.

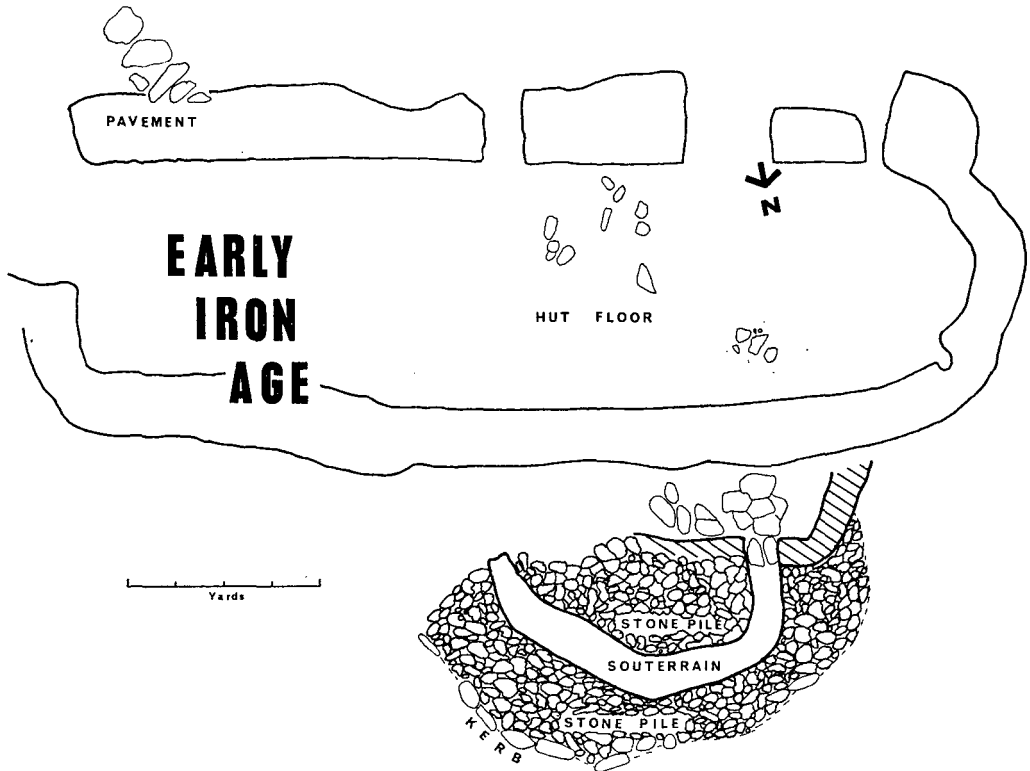


FIG. 4. Early Iron Age structures with longhouse outline superimposed

The diameter of the area enclosed by this outer kerbing had been approximately 24 ft.

Wainwright has admirably surveyed the literature on the functions of souterrains<sup>1</sup> and this discovery does not alter radically the picture which he presents. Certainly the Underhoull souterrain could not have been used as a dwelling place as it is only just large enough for a man to crawl into, and once in, it would be impossible for him to turn round. With its elaborate entrance structure it would have been an obvious feature in the settlement and consequently of little defensive value. The difficulty of entrance also seems to be a complication were it to be used for storage. About many Scottish souterrains, it is agreed that they had an 'enormous substanti-

<sup>1</sup> Wainwright, F. T., *The Souterrains of Southern Pictland* (London, 1963), 9-19; and 'Souterrains in Scotland', *Antiquity*, xxvii (1953), 219-32.

ality',<sup>1</sup> being often a more durable structure than was built above ground. This is indeed only partially true of this particular example where the minimum amount of stone is used to support the roof and stabilise the sides, which even when in use could not have offered great confidence to anyone inside. The cairn-like covering, however, suggests a degree of permanence and solidity.

No relics were recorded from the interior of the souterrain with the exception of a few scattered fragments of broch-period pottery, being the contents of the scatter from the midden which had been heaped against the entrance at a later date. The signs are that the structure got very little use as there was no indication of rubbing

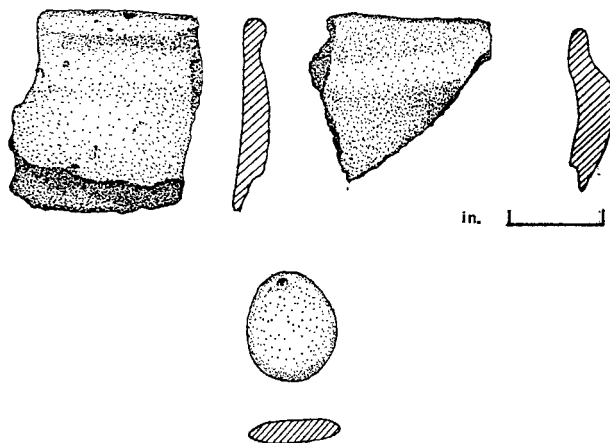


FIG. 5. Pottery and pendant from souterrain horizon

against the bare, weathered bedrock sides (experiment showed that rubbing would occur with a person crawling in or largish objects being dragged or pushed into the passage). From the floor in front of the souterrain several fragments of pottery were recovered. On stratigraphical grounds these were clearly separated from and lying below the later midden. Three pieces are significant (fig. 5). One is a thick, reddish, heavy ware of roll structure of very poor quality; it had a high steatite content and a rim section such as was found at Jarlshof.<sup>2</sup> The others are rim sections of a better and harder ware containing much finer particles of steatite, with finely carinated profiles. This is again paralleled at Jarlshof on the hut-circle and souterrain horizon.<sup>3</sup> The only other relic of note from this period is a small pendant which lay between the kerb stones at the margins of the souterrain. A natural serpentine pebble  $1\frac{1}{4}$  in. in length by 1 in. at its broadest and obviously selected for the beauty of its markings has been highly polished. The drilling of the suspension hole has been started with considerable precision from each side but never completed, perhaps due to the

<sup>1</sup> Burton, J. H., *The History of Scotland from Agricola's Invasion to the Revolution of 1688*, Vol. 1 (Edinburgh and London, 1867).

<sup>2</sup> Curle, A. O., 'An Account of Further Excavation at Jarlshof, Sumburgh, Shetland, in 1932 and 1933 on behalf of H.M. Office of Works', *P.S.A.S.*, LXIII (1928-9), 292, fig. 57 (8).

<sup>3</sup> Hamilton, J. R. C., *Excavations at Jarlshof, Shetland* (H.M.S.O., 1956), 37, fig. 18 (3); 38, fig. 20.

manufacturer dropping it among the stone pile of the souterrain and never recovering it.

On stratigraphical grounds this complex must pre-date the superimposed broch-period structures and the pottery, being analogous to that of the Jarlshof souterrains (although these are of a somewhat different construction), suggests an Early Iron Age date.

#### THE BROCH PERIOD

There is a definite stratigraphical break between the hut of the souterrain builders and the more extensive remains of the broch period. On this horizon, situated directly above the early Iron Age hut, are the fragmentary remains of the paved floor of another hut in which one post-hole has so far been definitely established (fig. 6). It has been impossible to estimate the original dimensions of the building as it extends beneath the important Viking buildings, but the presence of two separate hearths suggests a sizable structure. It also appears to be much larger than the earlier hut. On the SE. side a small section of kerbed paving overlapping the Early Iron Age paved approach suggests a similar layout of settlement (Pl. XXXIII, 1). To the N. of the hut a large midden deposit had accumulated against the

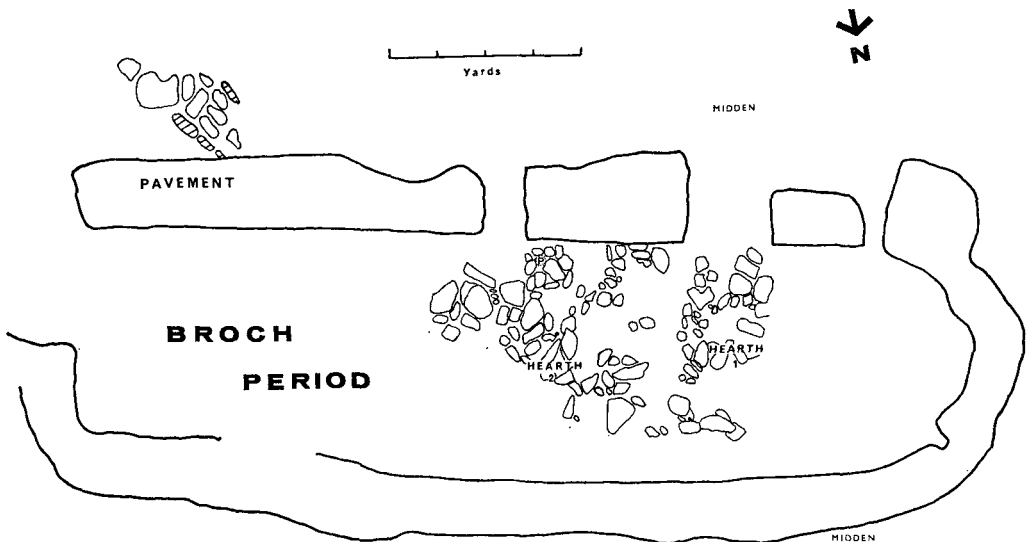


FIG. 6. Broch-period horizon with longhouse outline superimposed

souterrain entrance which had been partly blocked by a large stone. This midden, which consisted chiefly of peat ash, contained numerous relics and was distinctly stratified, showing its method of build-up and establishing clearly the stratigraphical relationship of the structures. The midden sloped down towards the W. A little of the material had overflowed the blocking stone into the souterrain and a few fragments had even landed on top of the cairn structure covering the earth-house. Peat ash also formed a thin layer over much of the hut floor, again containing relics of

household goods, which were more plentiful and of a similar nature in an area to the SW. of the site.

From this SW. area, some 55 ft. distant, the pottery was of considerable interest. It varied in colour from black, grey, through browns and orange to red and also had a considerable variation in texture from very fine grained clays to rough ware, with a variety of tempering agents, the most common of which was steatite of varying grain size. Nodules of clay from the area also revealed a wide variety of colour suggesting that the raw materials had been collected widely over the island. Typologically the pottery can be divided into three groups. The bulk of the material recovered was fragments of large ovoid cooking pots with everted rims which often

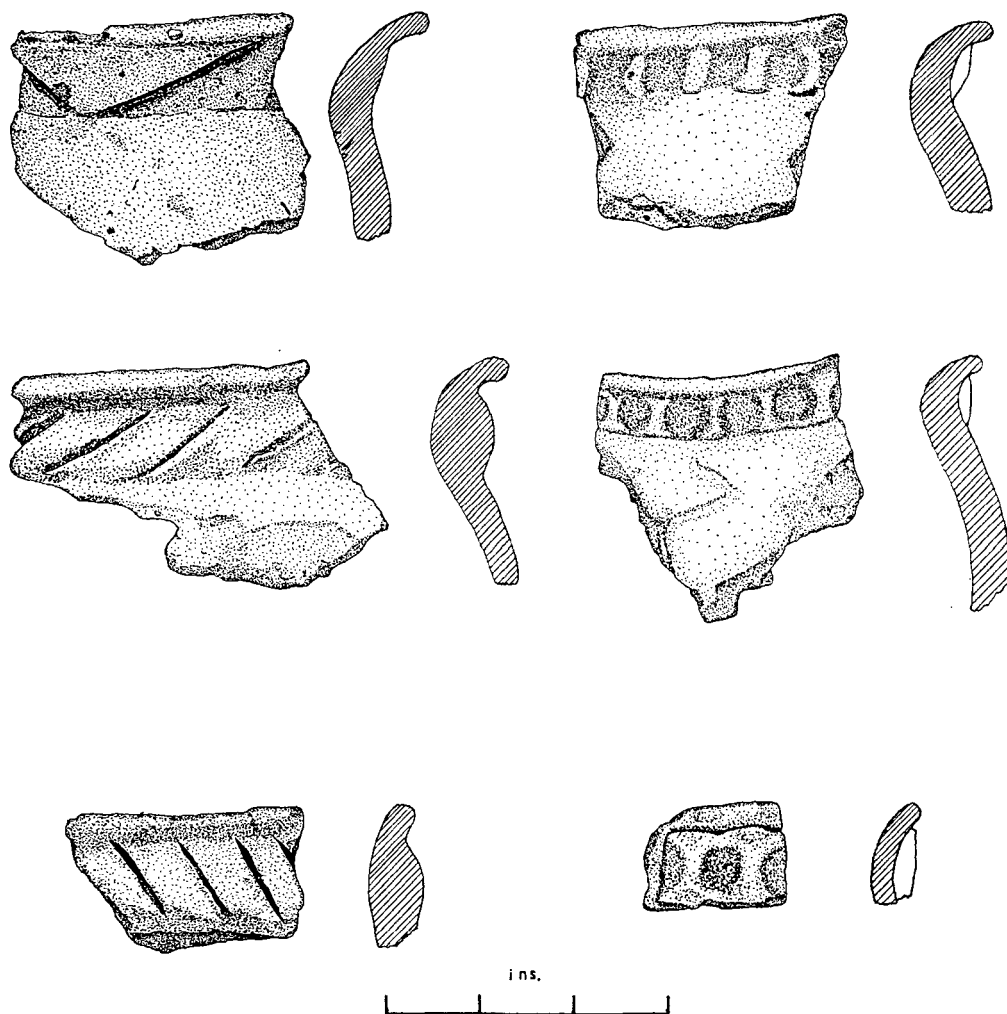


FIG. 7. Pottery from Broch-period horizon (group A)



had an applied neckband with a variety of diagonal line or finger-pinched decorations (group A) (fig. 7, Pl. XXXII, 3). Some of the ware has exact parallels to that found at Jarlshof<sup>1</sup> and similar material is recorded from other Shetland sites at Olnesfirth,<sup>2</sup> Hillswick,<sup>3</sup> Newhouse (see above, p. 227) and Skelberry. The fragment from the last site has a neckband with finger-pinched design and is preserved in the Shetland County Museum. This pottery, which Hamilton has traced to the area around Scapa Flow in Orkney with antecedents further S.,<sup>4</sup> can be accurately dated to the 'Broch Period' from the first century B.C. to the middle of the second A.D.

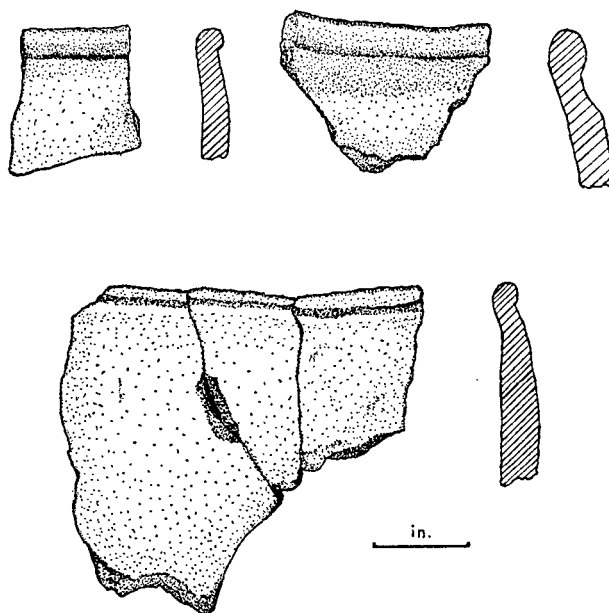


FIG. 8. Pottery from Broch-period horizon (group B)

Hamilton also draws attention to a second variety of pottery found in Shetland broch sites – a native ware rich in steatite. A number of sherds of this material were recovered mostly with straight flat or only slightly everted rims (group B). Most of this ware is plain and undecorated but a few fragments which appear to belong to this group had a number of incised parallel lines on the body of the vessel. The third group of pottery (fig. 8) was characterised by a roll rim or with a slight incision below the rim to give the impression of a roll rim (group C). This ware was usually of a finer quality than that with the applied band. By their find spots there can be no doubt that these three types of pottery are contemporaneous on this site. It is important to

<sup>1</sup> Hamilton, J. R. C., *op. cit.*, 46, fig. 25.

<sup>2</sup> *P.S.A.S.*, LXXI (1936-7), 23. Illustrated in *P.S.A.S.*, LXXXI (1946-7), 192, fig. 1, Nos. 5-8.

<sup>3</sup> Coughtrey, M., 'Notes on Materials Found in a Kitchen Midden at Hillswick, Shetland, with special reference to long-handled combs', *P.S.A.S.*, IX (1870-2), 118-50.

<sup>4</sup> Wainwright, F. T. (ed.), *The Northern Isles* (Edinburgh and London), chap. vi, by J. R. C. Hamilton, 53-90.

note that in the area to the SW. of the hut where thousands of sherds were found in a small area, and where there was no evidence of midden deposits, not one single complete vessel nor sufficient fragments to reconstruct a complete or even a large section of a vessel were recovered. Thus it was obvious that the density of considerable quantities of unrelated potsherds was a significant feature, particularly as nodules of unworked and partially worked clay were discovered here and not elsewhere on this horizon.

A similar pattern was observed in recording fragments of stone vessels – even contiguous fragments were from different objects. From this area none of the sherds showed signs of heating and a single fragment of a large dish in metamorphosed sandstone was in mint condition – the peck marks of the forming tool showing no signs of smoothing or wear. This is suggestive of its being broken during manufacture. Many pieces of black pumice occurred in the same area often impregnated with the red-brown clay of the potsherds. While some of the smoothing of the pumice lumps is no doubt due to marine action, other worn, clay-impregnated faces indicate their having been used to smooth off pottery vessels as for example at Eilean an Tighe in North Uist.<sup>1</sup> The pumice, of course, is not native to Shetland but has drifted by sea, most likely from Iceland or probably from Jan Mayen,<sup>2</sup> to the shores of Scotland where it was picked up by the early settlers. This same pumice is also found on the western shores of Norway and Denmark.

Evidence of the use of metal was also extensive. Several hundredweights of bog iron lumps, some of considerable size, lay within an area of some 200 sq. ft., with particular concentrations near a hearth suggesting that the raw material had been stored in piles; lumps of slag were numerous and a number of what at first appeared to be clay moulds were also recorded. These objects varied in size from 2 to 8 in. in length and slightly less in breadth with an exterior surface of poor quality red clay containing large fragments of steatite. Attached to the interior of this  $\frac{3}{8}$  in. thick clay was a layer of slaggy iron. It seems that these iron-impregnated clay objects represent the clay linings of pits in which the iron melt was collected. Nothing can be deduced from these fragments as to the nature of the finished product but it does suggest that iron was used fairly extensively and that not only weapons but also iron vessels and nails, some of which have been recovered, were manufactured.

This pattern of pottery, stone and iron finds suggests several possible interpretations. The nature of the scatter ruled out a midden accumulation – a conclusion supported by the lack of animal bone and peat ash. An alternative suggestion is that most of the Iron Age horizons were cleared by the Vikings, resulting in the accumulation of a large concentration of unrelated Iron Age finds in a limited area. There is, however, a clear stratigraphical break of from 5 to 7 in. of barren soil between this rich Iron Age horizon and the Viking occupation layer. Further, the presence of two undisturbed hearths rules out the possibility of Norse clearance.

The presence of large quantities of bog iron, iron slag and iron-impregnated clay

<sup>1</sup> Scott, Sir W. Lindsay, 'Eilean an Tighe: A Pottery Workshop of the Second Millennium B.C.', *P.S.A.S.*, LXXXV (1950-1), 12.

<sup>2</sup> I am indebted to Dr Sigurdur Thorarinnsson, Museum of Natural History, Reykjavik, for confirming my conclusions on this point.

linings suggests manufacturing, which is confirmed by nodules of unworked and partially worked clay. It follows therefore that the pottery fragments and fragments of stone vessels are reject specimens or objects broken during manufacture. Detailed examination of the pottery reveals several examples of unsatisfactory firing and occasionally unsuccessful attempts to attach the neckband, confirming the opinion that this has been a workshop area or building. The tools used in this small factory seem to have been mainly of stone – chisels and hammers all of local rock. Conclusive evidence of a building is lacking. Only at one place did some 7 ft. of stone rubble in a linear form suggest that it may at one time have been part of a wall from which all the large stones had been plundered. With a mere 6 in. separating the Iron Age and Viking horizons it is not improbable that the Norse prised any suitable building stones from the soil for their own requirements. On the whole, however, it would seem that an open working area is the more probable with only limited shelter available.

However, the apparent pattern is one of a hut with a large working area nearby which can be accurately dated by the pottery to the same period as the Broch of Underhoull above. The distance between the hut and its associated workshop can be explained by the nature of the terrain. As the cross-section reveals, the ground surface in Iron Age times had two small flat areas, natural structural benches, separated by a short difficult slope unsuitable for building and the hut was constructed on the upper bench while the workshop occupied the lower. A narrow section cut through the floor of the W. outhouse on the Norse courtyard confirmed this short sharp slope and revealed a midden deposit scattered down the slope from the hut. The midden contained large quantities of peat ash, fragments of charcoal, occasional pieces of shell and numerous fragments of pottery similar in character to that from the workshop and the hut itself. The character of the cordoned-rim pottery is exactly the same as that found at Newhouse to the S. While the exact relationship of these sites to the broch cannot be determined without the excavation of the broch, the settlement pattern of this area at the turn of the millennium does appear to revolve around a central defensive nucleus with a halo of huts located in the more fertile areas. Indeed the environmental controls played a very important part in accounting for the distribution of settlement in Iron Age times throughout Shetland. These geographical controls and their implications which have considerable similarity to those of Viking and Later Norse times will be examined in the discussion of the Viking long-house.

Notable among the prolific small finds from this horizon (fig. 9) are two strike-a-lights and carefully made serpentine knives. Five items of jewellery were discovered, two small pale-yellow amber beads, a fragment of an armlet in serpentine and a small piece of one in soapstone and part of a cannel-coal finger ring. While most items which the community required could be obtained locally, amber and cannel coal strike jarring notes, although Wainwright and others have clearly demonstrated that trade and piracy brought extraneous matter to the Northern Isles at this period.<sup>1</sup>

<sup>1</sup> For example see Hamilton, J. R. C., 'Brochs and their Builders', in Wainwright, F. T., *The Northern Isles*, loc. cit.

Several small serpentine pebbles varying in size from  $1\frac{1}{4}$  to  $3\frac{1}{2}$  in. were also recovered. They were rounded and brightly polished and all of regular circular or rectangular shapes. Their significance is problematic. They may merely have had a decorative attraction as some had a vein of a reddish mineral running through the dark green stone. However, it is well-known that serpentine was regarded as 'the cold stone' in

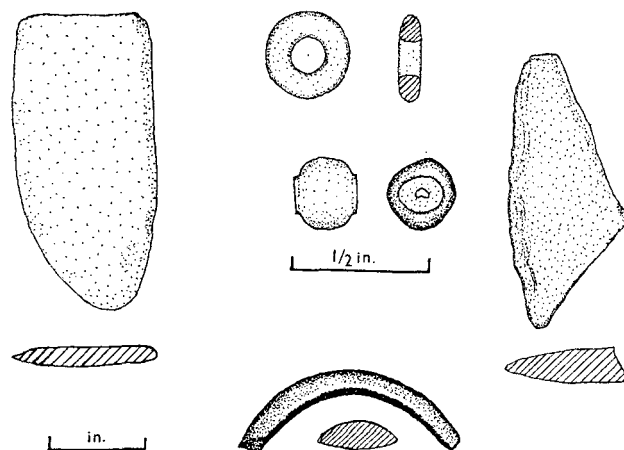


FIG. 9. Amber beads, serpentine knife, scalloped scraper, and cannel coal finger ring from Broch-period horizon. (Note that scale for beads is  $3\times$  other objects)

the islands in medieval times and placed on the back of the neck it alleviated headache and nose bleeding. Could this custom have been in existence since Iron Age times?<sup>1</sup>

#### THE VIKING SETTLEMENT

On stratigraphical grounds it is clear that the site was deserted for some considerable time before reoccupation by the Vikings as some 5 to 7 in. of barren soil, washed down the hillside from the broch, separate the upper Iron Age and Norse horizons. The selection of the same site not only confirms the judgment of Iron Age settlers in establishing their homesteads in relation to, but without sacrificing, good arable land while maintaining close proximity to the other main sources of food – namely the sea, the cliffs and the inland grazing areas. The ruined remains of the Iron Age settlement would also have provided a valuable source of building stone, as is witnessed by the almost complete destruction of parts of the earlier underlying structures and the use of a broken trough quern as a kerbstone in a primary Viking kerbed pathway (Pl. XXXIII, 2). It seems likely that this trough quern had been recovered from the structures of the souterrain builders as, although this type of quern is often found in earlier contexts, there is no evidence of any pre-souterrain period on this site. Additional building stone was probably obtained from the ruins

<sup>1</sup> Small, A., *Excavations in Unst* (Lerwick 1965, 2nd ed. 1966) for illustrations of these and a number of other small finds.

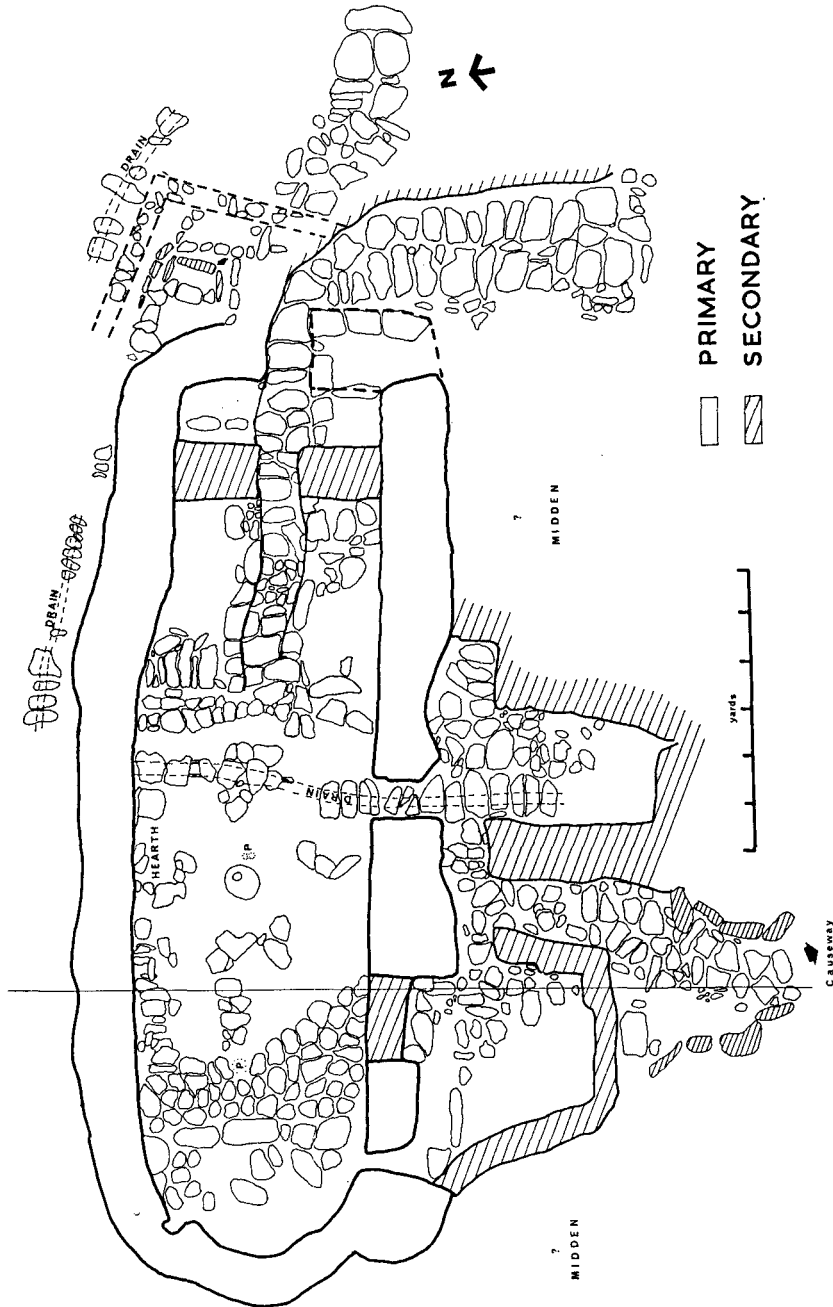


FIG. 10. The Norse horizon with line of cross-section illustrated in fig. 3

of the broch above and the storm beach below. With the Norse structure being much larger than those of the earlier periods careful site preparation was required on the limited area of the upper structural bench. To obtain a level site over the whole length it was necessary to dig back into the hillside at the E. end on the N. side and in this area the foundations rest on the rotted bedrock, whereas over most of the rest of the house they are well above the relatively undisturbed Iron Age horizons. Another problem existed on the S. side. With the need for a courtyard area the width of the bench was too small and for a short distance a section revealed that the ground had been built up artificially to extend the bench beyond the Iron Age midden.

The basic unit of the settlement is a longhouse some 56 ft. in internal length and with a maximum central breadth of 15 ft. with the long walls sweeping inwards at their extremities to give almost semicircular end walls (fig. 10). This gives the house an almost boat-like shape oriented along the contour in a WSW.-ENE. direction. While this supports Brøndsted's concept of building end on to the direction of the prevailing wind<sup>1</sup> it seems more reasonable to suggest that the physical nature of the site facilitates this orientation rather than any other. Field examination of sites in Færoe and Iceland confirms the opinion that the sheer nature of the terrain in difficult insular landscapes, was often the controlling factor in the orientation of the primary settlement.

The boat-shaped building is characteristic of Phase I (A.D. 800-850) of the Norse settlement at Jarlshof<sup>2</sup> where straight walls were featured from Phase II onwards, and similar structures occur at a number of other sites in Færoe and Iceland. At Kvívík<sup>3</sup> and Fuglafjørður<sup>4</sup> buildings of similar shape and proportions have been published and dated to the tenth century while an interesting unexcavated site at Utí i Grøv shows the development of outhouses in a similar fashion to the Underhoull site. It must be remembered that in the Færoes the technique of building boat-shaped long walls continued into the middle ages but the small finds from both Kvívík and Fuglafjørður indicate a tenth-century Viking date. The same technique is common in Iceland at such sites as Hús Hólmi, Isliefsstaðir,<sup>5</sup> and Skallakot.<sup>6</sup>

The building technique is similar to that associated with houses throughout the Viking North Atlantic insular province,<sup>7</sup> with dry-stone walls, varying in thickness from 3 to 4½ ft. and preserved to a similar height giving a smooth stone face in the interior while alternate courses of turf and stone on the exterior faces would have given a more wind-proof structure. The rotting away of the turf necessitated periodic rebuilding of the walls with consequent thickening to more than 6 ft. particularly on the W. and N. sides, which are the most exposed to winter storms. This rebuilding

<sup>1</sup> Brøndsted, J., *The Vikings* (London, 1960), 219.

<sup>2</sup> Hamilton, J. R. C., *Excavations at Jarlshof, Shetland* (H.M.S.O., 1956), 106-9.

<sup>3</sup> Dahl, S., 'Fornar toftir í Kvívík', *Heiðurist til Rasmus Rasmussen á 80 ára føðingardegnum* (Tórshavn, 1951); and 'A Survey of Recent Archaeological Investigations in the Færoes', in Small, A. (ed.), *The Fourth Viking Congress* (Edinburgh, 1965), 137-9.

<sup>4</sup> Dahl, S., 'Toftarannsóknir í Fuglafirði', *Froðskaparrit*, Bok 7, 118-45; and in Small, op. cit., 138-40.

<sup>5</sup> Stenberger, M., 'Isliefsstaðir, Borgarfjarðarsýsla', in *Fortida Gærdar í Island* (Copenhagen, 1943), 145-70.

<sup>6</sup> Russell, A., 'Skallakot Þjórsárdalur' in Stenberger, M., op. cit., 55-71.

<sup>7</sup> Erlingsson, T., *Ruins of the Saga Time* (London, 1899), 38.

is confirmed by the discovery of fragments of broken soapstone vessels of Norse character used as packing in the sections of the rebuilt walls. Little can be deduced of the roofing structure as only two post-holes have been identified. Their location along the central line of the house suggests that they supported a large *mónsás* or through-beam as is found in old Norse houses designed in *Lafteteknikk*. This would be a valuable building method in tree-less Shetland as it needs much less big timber to support the roof if one hefty beam is available. The E. post-hole apparently contained two thin posts, probably strapped together, supporting the hypothesis of a shortage of heavy timber. Nor does the width of the house justify a second row of posts to support the roof. A close parallel to this exists at the unexcavated site at Hús Hólmi in Reykjanæs, Iceland where the Ögmundurhrafn lava flow from the eruption of 1300 engulfed a farmstead and a central row of post holes is clearly visible today.

With the building lying along the contour, water seeping down the steep slope behind the house was a considerable problem and a drainage system was built along the N. wall of the house. The presence of the earlier souterrain in the NE. corner provided adequate drainage there and a slab covered drain solved the problem to the E. Inside the house a small drain carried seepage from the N. wall foundations straight across the house and out through the front door. There is no indication that this drainage system is in any way connected with water supply as was the case at Brattahlid, or Narssaq<sup>1</sup> in Greenland.

The living accommodation in the house lay in the central and E. parts and was approached by a narrow 29 in.-wide doorway in the centre of the S. wall. Destruction and rebuilding have made it impossible to decide whether there was a doorway in the E. end of the original house. Large stones, some set on edge, may have supported sleeping benches along the walls in the E. third of the house. To the W. of the central doorway lay the living room, where fragments of a stone bench stretch along the N. wall on either side of a hearth on a rough setting of stones. The displacement of the hearth from the more normal central position can be accounted for by the central location of the roof supports and the danger of their catching fire. A rotary quern occupied a central position.

The W. end of the house forms a distinct unit. It is approached from the courtyard by a broad doorway 5 ft. wide and has obviously been used for animals. It is roughly paved and slightly raised above the level of the rest of the house. Speaking of Sostelid, Hagen described byres roughly paved with flagstones and describes it as a 'common enough feature in SW. Norway during the Migration period'.<sup>2</sup> A similar feature is recorded at the tenth-century site at Kvívik in Færoe.<sup>3</sup>

In other parts of the house paving is only used to cover drains or in parts getting heavy use. The remainder had a beaten earth floor without paving, which has significant advantages. The fire is kept alight as long as possible, not only to avoid the difficulties of relighting, but also as a hard beaten earth floor is a good heat

<sup>1</sup> Vebæk, C. L., 'An Eleventh-Century Farmhouse in the Norse Colonies in Greenland', in Small, A. (ed.), (1965), op. cit., 115.

<sup>2</sup> Hagen, A., *Studier i Jernalderens Gårdssamfund* (Oslo, 1963), 355.

<sup>3</sup> Dahl, S., op. cit. (Tórshavn, 1951).

conductor and gives a simple form of central heating, whereas paving stones tend to be cold. Paving in the animal end of the house, however, would facilitate cleaning, and in this connection a narrow gap in the wall in the SW. corner may either have been used for ventilation or for cleaning. As will be shown later, this is close to the probable site of a midden.

The flat paved forecourt of the house to the S. is approached by a long kerbed and paved causeway (Pl. XXXIII, 3). With the building out of a flat courtyard during the initial levelling of the site, the causeway, mounted on a matrix of stone and earth, was essential to give a reasonable slope for animals to negotiate. One of the kerbstones of the causeway is the fractured trough quern mentioned above<sup>1</sup> (see p. 235). The unconsolidated nature of this built-up forecourt led to problems of subsidence and the paving had been relaid several times. In places where it was subjected to particularly heavy wear and subsidence, as in the approaches to the doorway, there are signs of three levels of paving being needed to maintain a level approach.

#### *Geographical Considerations*

From the small finds, a clear picture of the economy has been established. Apparently the farmers were basically self-sufficient, obtaining all their requirements of food and shelter locally. Their sources of building stone have already been

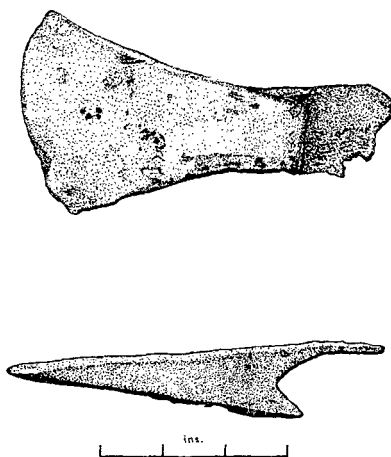


FIG. 11. Viking axe from midden on beach

outlined, while the timbers which supported the roof may have been imported or perhaps driftwood from the nearby beaches; an apparent shortage of timber has already been noted, however, and it seems that even in the so-called 'little climatic optimum' there was never any significant growth of timber suitable for constructional

<sup>1</sup> Small, A., 'Preliminary Notes on Excavation at Underhoull, Westing, Unst', *Abn. Univ. Rev.*, XL (1963), 138-44 for illustration.



purposes in Shetland. Peat, which was the main source of fuel, would have been plentiful in Norse times and an adequate supply of fresh water would have been available from the nearby stream.

As in the layout of the house, the provision of food bore many similarities to the traditional Shetland pattern. With the discovery of the broken stone points of ploughshares, agriculture can be deduced, and from the presence of two rotary querns it can be assumed that grain was grown, presumably in field strips on the flat land to the S. of the house where there is a greater depth of soil than is commonly formed in Unst. The presence of the byre confirms the presence of domesticated animals, and a midden nearby, which, though definitely not belonging to the present structure, is dated to the Viking period by an iron axe head (fig. 11), revealed bones of cattle, sheep and pigs as well as rabbits and fish. Although the agricultural colonisation of Iceland did not come till some two generations later, no doubt a rhythm of agricultural life similar to that described in the Icelandic sagas was already common in Shetland at this period. The Icelandic seasonal occupations are described in Snorre Sturlasonar Edda. March was regarded as the last of the winter months and in April seed was sown in field strips below the house. In May sheep were brought into the folds for lambing. June is described as a dairy month. The hay harvest usually took place in July, but August is described as the harvest month with the cutting of the bere or corn crop. In October the surplus

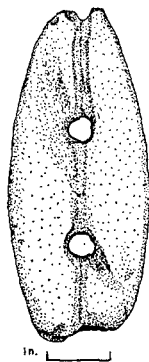


FIG. 12. Soapstone  
line-sinker pebble

livestock were slaughtered and the meat salted down as provision for the winter months. Other summer occupations included peat cutting and the preparation of the wool for weaving. In practically every area of flat ground around the house and in the areas intervening between the probable field strips hay was cut. A considerable number of small mounds encircle the site. Excavation of two of these revealed that they were earthen mounds with a scatter of field clearance stones on top but others showed a core of one or two large stones often 3 to 4 ft. high set on end on a platform of smaller stones. These appear to have been hay-drying ricks<sup>1</sup> (Pl. XXXIV, 1).

<sup>1</sup> I am indebted to Professor K. Walton for this interpretation.

It has been argued that in Shetland fishing is a reaction to the poverty of the agricultural environment, and line sinkers of more or less the same weight as hand line weights in use today indicate inshore fishing, while larger heavier models may have been used farther afield. Like Jarlshof, the Underhoull site is well located in relation to known prolific fishing grounds associated with the tidal springs between the islands. An interesting problem in fishing methods arises here. While some of the stone weights bear rope grooves indicating line sinkers (fig. 12) with a method of attachment still known in both Shetland and Færoe today, there is the distinct possibility that others could have been utilised as net sinkers. Now the Viking settlers must have been aware of the use of nets. They are recorded even from Mesolithic sites and the story of the Viking god Loke discovering the net is well-known. Brøndsted states that fish, *especially herring*,<sup>1</sup> were part of the Vikings' staple diet, and the mouths of herring are too soft to take a hook. In Scottish Viking sites

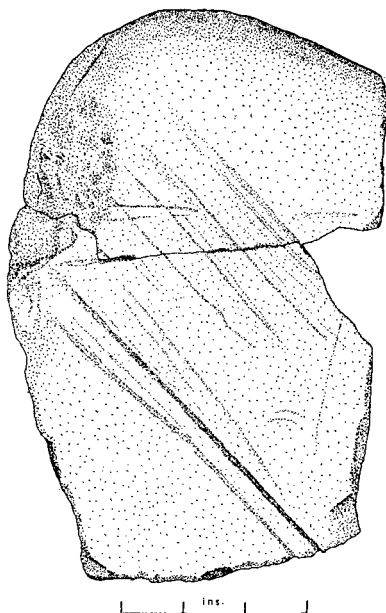


FIG. 13. Red sandstone sharpening stone

herring bones are not recorded and although herring have been prolific in reasonable proximity to these sites in modern times, one cannot rule out the possibility that the migration patterns of the herring were different in the Viking era. It seems probable that both methods were extensively used. Interesting also was the recovery of a deeply grooved sandstone boulder probably used for sharpening fish hooks as well as pins and needles (fig. 13). On this site haunch hones were also relatively common. Besides their value for food, fish appear to have been an important source of oil. Mr Tom Henderson, curator of the Shetland County Museum, has identified two of the arti-

<sup>1</sup> Brøndsted, J., *op. cit.*, 235.

facts from the longhouse as being parts of vessels used for rendering down fish livers (fig. 14).

The sands at the head of Burga Bay below the site permit the pulling up of a small boat, but conditions are not ideal. However, it has been used in the past as the remains of a small boat noost partly eroded by the winter storms were discovered near the centre of the bay head (Pl. XXXIV, 3). The noost, with curved end, was 4 ft. deep and the same width and could probably, in its original state, have taken a boat up to about 18 ft. long. Into the noost a lean-to wall had been built almost halving the width so that it could be used for sawing driftwood lengthwise. A layer of rotting sawdust on sand inches above the roughly cobbled floor confirmed this. Sand blows into the noost very rapidly and it has no doubt been cleared out many

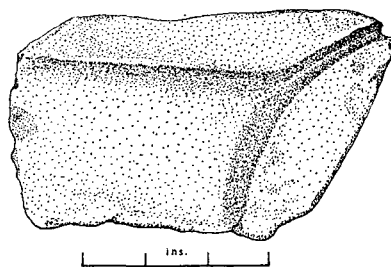


FIG. 14. Fragment of vessel for rendering down fish livers (Norse)

times and there is no means of dating its construction. A section outside the noost, however, revealed one fragment of a soapstone vessel very similar in shape and character to those found in the longhouse and stratigraphically this was on the same horizon as the noost floor. Boat noosts of similar proportions are known in all the Atlantic Island groups with perhaps the nearest parallel at Uti í Grøv in Borðoy, Færoe, where the method of construction is similar. The discovery of the steatite fragment on the exterior of the noost suggests that the noost was originally free-standing and as such has many parallels in the North Atlantic Islands. Although the noost is being eroded at present, and consequently valueless, it was probably in an extremely safe position in Norse times as there is a growing corpus of evidence supporting a rising sea-level in Shetland.<sup>1</sup>

No doubt the prolific bird life on the cliffs would have provided a welcome variation in the diet although ornithologists are of the opinion that the pattern of bird life would not have been the same in Viking times as it is today.

The resources of soapstone in Shetland are considerable and, as in Norway, they have been used since very early times. However, the full expansion of the local industry came in Viking times and at both Jarlshof and Underhoull steatite seems to have completely replaced pottery in the Early Norse period. A large variety of fragments of steatite vessels were recovered. Particularly common were large round vessels varying in diameter from 4 in. to over 40 in. Most of these had curving sides

<sup>1</sup> Hoppe, Gunnar, 'Submarine Peat in the Shetland Isles', *Geografiska Annaler*, Vol. 47, Ser. A (1965), 4.

and a relatively small flattish bottom. Square pots with rounded corners, steep sides and flat bottoms were also plentiful. The thickness of the pots varies from  $\frac{1}{2}$  to 2 in. and seems in part to be related to the quality of the soapstone. Decoration is limited to a small grooving below the rims of some of the smaller vessels and there is no basis for typological analysis. The quality of the workmanship, on the other hand, shows a distinct division. A quantity of sherds reveal rough workmanship with the tool marks clearly visible. Broad chisels have been used, many with a curving blade. Many of these chisels were probably of iron but none were recovered and in association with a fragment of a dish broken during manufacture a narrow-bladed chisel in very fine-grained slate was discovered, bearing out the apparent



FIG. 15. Small lamp  
(Norse)

shortage of iron at this particular farm. These roughly worked and often a symmetrical pots contrast markedly with the many smooth finely finished vessels which are more like the work of a professional craftsman. Skjølsvold in his study of the Norwegian Viking soapstone industry draws attention to a similar dichotomy in Norwegian finds.<sup>1</sup> In Scandinavia where soapstone was available farmers made their own steatite dishes as required and much of the pottery associated with this period was imported and is only common in the larger settlements with strong trading connections. Here there is a distinct differentiation from the Jarlshof site. Underhoull does not have the geographical nodality of Jarlshof with the obvious growth factors beyond a simple farmstead. Its location at the S. tip of Shetland at the closest point to the important Earldom of Orkney gave Jarlshof obvious trading advantages and resultant expansion. Underhoull on the other hand is a simple, basically self-sufficient farmstead perhaps more typical of the average settlement unit in Shetland at that time. It would only appear to have had minor trading connections for professionally made steatite vessels. These may have been brought by itinerant traders.

At present it is impossible to ascertain the origin of these vessels. Sufficient geological data is not available to establish without doubt the probable sources of the raw material. Large quantities of varying qualities of soapstone exist in Unst, outcropping within 274 yds. of the site, but, though a number of old quarries have been

<sup>1</sup> Skjølsvold, A., *Klebersteinsindustrien i vikingetiden* (Oslo, 1961), 96.

examined, their working in Viking times cannot be established. Similarly other areas of Shetland, for example Fetlar or the mainland, cannot be ruled out, particularly as the working of the Cunningsburgh quarries for soapstone for Jarlshof was proved! Nor can the possibility of import from Norway be discarded.

Close typological parallels exist to the Underhoull steatite industry throughout the Viking world. These are particularly noticeable in areas where soapstone does not occur locally, for example Færoe<sup>1</sup> and Iceland. Even so, it would seem impossible at present to establish positively whether certain vessels were manufactured in Norway and taken to Unst or Færoe or whether they were made in Unst and moved northwards from there. Geologists in both Britain and Norway agree that the problem cannot be solved at present because of lack of sufficient petrological analyses.

Some glimmer of home life can also be gauged from other small finds. Spindle whorls of varying design and loom weights suggest thriving spinning and weaving

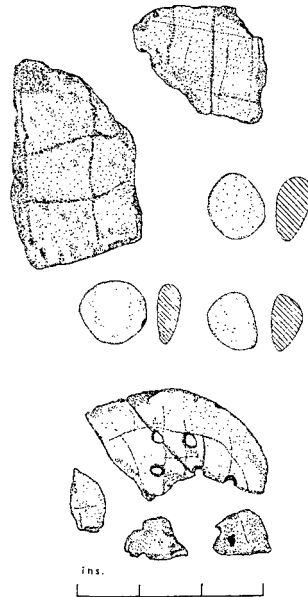


FIG. 16. Gaming boards and counters (Norse)

while fragments of slightly grooved steatite soapstone are probably pieces of a baking board. Small lamps (fig. 15) similar to the later Shetland collie lamp were probably filled with oil, and fragments of simple gaming boards and counters suggest that there was some time for relaxation (fig. 16). Toy millstones, similar to those found in a tenth-century context at Jarlshof, suggest the presence of children copying their adults. One of these is particularly interesting as it is an exact model, down to the grooving, of a full-scale version recovered from the midden on the far side of the beach. One would also have expected to discover implements of bone

<sup>1</sup> Dahl, S., 'Um tíðarfesting av føroyskum fitisteinsfundum', *Fróðscaðarrit*, Bók 4, p. 84.

and perhaps some metal objects but the physical conditions of the site are such that they would not necessarily have been preserved.

While the Iron Age horizon below yielded extensive evidence of iron working it is surprising that no slag or bog iron has been recovered in a Viking context. Indeed the only indication of the use of iron was the axe head found in the midden and one must pose the question – ‘How extensive was the use of iron in a simple farmstead at this period in Shetland?’ However, there is no reason to think that the settlement was other than simply abandoned and if iron tools were imported it is likely that they would be taken with the people when they left.

Extensive quantities of black pumice, of the same type as that found on the Iron Age horizon, were recovered from the Viking floor and were presumably used as abrasives. It is significant to recall that pumice collected from the beaches was used in the finishing of wooden implements manufactured in W. Norway right up till last century.

### *Rebuilding and Modification*

As time went on the dry-stone building of the house needed repair. The turf and stone outer walls have been rebuilt and strengthened several times, but the major change came about with the building of two outhouses, either or both of which could be for animals, on the courtyard. Both outhouses are very irregular in shape, the W. averaging some 10 by 10 ft. and approached by a door 2 ft. 6 in. wide in its E. wall. The E. outhouse appears to be more of an annexe to the main structure. It measures 7 ft. by 16 ft. 6 in. with a small alcove 3 ft. 6 in. wide in the NW. corner projecting E. for 4 ft. 6 in. Access is gained either directly from the house by the main door or from a door 2 ft. 6 in. wide in the W. wall. There can be no doubt as to the secondary nature of these structures on stratigraphical evidence as well as the use of steatite vessel fragments of Norse type as packing in the walls. One doorway of the main building was closed up and the house slightly shortened in length by building a cross-wall, unbonded to the main structure, near the eastern end with a new doorway in it approached by a paved track, which turns S. towards the arable land immediately on leaving the house. In contrast to the kerbed pathway approaching the front of the house a smooth slope for the path has been obtained by cutting down into the Iron Age levels. In one area the Viking pavement is some 5 in. below the earliest Iron Age pavement, a fragment of which exists nearby.

The blocking of the broad doorway in association with the building of outhouses and the shortening of the total length of the house by some 6 ft. would suggest that the animals were accommodated in the outhouses and the whole of the main structure was utilised as living space. This is borne out by the recovery of fishing and weaving tackle in the upper layers of the old byre floor.

The secondary structure in the NE. corner of the house is of considerable interest. A central hearth is surrounded by a narrow channel with sides of upright slabs and in part covered over by flat stones (Pl. XXXIV, 2). A further channel appears to link this to the outside N. wall of the house. This would appear to be a device to give considerable draught at the hearth, in which there were a number

of fire-cracked pebbles. Too much destruction has taken place to suggest more than the probable outline of the building plan. It would seem to have been some sort of drying chamber probably for grain. Small finds in the area were few but included loom weights and hone fragments which would support the concept of seasonal use and storage for the remainder or re-use after its original function disappeared.

The lack of accurately datable material creates a considerable problem in dating the house. At present, probably because of the extensive use of timber, we have a lack of comparable longhouses from the Viking period in the homeland areas of SW. Norway. While late Iron Age sites such as Oma in Rogaland<sup>1</sup> show some parallels, modern Viking period excavations such as at Ytre Moa have not produced longhouses.<sup>2</sup> Similarly there is a lack of comparative material in Scotland.

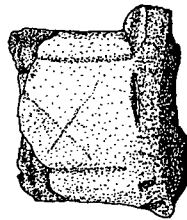


FIG. 17. Handled cup  
with incised decoration  
(Norse)

The Freswick, Caithness, site<sup>3</sup> shows no distinct parallels and full accounts of the sites at Aikerness<sup>4</sup> and Birsay<sup>5</sup> in Orkney are still awaited. Thus the only direct Scottish parallel is to Phase I of the Viking settlement at Jarlshof which points to an early ninth-century date if the Jarlshof dating is acceptable. However, as has been shown there are later parallels in both Færoe and Iceland, particularly tenth century sites in Færoe. Turning to the small finds, toy querns are found in a tenth-century context at Jarlshof<sup>6</sup> and also in the upper floor levels at Underhoull. In shape, size and technique of manufacture the remainder of the small finds – soap-stone bowls, haunch hones, sinkers and loom weights are almost precisely paralleled from Kvívík in Færoe whose tenth-century date is established. One handled soap-stone cup (fig. 17) with a slight incised decoration has tenth- and eleventh-century parallels in Norway. Also if one considers the modifications and rebuilding which have taken place, the farmstead must have been occupied for some considerable time. Thus it can tentatively be suggested that the initial settlement came in the ninth century and blossomed to its maximum in the tenth.

<sup>1</sup> Petersen, J., *Gamle Gardsanlegg i Rogaland* (Oslo, 1933), 66-68.

<sup>2</sup> Bakka, E., 'Ytre Moa, Eit gardsanlegg frå vikingtida i Ardal i Sogn', *Viking* (1965), 121-45.

<sup>3</sup> Curle, A. O., 'A Viking Settlement at Freswick, Caithness', *P.S.A.S.*, LXXIII (1938-9), 71-110.

Childe, V. G., 'Another Late Viking House at Freswick, Caithness', *P.S.A.S.*, LXXVII (1942-3), 5-17.

<sup>4</sup> *Inventory of Shetland*, No. 263; Richardson, J. S., *The Broch of Gurness, Aikerness, West Mainland, Orkney* (M.O.W. Guide, Edinburgh, 1948), 6.

<sup>5</sup> *Inventory of Shetland*, Nos. 6 and 8; Cruden, S. H., 'Excavations at Birsay, Orkney', in Small, A. (ed.), *The Fourth Viking Congress* (Edinburgh, 1965), 22-31.

<sup>6</sup> Hamilton, J. R. C., *op. cit.*, 154.

As has been pointed out the settlement must have been in use for a significant period of time and if so sizable midden deposits should exist. At both the eastern and western extremities of the courtyard there has been considerable removal of material in the post-Viking era and not only has the extension of the Viking but also the Iron Age horizon been completely removed. There is no reason to suppose that major structures existed on this part and on the evidence of comparable sites it would seem probable that middens may have occupied these hollows. They were probably removed in later times as they may have had a high shell content which would have made them a valuable source of fertiliser in an agricultural area. A manuscript 'Map of the Division of the Room in Underhould in Unst' compiled in 1823 shows that this whole area of the site was under cultivation rigs, and in the upper layers of the soil there was evidence that seaweed had been spread on soil to increase the humus content.

Local tradition names the field containing the site the 'kummel field' or burial field. Jakobsen suggests that this is from the old Norse 'Kuml' – a mark, tumulus or cairn,<sup>1</sup> and a number of small mounds encircle the site, apparently giving the field its name. As shown above these were most probably associated with hay drying and one must assume that the name is late, having been given to the field in medieval times after the settlement was probably deserted and the purpose of the mounds forgotten.

Finally, on the western shore of Burga Sand the sea has eroded part of a midden which has produced a large quantity of animal bones, steatite fragments of typical Viking bowls, the top stone of a rotary quern and an iron axe. Exact parallels in shape and size to this axe are difficult to find, the nearest being from Straumi in Iceland.<sup>2</sup> While the Viking date of this midden is established it lies some 263 yds. from the excavated farmstead – too far to belong to that building, yet of the same period. This would seem to suggest that a second longhouse probably exists somewhere on the SW. shore of the bay.

There can be no doubt that the farm was the social and economic unit in Norse times – a self-supporting unit drawing on all the resources of its environment. With the density of Norse place-names in Shetland there can be no doubt that there was a considerable density of settlement, yet few house sites have been found. At Underhould the archaeological record points to at least two farms around a tiny bay. No doubt most of their stonework has been used in the construction of later crofts while in other areas the Vikings also chose areas which were environmentally most favourable and in the following periods the same limited land areas have continued in use till the present century. Perhaps, then, the physical relics of the early Viking colonisation lie buried below many of the crofts still existing today.

#### ACKNOWLEDGMENTS

I am deeply indebted to Royal Air Force Saxa Vord and Fighter Command for consistent financial and organisational support, to Zetland Educational Trust for

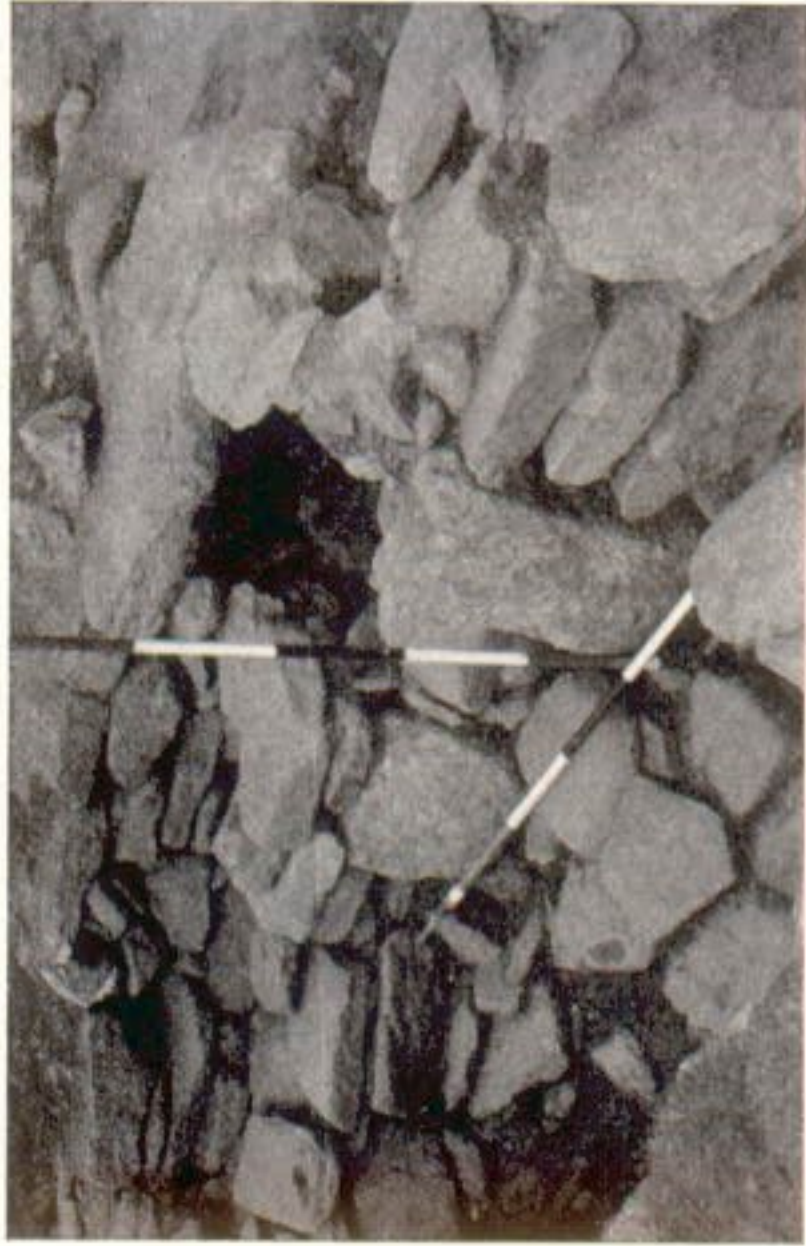
<sup>1</sup> Jakobsen, J., *The Place-Names of Shetland* (London and Copenhagen, 1936).

<sup>2</sup> Eldjárn, K., *Kuml og Haugfé* (Reykjavik, 1956), 286, Pl. 102, No 3.

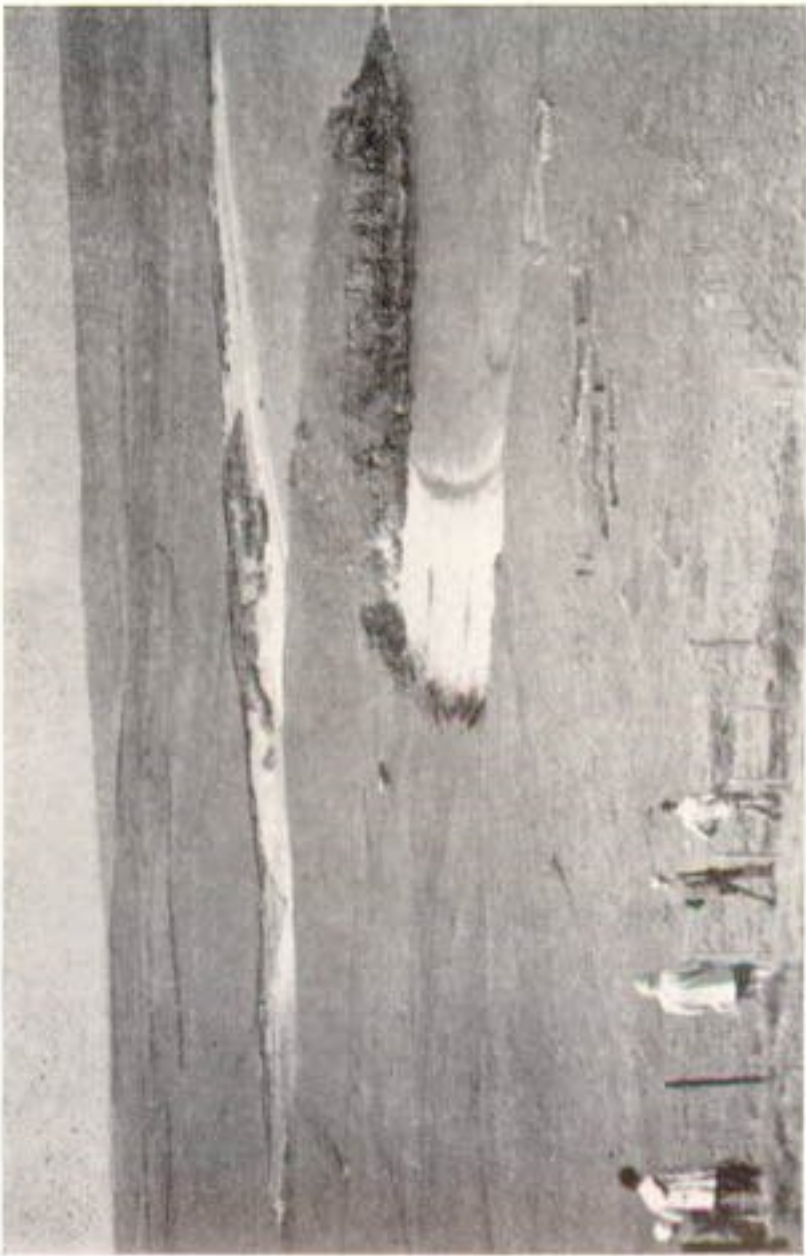


financial support and to the teams of excavators from R.A.F. Saxa Vord, R.A.F. Buchan, the Unst Field Club, and Aberdeen University Geographical Society. Grateful thanks are also due to the Carnegie Trust for the Universities of Scotland, and the University of Aberdeen for financial assistance in visiting sites and museums in other parts of the Viking World.

Grateful thanks are also due to Mr Alistair Dunnett for permission to reproduce Pl. XXXII, 1; to the Editor of *The Scotsman* for Pl. XXXII, 3; to Miss Heather Smith who prepared figs. 2 and 3; and to Mr Charles Simpson, who drew all the small finds.



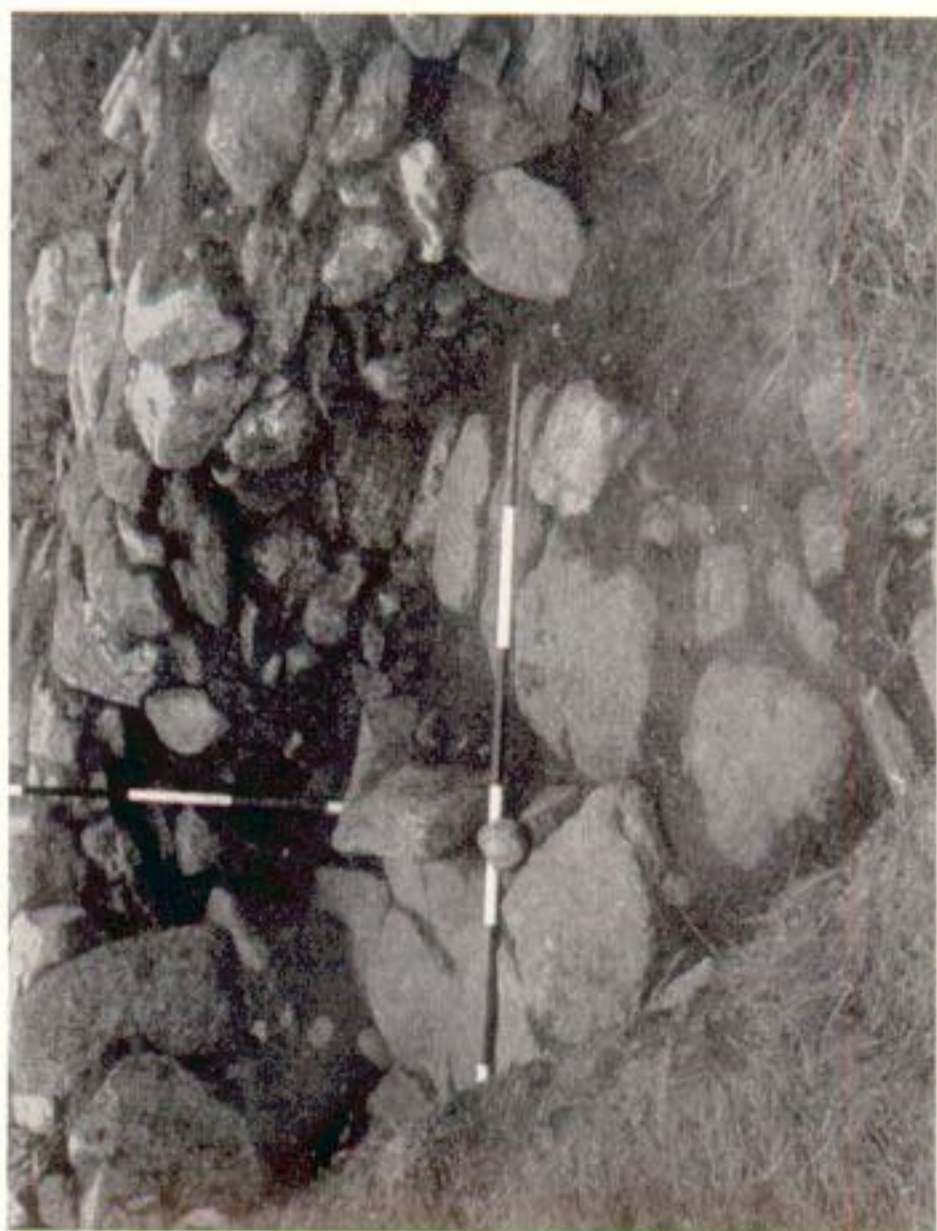
2. Entrance to the souterrain



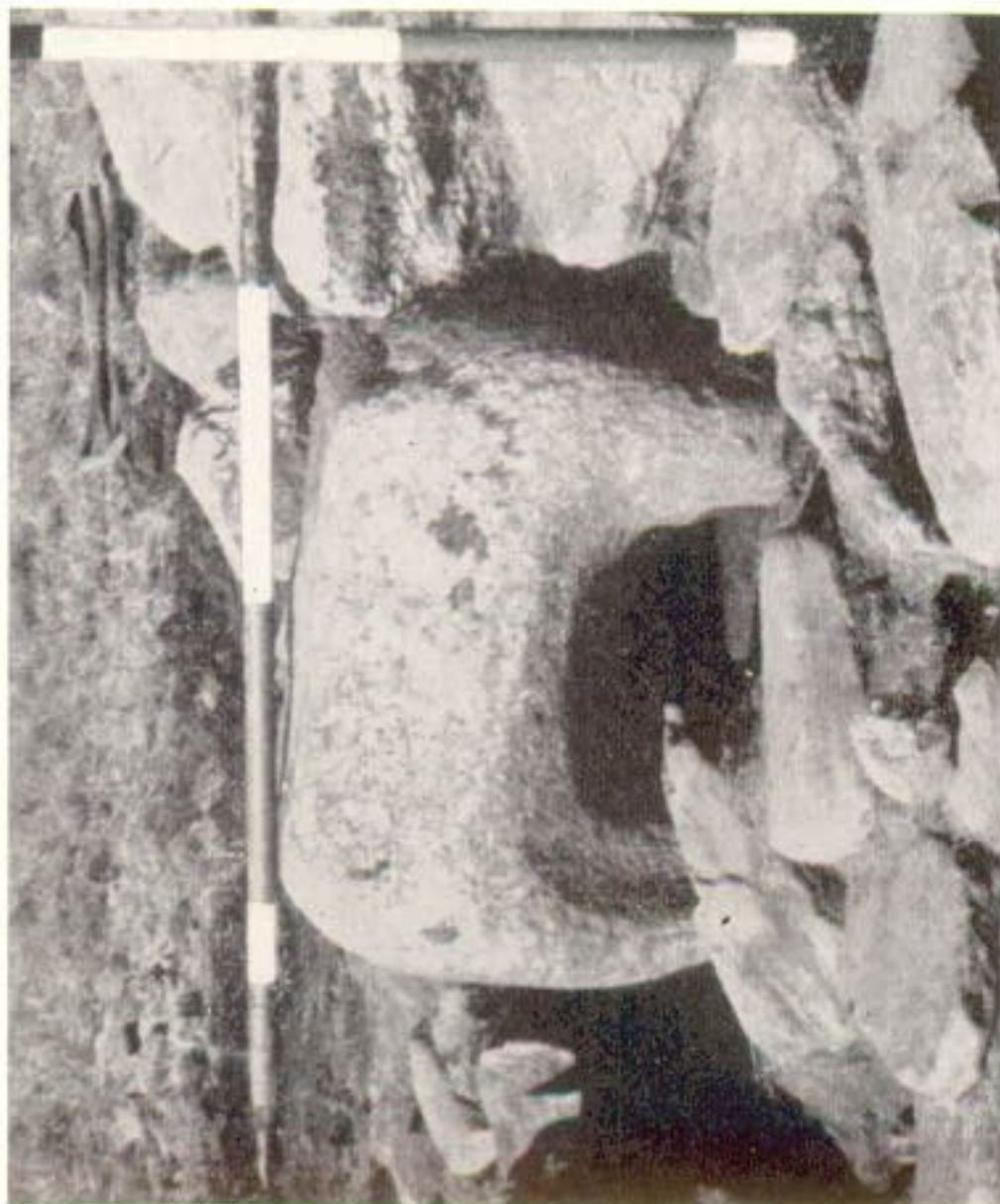
1. General view across site to Burga Sand and Lunda Wick  
from the Broch of Underhoull



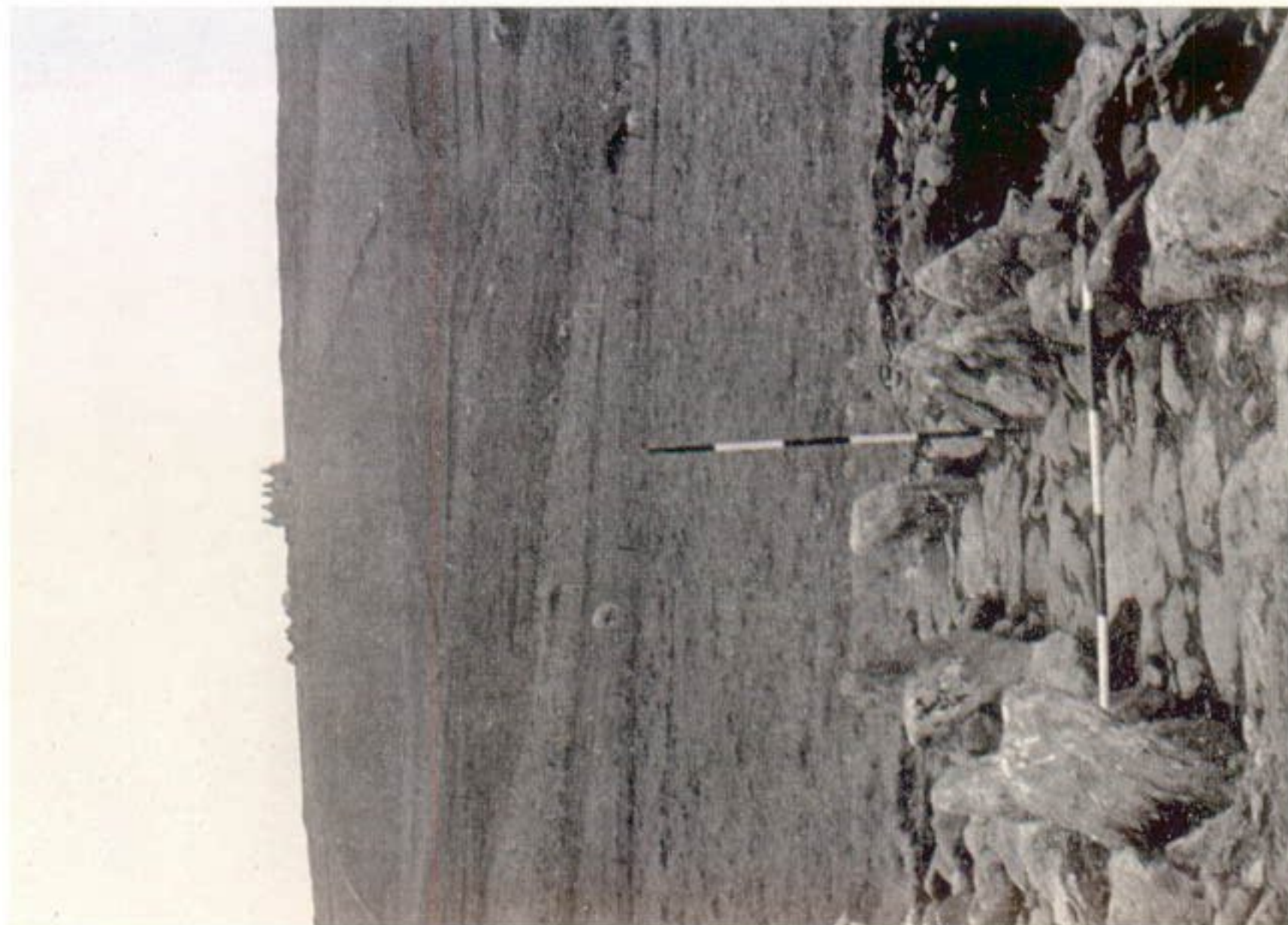
3. Pottery from the Broch period horizon



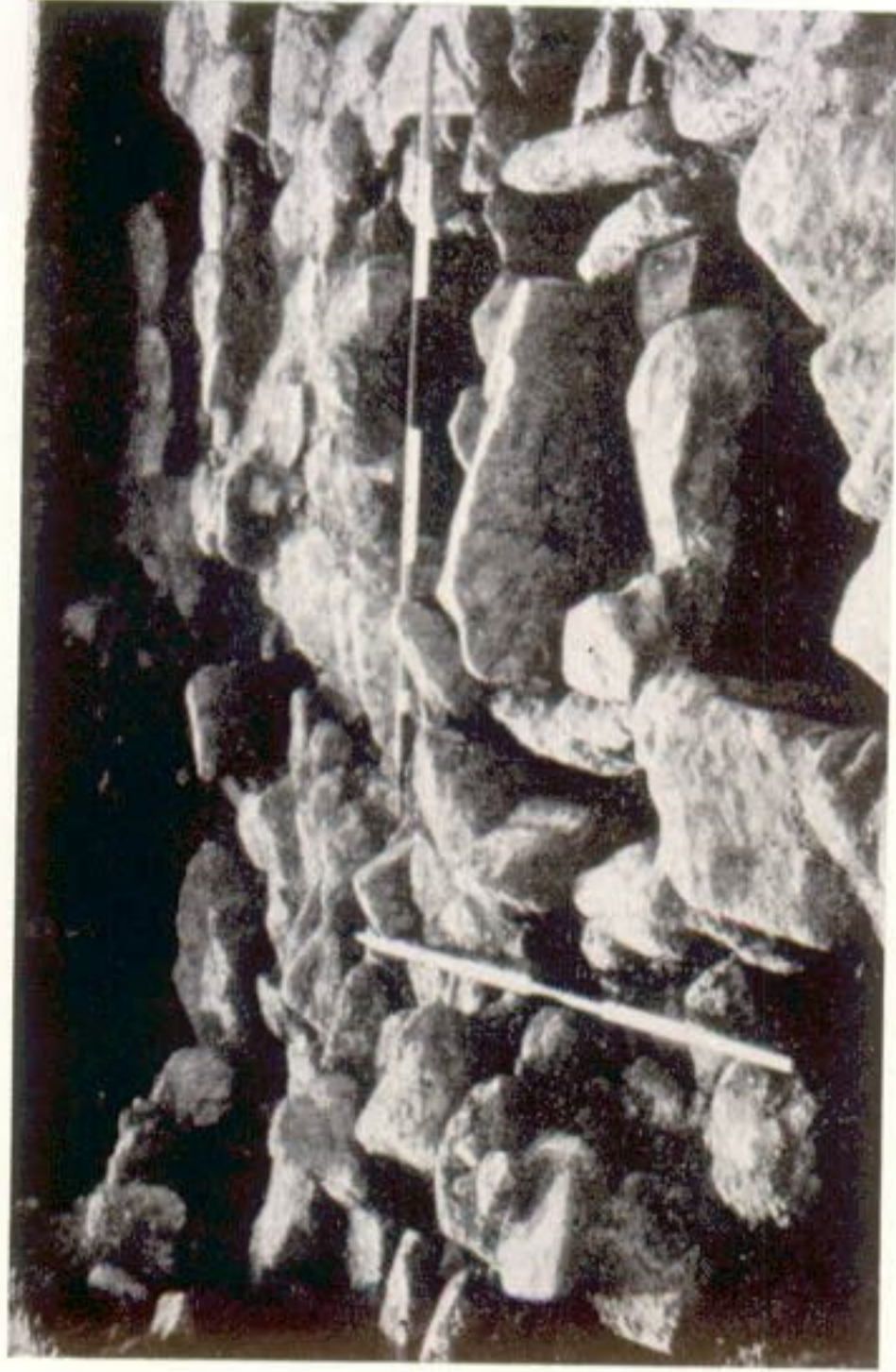
1. Overlapping Early Iron Age pavement (foreground) and Broch period pavement. Both pass under the walls of the Viking longhouse in the background



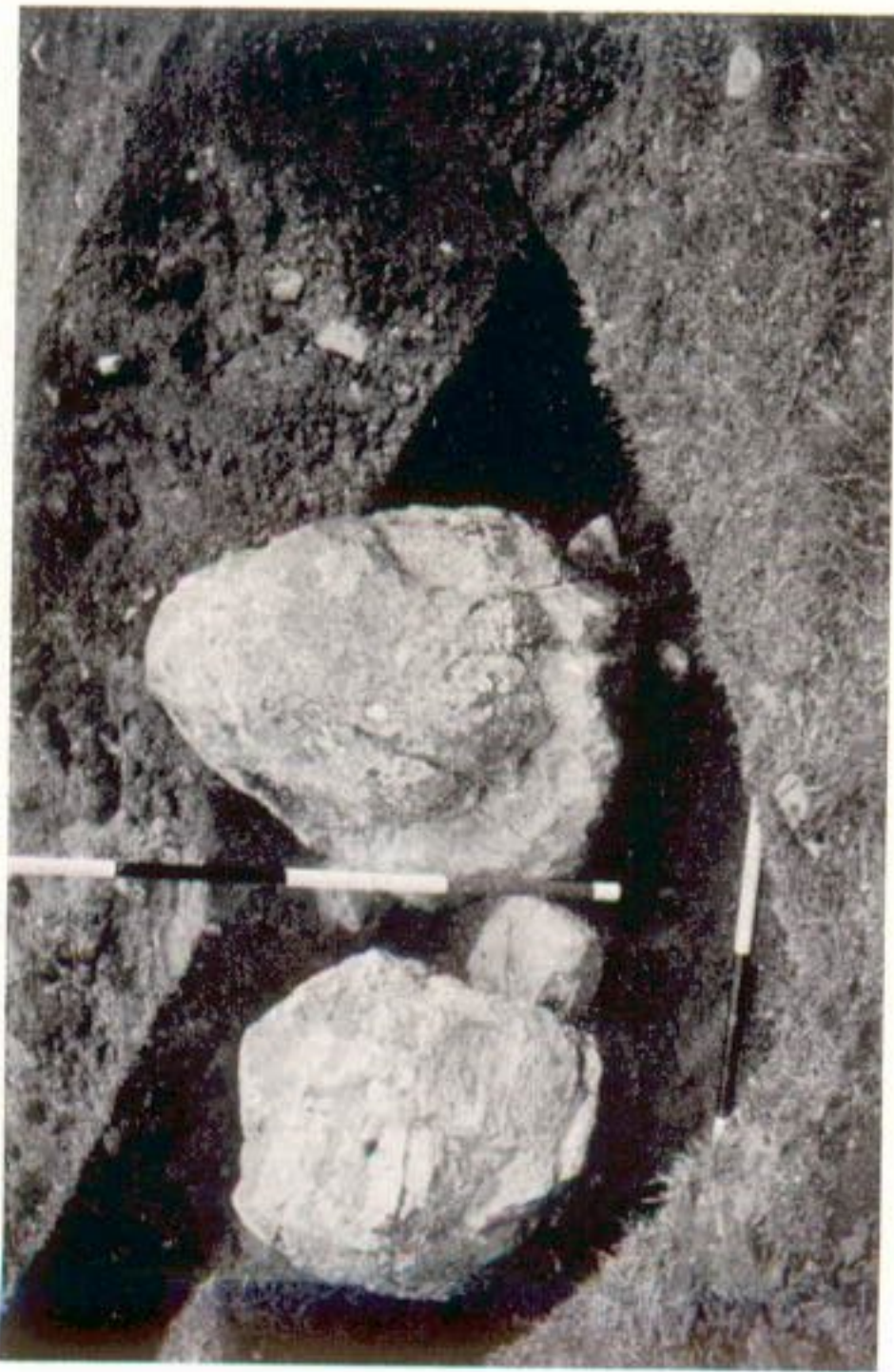
2. Broken quern used as building stone in primary Norse causeway



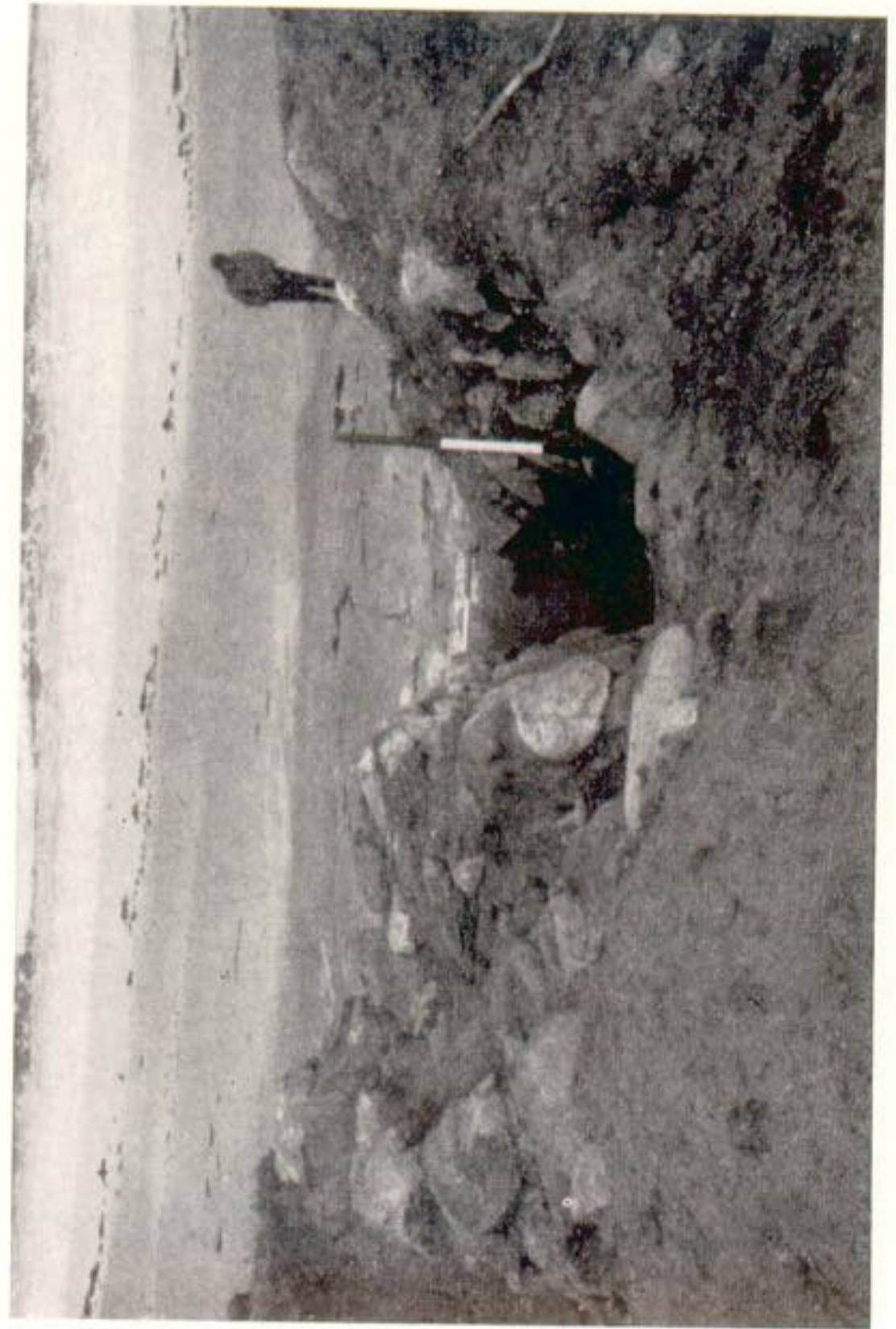
3. Kerbed causeway leading down to cultivatable land from the Viking longhouse



2. Secondary structure in north-east corner of longhouse



1. Large stones on a base of small flat stones which were revealed in a number of mounds surrounding the site



3. Boat noost near the centre of Burga Sand Bay