Excavations at Auchategan, Glendaruel, Argyll

D N Marshall*

INTRODUCTION

Auchategan (NGR NS 002843) lies on a small level area 90 m above the river Ruel, looking over Glendaruel to the W. Glendaruel is now a fertile valley with the river running through it, well cultivated, in marked contrast to the rather stark hills rising on either side. This fertility was only made possible by draining, probably in the eighteenth century; the Stat Acct (1791) mentions that the soil was 'friendly to flax'. Prior to this most of the cultivation lay on the hillsides, at heights of about 60 m OD and mostly on the W side of the glen. However, the area round the church must have been in use since the 14th century as the memorial grave slabs found in the burial ground show; the present church, although only built in 1783 is certainly on or near the site of an earlier one.

Glendaruel has always attracted settlement as is indicated by three Neolithic burial cairns and one large, presumably Bronze Age burial cairn and one smaller one, destroyed when the road was made. The 'well constructed stone coffins' mentioned in the NSA (1843) may well have been Bronze Age cists.

Our original interest in Glendaruel lay in finding the site of St Modan's earliest chapel as described by Inglis (1895, 56). 'The venerable shrine of Modan's Chille, or Church, is situated above the present church, on the hillside beyond the first shoulder of the hill on the east side of the glen, and is about seven to eight hundred feet above the level of the road. Though now in ruins the walls of the buildings are still there. It was situated within the still more ancient Druidical circle, the stones of which are yet standing, and are celebrated as the "Clachan Glendaruel". Still higher up the hillside, a bright green oasis attracts the visitor to Modan's Well, which flows as fresh as ever. It is held in high veneration and, till recent years, used to be visited by many who brought those afflicted by various diseases to find in its crystal waters a sovereign cure'.

This site was also marked as 'Site of Chapel' on the OS 1-in map, sheet 65 and on the 6-in OS map, published in 1865. On investigation, the site proved not to be that of a chapel but that of a hitherto unrecorded Neolithic long cairn now known as Lephinkill Cairn (Henshall 1972, ARG 16).

SITE AND SETTING (fig 1)

The valley of the Ruel stretches from Dunans at the head of the glen to Loch Ruel or Riddon, a distance of about 10 km.

Two km up the glen lies the Clachan of Glendaruel and here, on the side of the glen, a bout 90 m above the level of the river lies the site of Auchategan. Fairly steep hills rise on either side of the glen; here and there on the hillsides are ridges and shelves of flatter land, it is on one of these

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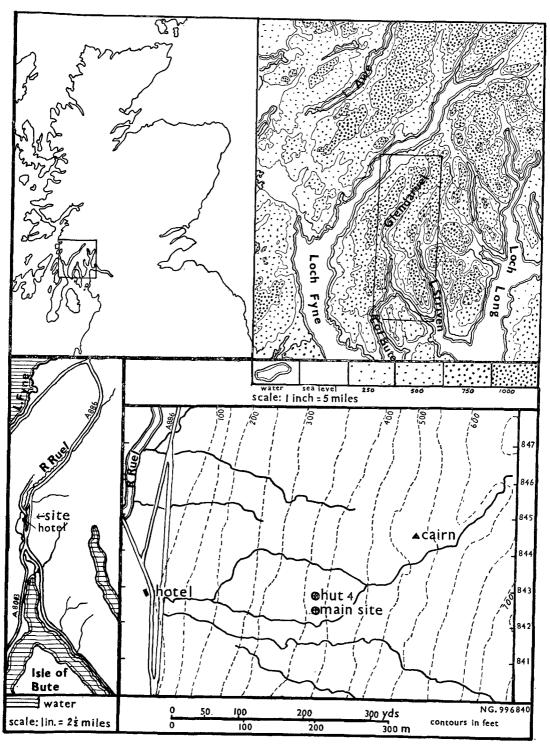


Fig 1 Location map

that the site lies, appearing when first examined as a grassy shelf in the surrounding heavy bracken. About 30 m to the S runs a fairly large and steep sided burn, while about 75 m to the N runs another burn with a much smaller volume of water. Such relatively open ledges on the hill slopes would naturally be attractive to early settlers, certainly in comparison to the marshy valley below, often subject to heavy flooding. At Auchategan, the compacted debris of the Neolithic occupation and the building of the Bronze Age cairn combined to ensure that there was excellent drainage. This emphasised the attractiveness of the site for future settlement. Excavation has proved that there was occupation here, at least intermittently, for 3,000 years.

Glendaruel runs from N to S and the ledge on which the site is situated lies along the contour of the hill on the E side of the valley. The ledge is approximately 14 m wide, giving an extensive view of the whole glen. Birch and alder grew naturally on each side of the site and formerly peat was dug on the higher slopes. However, the hillside has now been planted by the Forestry Commission.

Across the smaller burn to the N and about 30 m higher up the hill lies the unexcavated Lephinkill cairn (ARG 16). A leaf-shaped flint arrowhead was found in the plough furrows near the cairn belonging to a type very similar to two found at Auchategan.

As there are at least two Neolithic burial cairns in the vicinity, Lephinkill (ARG 16) and Ardachearanbeg (Henshall 1972, 328, ARG 15), and were two probable Bronze Age cairns, Carn Mor and Carn Beg, there must, somewhere in the glen, be more habitation sites not yet recovered and now, perhaps, lost in newly planted forests.

The glen continued to be a desirable place to live in throughout the centuries and is now a thriving community with farming on the better land, forestry on the rougher hills.

METHOD OF EXCAVATION (fig 2)

The excavations on the ledge 90 m above the river bed on the E side of Glendaruel were primarily undertaken to locate the site of St Modan's earliest chapel. This was not found.

The first investigations were at the foundations of a small structure (Hut 4 on fig 2) which were visible above ground. Excavation showed that they were not those of the chapel. Work was then started on a turf covered mound of stones 68.50 m to the S of Hut 4.

Excavation uncovered a complex of hut circles. The area between them and Hut 4 was

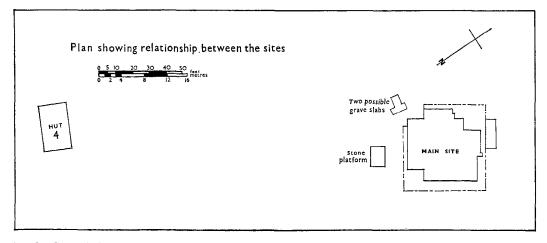


Fig 2 General plan

systematically probed and examined for further structures. A possible working platform and two large, shaped, stones were found but no structures.

It was found that the hut circles overlay a sequence of earlier periods:

- 6 Three Medieval or later hut circles.
- 5 Rectangular stone house with accompanying peat stack.
- 4 Evidence of early iron working
- 3 Hut defined by post-holes.
- 2 Bronze Age burial cists and cairn.
- 1 Two levels of Neolithic domestic occupation.

This site, covering an area of 11 m by 15.20 m, was cleared down to the natural soil on which the Neolithic hearths and post holes were built. The depth of the excavation was not more than 1.20 m, the successive occupations lay closely one on the top of the other. Levels were at times hardly distinguishable.

In the last season's work the area of excavation was extended 7.50~m S to find the extent of the Neolithic occupation. No structures of the later periods were found in this area. In Trench S, 2 m S, a few traces of Neolithic occupations were found but as the soil in Trench T, 7.50~m S, seemed undisturbed it was concluded that the Neolithic occupation did not extend as far S as Trench T.

THE NEOLITHIC PHASES: PERIOD 1 (figs 3 & 4)

The Neolithic occupation lay on natural undisturbed soil or on the live rock of the site. Two levels, Neo 1 and Neo 2, could be distinguished on the site but they lay so closely one above the other, that it was only in a few places that they could be clearly differentiated. Neolithic occupation covered an area of 10 m E to W by 11 m N to S. To the E the natural slope of the ground rises steeply; to the W it drops sharply. A drift or deposit of red soil overlay the Neolithic levels to the E to a depth of 0.80 m but at the W the Neolithic occupation was just under the turf. At the edge of the ledge was an area of firm packed earth.

The building of the Bronze Age cairn on the top of the Neolithic site must have destroyed much of the evidence of the occupation level, not only when the site was cleared and the stones of the cairn moved into place but when the spaces between the stones were filled with soil from the Neolithic levels.

Traces of two not very well defined huts belonging to the earlier of the two periods were found. Both had been formed by scraping out the soft natural mica schist to form a rough circular area. Where the rock faded out the circle was completed in part by a line of stones. In Hut I there was a rather nebulous floor level with patches of black, greasy soil (Hearth 19, 0.47 m in diameter and 0.05 m deep). Flecks of charcoal and carbon were in the crevices of the rock at the edge of the hut. Post-holes may indicate some sort of a structure within the hut, perhaps to support the roof. The post-holes were slightly constructed with stones set on rather than dug into the soil. Other post-holes may well have been lost in the succeeding occupations.

In Hut 2 of the first Neolithic level, post-hole L had been dug into the live rock edging the hut, some packing stones were in it. This was the only post-hole found in this hut. Post-hole K, lightly constructed, was set into the natural soil, the deepest stone being 0·18 m long. Round it was a small area of light gravelly cobbling. Post-hole C, also slightly built was set on the natural soil near Hearth 7.

There were two distinct types of hearths in the occupation levels. One was a shallow concentration of charcoal and greasy black soil with few or no stones round it. The other type was

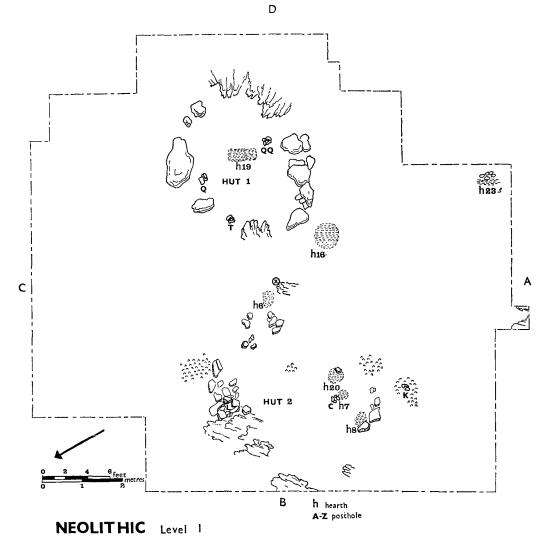


Fig 3 Neolithic remains, period 1

firmly constructed with stones several layers deep in some cases. As Hearths 19, 7, 20 and 8 were associated with the earlier Neolithic level it is probable that the similarly made Hearths 16, 24 and 6 were also of this period. Hearth 16 roughly circular was 0.61 m across and 0.11 m deep at the centre. The shallow bowl was filled with hearth material which came away cleanly from the sandy sides. Hearth 8 was smaller but of the same construction, thus Hearths 19, 7, 8, 20, 16, 6 and 24 would appear to have belonged to the Neo 1 levels. Few artefacts and little pottery could definitely be associated with the first Neolithic level, but what there was is similar in character to the artefacts and pottery of the second period.

The most distinctive feature of the second Neolithic level was the number of well constructed hearths, several showing more than one level of use. Hearths 12, 18 and 13 were fairly close together in a definite area of stones bounded by a rough edge to the NW, giving the impression of a 'working area'. Hearth 12, 0.3 m in diameter, was surrounded by stones. A flint knife

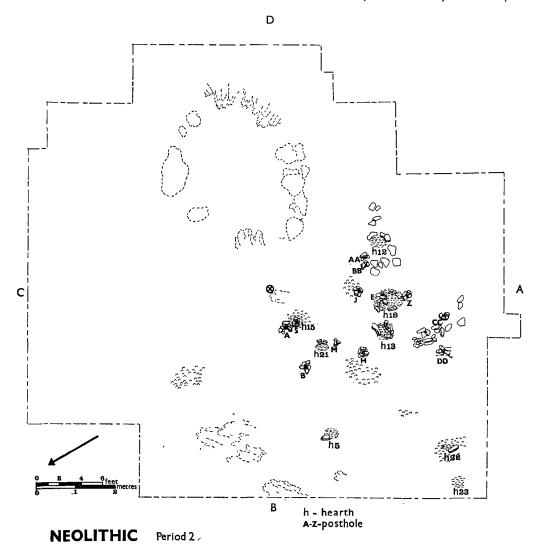


Fig 4 Neolithic remains, period 2

was found in it. Hearth 18 was well built with layers of stones. One long stone lay at the centre; dense black greasy soil and carbon stretched for a distance of 0.71 m by 0.68 m round it. At either side were two small stake-holes.

Hearth 13 seemed to have been in use for some time. Under a layer of stones one long stone (0.45 m) edged the hearth, on some flat stones at the other edge was a setting of small stones making a little platform, perhaps a pot rest. As well as the greenstone axehead (AG 146: fig 5) found among the ashy deposit were pitchstone artefacts and right at the bottom half a lignite bead.

Among the stones and packed soil of the working area many artefacts and sherds were found. The two green stone axe heads found on the site came from this area, one from Health 13. In all 20 artefacts were found as well as many chips of flint, pitchstone and quartz. In addition rims of 13 pots, numerous sherds and three pot lids were recovered here.

Hearth 22, 3.35 m W of Hearth 13 was also of at least two periods of use. It was set into natural soil with a sloping stone (0.38 m long) at one side. A flat stone at the base of the upper hearth was 0.22 m down from the top of this sloping stone. Tiny sherds were found throughout the hearth material, one sherd had a fragment of bone attached to it.

Hearth 21 was smaller than those already described with two stones, each 0.2 m long sloping inwards to make a hollow 0.12 m deep filled with intense black material. There were stones bounding it on one side only. The hearth was within an area of light cobbling. Hearth 10 was deep, filled with layers of stones; black greasy material was all through the build of stones. Burnt hazel nuts and five pitchstone flakes were found in it. Hearth 15 was not so firmly constructed as hearth 10 but contained much black soil and carbon. At the bottom of it was a circle of stones making post-hole S which was presumably out of use before the hearth was made. Very close to post-hole S was post-hole A which appears to have taken its place.

Six of the post-holes associated with Neo 2; A, B, J, S, H and M were on the whole well made, especially post-hole H which had an upright stone, 0.43 m long. Five other post-holes

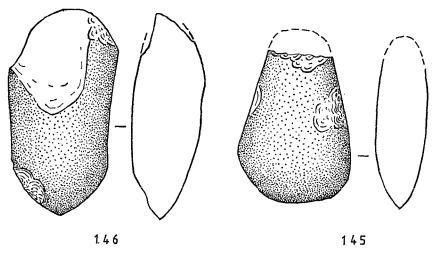


Fig 5 Greenstone axeheads (scale 2:3)

Z, E, AA, BB (these two very close together) and DD, lighter in construction, were more in the nature of stake-holes than post-holes. In trench S to the S of the main concentration of occupation were two small post-holes, EE and FF with light cobbling round them.

The post-holes made no real pattern. H, the deepest and best built, could have been a central post with J, A or S and B on the NW edge of a circular hut. This assumes that the post-holes round the rest of the hut were destroyed when Hearths 18 and 12 on the working area were made. This complex lay at a slightly higher level than the post-holes and is therefore presumably later. Post-holes J, A and S or B might have marked the three corners of a rectangular hut with H possibly at a porch. Again this assumes the destruction of other post-holes by the making of the working area. Neither of these tentative plans includes M. Patches of cobbling were found all over the Neo 2 levels. Mostly they were one layer only but around and to the S of post-hole H the cobbling was firmly packed and two layers deep. One patch lay N of the Neo Hut 2. Light cobbling was found in Trench S at the S end of the occupation. This cobbling was on the whole made of larger stones than the cobbling associated with Neo 1. Traces of stained soil which might

have been caused by eaves' drip were found in two places; one, clearly defined, was under the Bronze Age cist in the Cairn. The other was near Hearth 24.

Only very small fragments of bone were found on the site, in the hearths or among the occupation levels. Nothing could be identified. Hazel nut shells were found at the foot of posthole C, S and J and at Hearth 10 as well as a few among the cobbles of the floors. The people who used the huts and hearths of the Neo 1 level cannot have preceded the next settlers by many generations, they could perhaps have been in the way of prospectors for the later comers. The pottery and artefacts show no change in character. The difference in the type of hearth used may point to a different type of cooking. With no stones round the hearths the bread may have been made as dampers, the dough cooked wrapped round sticks held over the fire, or it may have been cooked in the ashes as the Greeks did with their artos until about 600 BC. Meat and fish from the river may have been cooked in the ashes wrapped in leaves. The hearths made of large stones with a greater depth and greater concentration of carbon and ash indicate perhaps a more sophisticated type of cooking with better equipment. The little platform of stones at the edge of Hearth 13 might have been to keep the pot off the hot stones but yet allow for the slow cooking of food. Some of the flat stones may have been used for the baking of a thin bread.

The second occupation may have been seasonal. As the main post-holes were on a slightly lower level than the big hearths 18 and 13 it does not seem to have been continuous. Hearths 10 and 15 can hardly have been in use at the same time as post-hole A, S or B. It seems as if all trace of the post-holes and huts of the makers of the large hearths and the working area have disappeared. Among the cobbling at the W edge of the occupation area two small groups of stones were found, they may have supported stakes. One would have thought that this area at the W edge of the ledge would have been a more exposed place to live than at the E edge under the shelter of the hill. No cobbling was found E of post-hole J. The firm packed and tramped earth at the W edge is perhaps evidence of a levelling up of the ground. The first settlers with their two huts and associated hearths and floors used an area of 10 m by 7 m with one rather isolated hearth 4 m to the S. The next settlers were concentrated in an area of 8 m by 11.50 m. So the numbers living on this ledge on the hillside cannot have been very great, two or three families at the most.

They were a well equipped people with a good range of implements. They had arrows for hunting, flint knives and scrapers for dealing with the meat and skins. While flint is not native to Cowal erratic pebbles brought by ice can be found. The colour of the flint used however suggests that it came from Ireland.

Certainly the larger tools could not have been made from pebbles. Mr Collins of the Institute of Geological Sciences after examining some of the pitchstone found on the site stated that he believed it originated in Arran. They seem to have made their small pitchstone tools on the spot as many flakes were found, 24 artefacts to 54 flakes. The flint tools seem to have been brought as tools as fewer flakes than tools were found, 24 artefacts to 16 flakes. They used quartz as well which is a difficult material to work. The two greenstone axeheads came from the Langdale Quarry so these people must have journeyed as far as that or traded with travellers. The chipped condition of the axeheads may indicate that they were hard to come by and continued in use for a long time.

The variety of their pottery was considerable. The sherds differed in size and shape and texture.

A Carbon 14 reading gave a date of 2300 ± 110 bc (I-4705) from a sample taken from Neo 2 Hearth 17.

FINDS - NEOLITHIC

Fig 6 Flint

- AG 143 Flake with retouched edges perhaps intended as a plano-convex knife but damaged during manufacture.
- AG 26 Broad flake with retouch along two edges.
- AG 27 Symmetrical scraper on a thick flake.
- AG 5 Scraper, distinct secondary working round two edges, under face shows very light working. Cortex shows at straight edge. Tool possibly waisted to help hafting.
- AG 32 Knife, retouched towards tip, working edge much serrated through use.
- AG 144 Arrowhead, finely and evenly worked all over, one face more carefully worked than the other.
- AG 300 Arrowhead, leaf shaped, finely and evenly worked all over.

Fig 7 Flint

- AG 36 Utilised blade.
- AG 37 Blade utilised after slight shaping. Very small serrations along edge on one face only.
- AG 38 Part of flake with some flaking on upper face.
- AG 39 End of flake blade, retouch on round edge and on upper face.
- AG 183 Fragment small flake blade, some flaking on upper face.
- AG 34 Flint chip with possible retouch on notch.
- AG 35 End scraper on square ended flake, retouch on square end, no working on under face.
- AG 24 End scraper, flaking over convex face, retouch at edge of point, under side flat with very slight retouch at edge.
- AG 148 End of scraper, fine retouch on one edge, under face flat.
- AG 111 Flake possibly utilised as scraper, slight signs of secondary working, cortex showing at thick end.
- AG 33 Possibly part of arrowhead, if so would have been somewhat large.
- AG 201 End scraper on flake, some flaking, edge roughly retouched.
- AG 147 End scraper, just possibly part of plano-convex knife damaged during manufacture.
- AG 42 End scraper, part of, worked to a fairly blunt point, flaking over convex side, a little retouch at point.
- AG 40 End scraper.
- AG 20 End of flake blade, cf AG 39.
- AG 29 End of flake blade, cf AG 39.
- AG 113 End scraper on flake, some re-touch on edge.

Figs 8-9 Pitchstone

During the course of the excavation of the Neolithic domestic site just over 100 flakes and chips of pitchstone were found. None of these showed real secondary working but 15 small flakes seemed to have been carefully made and could have been part of small blades. There were 12 flakes which did not have this quality. There were seven larger flakes which also might have been used as tools and four other larger flakes which would probably not have been so used. Only three of these utilised flakes had points.

There were none of the wedge-shaped artefacts associated with Mesolithic working.

There were ten pieces of pitchstone from which flakes had been struck – cores. The rest of the assemblage consisted of unevenly shaped flakes and chips. Mostly the pitchstone is shiny black but some of the fragments are matt, three of them olive green in colour. From the number of chips and flakes it seems as though the pitchstone was worked on the site.

Figs 9-10 Quartz

While these quartz artefacts are not tools in the generally accepted term, they all seem to have been used. Quartz is a difficult material to work. One has to handle many chips and flakes of quartz before one can appreciate those which seem at least to have been used. During the course of the excavation many scores of quartz flakes and chips were found. It was while examining them that those illustrated were selected.

Scrapers similar to those illustrated can be seen in the National Museum of Antiquities from Dryburgh Mains, Kentra Bay, Ardnamurchan and Ness of Gruting.

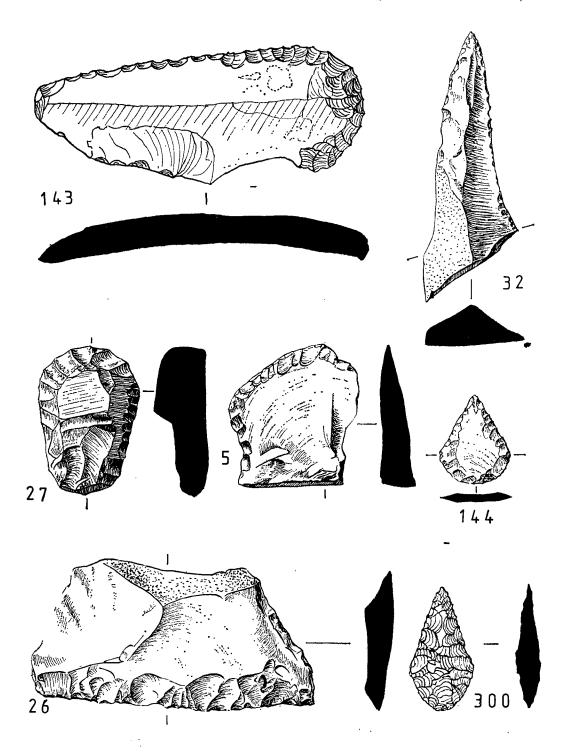


Fig 6 Flint artefacts (scale 1:1)

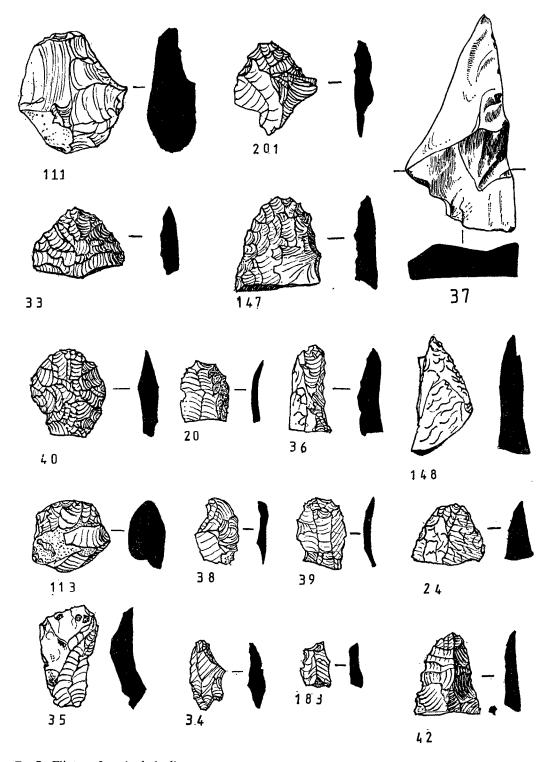


Fig 7 Flint artefacts (scale 1:1)

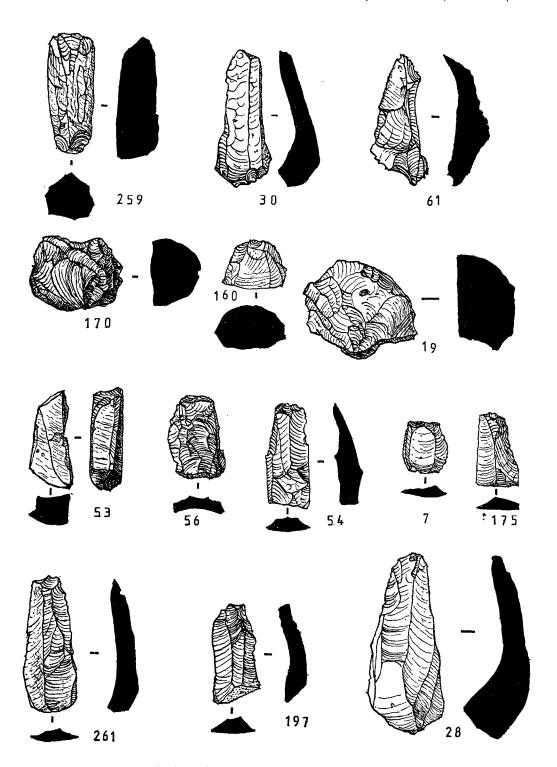


Fig 8 Pitchstone artefacts (scale 1:1)

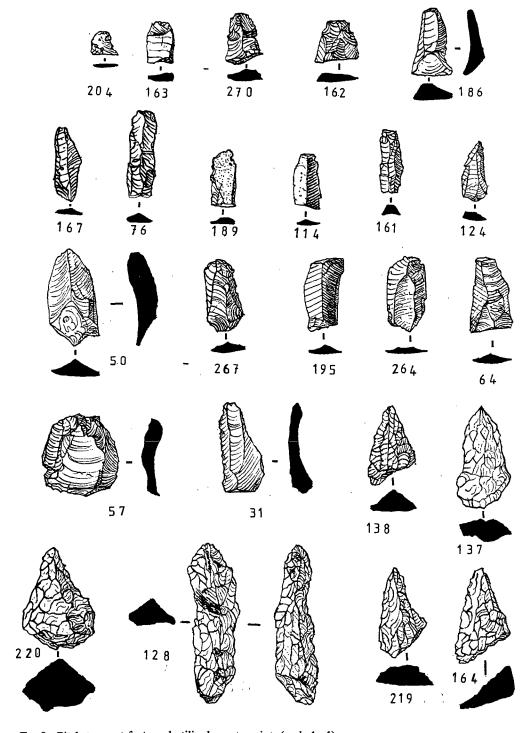


Fig 9 Pitchstone artefacts and utilised quartz points (scale 1:1)

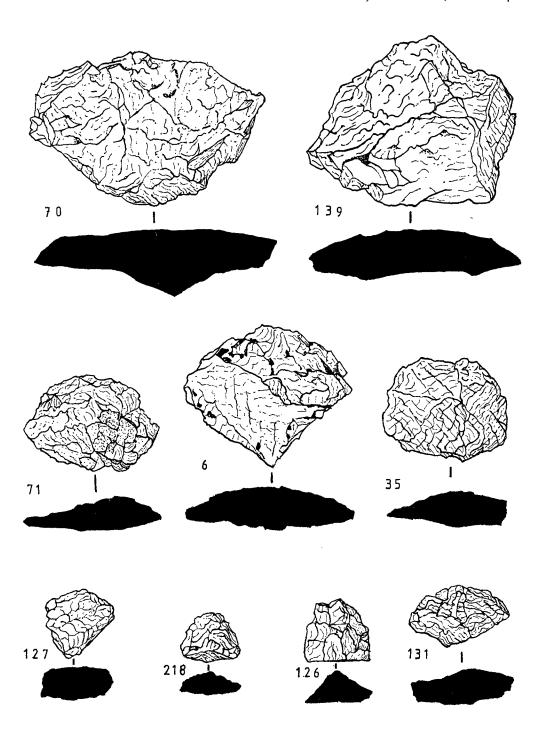


Fig 10 Utilised quartz flakes

Lignite

AG 202 Half bead 18 mm diameter, 10 mm thick. Hour glass perforation. Perforation and surface of bead polished.

Stone

- AG 145 Greenstone axe, polished, chipped and broken 60 mm to break, 55 mm at broadest part (fig 5). Group VI.
- AG 146 Greenstone axe, polished chipped 85 mm long, 55 mm at broadest (fig 5). Group VI.
- AG 215 Pebble of pink quartz with smoothed facets, possibly used as polisher.
- AG 222 Pot lid, disc of schist, 100 mm diameter, 28 mm thick.
- AG 223 Pot lid, disc of schist, part of, roughly trimmed to shape. 100 mm diameter, 28 mm thick.
- AG 105 Hone, possible, part of. Triangular in section, three sides smoothed, one edge flattened. 64 mm long to break, sides 33 mm.
- AG 107 Hammer Stone, quartzite, rectangular stone abraded at both ends. 77 mm by 73 mm.
- AG 108 Pounder, part of, sandstone, abraded one end. 58 mm to break by 73 mm.

The Neolithic pottery from Auchategan

J G Scott

INTRODUCTION

The total number of potsherds found at Auchategan is estimated at 438. All are acceptable as Neolithic. They clearly represent domestic refuse, for a great many are sooted, some have been refired and a significant number abraded. In consequence many of the sherds are small and featureless, so that any estimate of types of vessel must be approximate.

The open or upright bowl, usually carinated or alternatively in the case of the open bowl, S-profiled, is by far the most numerous type of vessel. It is estimated that 60 might be represented. Of other types only one closed carinated bowl, constricted at the mouth, and one globular bowl could with certainty be recognised. However, although the number of types is restricted, it is clear that there was variety in size amongst the vessels used.

I should like to thank my wife for the drawings of the pottery.

DESCRIPTION

Grimston style

- a *Open bowls*. In these vessels the internal diameter at the carination, or at the point of change of curve of the S-profile, is less than at the neck. The external rim diameter is always the greatest. They include vessels ascribed by Wainwright (1972) to his Types IID and IVC (ii).
- 1 Rim and body sherds from a plain S-profiled bowl of fine, almost gritless fabric, light brown and smoothed (fig 11). Below the simple splayed rim the neck shows two faint corrugations; there are sooty patches in this area. AG 1, 20, 23 (1967); 43, 48 & V2 (1968) are believed to belong to this vessel.
- 2 Two rim sherds from a plain bowl probably with S-profile, of fine reddish brown micaceous fabric containing a few large grits, the surface probably originally burnished, sooted at the neck (fig 12a). AG 245, 249 (1969).
- 3. Rim and body sherds from a plain bowl probably with S-profile, of fine, almost gritless micaceous fabric, dark brown to black on the outside, smoothed and burnished black on the interior (fig 12c). The rim is markedly splayed. AG 232, 254 (1969).

- 4 Rim and body sherds from a plain bowl probably with S-profile, of fine slightly reddish brown fabric containing a few probably calcite grits, the inner surface of the rim and the interior horizontally striated possibly through smoothing with a stick (fig 12b). The out-turned rim has a slightly beaded lip. The exterior is sooted. AG 47, 103 (1968).
- 5 Body sherd from a bowl with slight carination, of fine micaceous fabric containing a little perhaps calcite grit, dark reddish brown on the outside and slightly darker on the inside, with some sooting (fig 12y). Both interior and exterior have been burnished; the exterior has faintly scored oblique decorative lines breaking the burnishing just above the carination. V2 (1968).
- 6 Rim sherds probably from an open bowl, of fine reddish brown fabric containing a little perhaps calcite grit, the exterior sooted (fig 12g). The rim seems to have been widely splayed, with a slightly beaded lip. The interior at least seems to have been burnished. AG 243, 250 (1969).
- 7 Rim sherd probably from an open bowl, of fabric perhaps calcite-gritted, pink through refiring (fig 12i). AG 86 (1968).

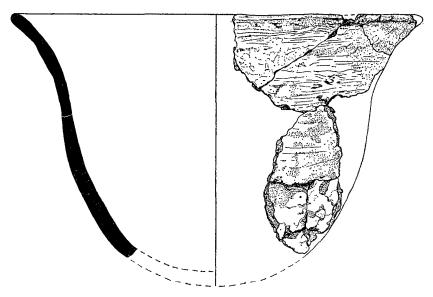


Fig 11 Pottery bowl (catalogue no 1; scale 1:3)

- b Carinated bowls with upright neck. In these vessels the internal diameter at the carination is the same as or greater than at the neck, yet the rim is not constricted but is everted and sometimes flaring. They include vessels ascribed by Wainwright (1972) to his Types IID, IVA (i), IVA (ii), IVB (i), IVC (i) and IVC (ii).
- 8 Rim and body sherds of fine dark chocolate brown burnished micaceous fabric containing some large quartz grits (fig 13d). The inner surface of the rim and the interior are striated perhaps through smoothing with a stick. AG 51, D, T (1968); 241 (1969): the first three are refired.
- 9 Rim sherd, apparently refired, of micaceous fabric containing many small possibly calcite grits, buff on the exterior, blackish on the interior, with smoothed finish (fig 13g). The lip is beaded and the carination distinct though not stepped. AG 85 (1968).
- 10 Rim sherd of dense black fabric containing many small possibly calcite grits, the surface burnished, with a suggestion of rippling on the rim (fig 13f). The lip is carefully out-turned and the carination marked by a slight ridge. AG 252 (1969).
- 11 Carinated body sherd of dark grey, almost gritless micaceous fabric with surfaces probably originally burnished (fig 131). A distinct ridge marks the carination. AG 88 (1968).
- 12 Rim and body sherds of dark greyish brown micaceous fabric with occasional small grits and burnished finish, sooted (fig 13a). The lip is rather irregularly beaded; the carination has a well marked ridge. AG 255, 256 (1969); the rim and carinated sherds do not join but seem to be from the same vessel.

13 Carinated and other body sherds of dark grey micaceous fabric, brown in patches, containing fine grit, the burnished surfaces sooted (fig 13b). The interior bears horizontal striations possibly caused by smoothing with a stick. AG 230 (1969).

14 Rim and carinated body sherds, almost certainly from the same vessel, of greyish brown micaceous fabric with a little small grit, the surfaces probably originally burnished (fig 13c). The outward turn of the lip has been emphasised by shallow grooving below it. The carination is defined by a ridge. AG 237, 238 (1969).

- c Open bowls or carinated bowls with upright neck. Of these sherds insufficient survives to enable them to be placed with certainty in either of the categories, a or b, described above.
- 15 Rim sherd probably from an open bowl of finely finished reddish brown micaceous fabric containing a little quartz grit (fig 12f). AG 253 (1969). The small rim sherd, AG 84 (1968), 18 mm by 15 mm and 8 mm thick, is from this or a very similar vessel.
- 16 Rim sherd, possibly refired, of fine, almost gritless fabric with well burnished surface (fig 12w). AG 49 (1968); a carinated sherd from the same context, AG 50 (1968), though more micaceous in appearance, may be from the same vessel.
- 17 Rim sherds of fine, almost gritless reddish brown micaceous fabric, the sooted surfaces smooth and probably originally burnished (fig 12h). This vessel must have been large, and given strength by a thick and out-turned rim. AG 244 (1969).
- 18 Rim sherd of fine, almost gritless reddish brown micaceous fabric, the surfaces smooth and probably originally burnished (fig 12q). The rim is rolled over. AG 87 (1968).
- 19 Rim sherd of fine reddish brown smoothed micaceous fabric with small, perhaps calcite grits, the interior sooted (fig 121). The missing lip has been emphasised by a well marked finger groove just below it. AG 276 (1970). Neolithic 1.
- 20 Rim and body sherds of fine reddish brown micaceous fabric with small grits, the interior abraded, the exterior sooted (fig 12d). The rim is strongly out-turned: the exterior at least of this vessel may have been burnished. AG 234 (1969); the rim sherd, AG 236 (1969), might be from the same vessel (fig 12j).
- 21 Rim sherd of fine reddish brown micaceous fabric with small grits, the interior abraded, the exterior smoothed (fig 12r). Abrasion has destroyed the upper surface of the rim. AG 235 (1969).
- 22 Rim sherd, probably refired, of micaceous fabric containing medium grits, orange red on the smoothed exterior and grey on the abraded interior (fig 12v). The rim seems to have been rolled over and finished off with the thumb nail. AG 89 (1968). Neolithic 2.
- 23 Carinated sherd of exceptionally fine hard, almost gritless black fabric, the exterior a burnished dark red, the interior burnished black and rippled (fig 12x). The carination is a rounded ridge. AG 242 (1969).
- 24 Rim sherd of dark grey fabric containing small, perhaps calcite grits, the exterior with a reddish brown slip (fig 12t). The angle of the rim is not certain. AG 247 (1969).
- 25 Rim sherd of greyish brown burnished rather coarse fabric containing large grits, sooted on the exterior (fig 12m). The rolled over rim has been smoothed, perhaps with a stick, to produce a series of horizontal facets. AG 251 (1969); very similar to AG 248 (no 26), but apparently not from the same vessel. Two partial rim sherds (fig 12n, o) may be from this vessel: AG Z (1969).
- 26 Rim sherd of reddish brown burnished fabric containing small grits (fig 12p). The rolled over rim appears to have faint traces of radial rippling. AG 248 (1969); very similar to AG 251 (no 25), but apparently not from the same vessel.
- 27 Partial rim sherd of rather coarse brown fabric containing large quartz grits, 22 mm by 25 mm. This rim would appear to be from a large vessel. AG Z (1969).
- 28 Neck sherd of fine greyish brown burnished micaceous fabric containing medium grits, including quartz, 55 mm by 48 mm and 6–10 mm thick, from a substantial vessel probably with S-profile. AG Y (1969).
 - 29 Rim sherd of fine greyish brown micaceous fabric containing small grits (fig 12k). AG N (1968).
- 30 Rim sheld of thin reddish brown originally burnished micaceous fabric, containing small grits (fig 12s). The rim has a beaded lip. AG 295 (1970).
- 31 Concave neck sherd of dark brown fabric with a little medium grit, the inside burnished almost black, 37 mm by 23 mm and 8 mm thick. AG Y (1969).

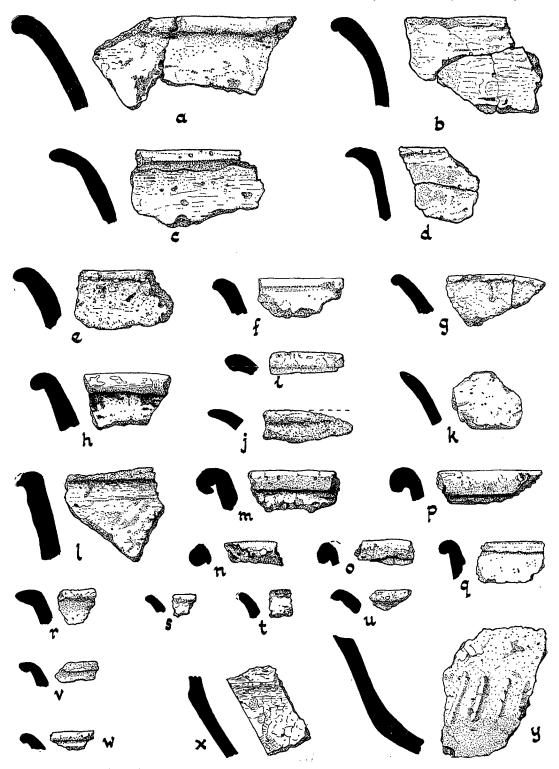


Fig 12 Pottery (scale 1:2)

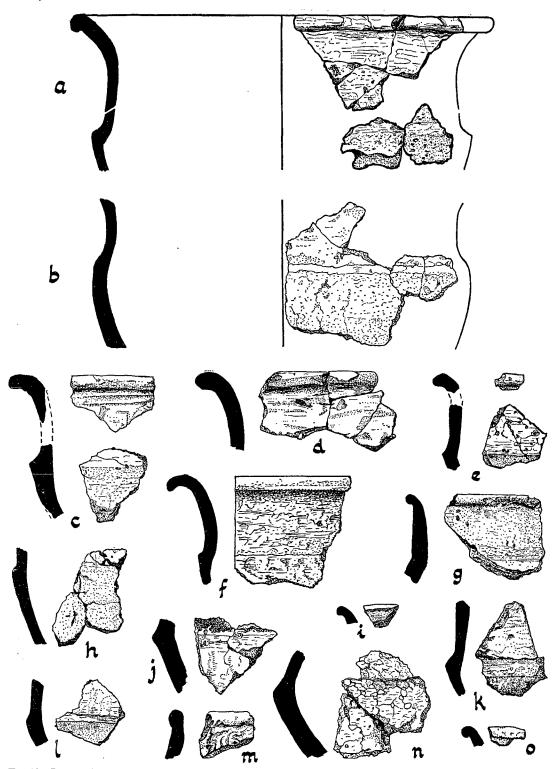


Fig 13 Pottery (scale 1:2)

- 32 Partial everted rim sherd of coarse brown fabric containing large quartz grits, 23 mm by 25 mm, the outer surface missing. AG Z (1969).
- 33 Rim sherd of hard reddish brown fabric containing medium grits (fig 12e), the surfaces abraded. The lip is slightly beaded. AG 83 (1968). Probably Neolithic 2.
- 34 Rim sherd, perhaps refired, of rather coarse reddish brown fabric containing medium quartz grits (fig 12u). AG 46 (1968).
- d Carinated bowls with upright neck or closed carinated bowls. It is likely that all the sherds in this group are from carinated bowls with upright neck (upright bowls), but it is possible that some might be from closed carinated bowls.
- 35 Carinated body sherds of fine greyish brown burnished micaceous fabric containing small grits (fig 13h). The carination is defined by a ridge. AG 48, T (1968).
- 36 Carinated sherd of fine fabric containing a little medium grit, the exterior brown, the interior a burnished black, 25 mm by 22 mm and 8 mm thick. The carination is rounded but sharply angled. AG 84 (1968).
- 37 Carinated sherd of fine micaceous, almost gritless fabric, the exterior brown, the interior a burnished black, 14 mm by 25 mm and 5–8 mm thick. The carination is rounded and the neck probably concave. AG 101 (1968).
- 38 Concave neck sherd of fine, almost gritless fabric, the exterior brown, the interior burnished black and sooted, 20 mm by 25 mm and 5 mm thick. AG 90 (1968). Neolithic 2.
- 39 Carinated, almost straight neck sherds of fine micaceous brown fabric containing a few quartz grits, both interior and exterior having a burnished black slip, 40 mm by 32 mm and 5 mm thick. AG 90 (1968). Neolithic 2.
- 40 Sherd perhaps from the neck just above the carination of fine dark brown micaceous fabric containing small grits, the interior burnished black and apparently rippled, 30 mm by 35 mm and 7–8 mm thick. AG 89 (1968). Neolithic 2.
- 41 Carinated sherds of fine dark brown burnished micaceous fabric containing a few small grits, rather roughly finished (fig 13k). The carination is strongly formed with a ridge and groove. AG 246 (1969).
- 42 Carinated sherd of fine reddish brown burnished, almost gritless micaceous fabric, 20 mm by 7 mm and 7-9 mm thick. AG 297 (1970). This small sherd might well belong to a vessel already described.
- 43 Twenty sherds, including two neck and two carinated, of poorly fired coarse reddish brown rather crumbly fabric with medium, probably calcite and micaceous grit (fig 13j). Both interior and exterior have been smoothed; the exterior is sooted. Very faintly impressed upon the exterior, below the carination, are closely set narrow vertical bands of horizontal lines, which appear to be deliberate decoration. AG 229 (1969).
- 44 Concave neck sherd from a carinated bowl of fine hard, almost gritless micaceous fabric, the surfaces burnished black, 37 mm by 28 mm and 4-6 mm thick. AG Z (1969). Another carinated sherd, 24 mm by 22 mm and 5-7 mm thick, is almost certainly from the same vessel. AG Z (1969).
- 45 Carinated sherd of greyish brown burnished micaceous fabric containing medium quartz grits, 30 mm by 25 mm and 4-5 mm thick. The slight carination takes the form of a shallow curve. AG Z (1969).
- 46 Rim sherd and carinated sherds, not joining but possibly from the same vessel, of dark grey micaceous fabric with medium grits, the exterior surface with a burnished black slip (fig 13e). The carination is defined by a sharp ridge. AG 276, 277 (1970); probably Neolithic 1.
- 47 Rim sherd of fine, almost gritless fabric with black surface probably originally burnished (fig 13i). AG 233 (1969).
- 48 Rim sherd of fine dark grey, almost gritless fabric, probably originally burnished, the exterior sooted (fig 130). The lip of the rim is rolled over and beaded. An associated concave neck sherd is probably from the same vessel. AG 45 (1968).
- 49 Carinated sherd of reddish brown smoothed and perhaps originally burnished micaceous fabric, containing small grits, 20 mm by 20 mm and 5–7 mm thick. The carination is defined by a rounded ridge. AG 239 (1969).
- 50 Concave neck sherd of fine dark grey burnished micaceous fabric containing quartz grits, 40 mm by 23 mm and 5-6 mm thick. AG 86 (1968).

- 51 Concave neck sherd of fine dark grey burnished micaceous fabric containing quartz grits, sooted, 20 mm by 24 mm and 5 mm thick. AG 90 (1968). Neolithic 2.
- 52 Concave neck sherd of fine dark grey, almost gritless micaceous fabric, sooted on the outside, 18 mm by 20 mm and 5-6 mm thick. AG A (1968).
- 53 Carinated sherd of coarse brown fabric, much abraded, containing medium grits, some of quartz, 44 mm by 23 mm and 6-8 mm thick. AG L (1968).
- 54 Carinated sherd, refired and abraded, of almost gritless reddish brown micaceous fabric, the outside sooted, 35 mm by 32 mm and 7 mm thick. AG WA (1968).
- 55 Concave neck sherd of greyish brown, almost gritless fabric with burnished surfaces, sooted on the outside, 33 mm by 25 mm and 5-8 mm thick. AG WA (1968).
- 56 Carinated sherd, refired and abraded, of coarse micaceous orange fabric containing medium grits, some of quartz, 30 mm by 24 mm and 5-7 mm thick. AG W (1968). A similar sherd, in similar condition, 22 mm by 17 mm and 5-7 mm thick, may be from the same vessel. AG Y (1969).
- 57 Carinated sherd, refired, of fine micaceous orange fabric with a little small grit, 27 mm by 40 mm and 5-6 mm thick. AG Y (1969).

Miscellaneous vessels

- 58 Carinated sherds of very coarse fabric containing large grits, pale buff on the outside and grey on the inside (fig 13n). Abrasion has softened the outlines, but it is likely that the carination was defined as a ridge and that the neck was concave. Almost certainly a closed carinated bowl. AG 103 (1968). Probably Neolithic 2.
- 59 Rim sherd of coarse reddish grey micaceous fabric containing medium grits, the outside sooted, the inside abraded, perhaps from a globular bowl, constricted at the mouth, with an almost upright rim (fig 13m). AG 231 (1969).
- 60 Body sherd, perhaps from the concave neck of a substantial vessel, of fine, almost gritless micaceous fabric with smoothed surfaces, 30 mm by 30 mm and 8-10 mm thick. On the outer surface are two lightly scored lines, parallel, slightly curved and 6-7 mm apart presumably decoration. AG 95 (1968). Neolithic 1.

DISCUSSION

The Neolithic pottery from Auchategan is, with a few exceptions, in the Grimston tradition. It adheres so closely to that tradition that it may be described as Grimston in style. Parallels for its almost every characteristic may be discerned among the far greater assemblage of vessels found by Wainwright (1972) at the Neolithic settlement on Broome Heath, Ditchingham, Norfolk. The relationship of the Broome Heath pottery to the Grimston style is accepted by Wainwright (1972, 73) and by Manby (1975, 48).

Wainwright (1972, 24–30) has classified the Broome Heath pottery into four Types – I, cups, carinated and not carinated; II, bowls, globular and open, including S-profiled forms; IV, carinated bowls, both open and closed (ie constricted at the mouth); V, a single vessel with a thumb groove below the rim. Type III had been reserved for vessels in which the height exceeds the maximum diameter, but none was recognised. Manby (1975, 49) points out that in the Grimston style in Yorkshire carinated, S-profiled and open bowls predominate, and that simple rim shapes and globular bowl forms are not numerous.

Manby (1975, 48-9) also emphasises that regional variations within a Grimston style distribution now seen to extend along the length of eastern England and Scotland from Sussex to Caithness (Smith 1974a, 32) are at present difficult to define owing to the limited nature of the assemblages in many areas. At Auchategan the Neolithic pottery though plentiful by Scottish standards is still insufficient to bear the statistical analysis or to justify the typology appropriate to the vastly larger collection from Broome Heath. Nevertheless, it can be noted that simple rim shapes and globular bowl forms as in Yorkshire, are not numerous. Open bowls, both S-profiled

and carinated, corresponding to Wainwright's (1972) Types IID, IVA (i), IVA (ii), IVB (i), IVC (i) and IVC (ii), are found, but there is only one undoubted example (58) of the closed carinated bowl of Type IVB (ii), so well known in the Beacharra style. Cups of Type I could not be proved to occur at Auchategan, though several thin and delicate sherds might well have come from such vessels, defined as having a diameter of not more than 120 mm.

For the Grimston style pottery at Auchategan it has seemed best to adopt a simpler classification, into open bowls, both S-profiled and carinated, on the one hand (figs 11, 12) and carinated bowls, either upright or constricted at the mouth, on the other hand (fig 13). In what is termed the upright bowl the neck is not necessarily straight; it may be concave, and the rim may be everted or even flaring. Nevertheless, the neck of the upright bowl seems to be set in a recognisably vertical plane on top of the body. It must, of course, be borne in mind that the angles of the small rim and carinated sherds shown in figs 12 and 13 are estimated only, the outcome of a study of the pottery over a period but liable to error. With this made clear it may be suggested, with all reserve, that the open bowl and the upright bowl predominated in the Grimston style at Auchategan: the open bowl appears to be slightly more plentiful, but this may merely reflect a higher survival capability, since in general it is more robust in construction and of a consistently hard and high quality fabric.

The fabrics of the two types of bowl contrast also in appearance and composition, thereby not only emphasising the distinction made above between the two types of bowl but suggesting that they may have had different functions. Nearly all the pottery has been described as micaceous, but the mica particles are for the most part so minute as to imply that they were a primary constituent of the clay rather than a deliberate additive. In only a few instances, and with one exception in upright bowls, were the particles of mica large enough to suggest deliberate addition as grit. The fabric of the open bowls is typically of a reddish brown colour throughout, hard, often almost gritless, sometimes containing small grit, rarely large grit. The surfaces are well finished - smoothed and often burnished. Carinations are usually rounded. By contrast the addition of small to medium grit, including mica and quartz, tends to be more frequent in upright bowls. Their fabric is good, and sometimes excellent, grey to almost black in colour, but generally thinner and less robust than the fabric of the open bowls. Surfaces are carefully smoothed and occasionally burnished. A shiny black finish seems sometimes to have been the aim, and was at times achieved with what appears to be a black slip. Decoration is not used, apart from very occasional rippling, except in two cases (5, 43), one open and one upright bowl (figs 12y, 13j), with one uncertain example (60). Rippling is found on both fabrics.

The range of Grimston style vessels from Broome Heath has made it easier to accept the Auchategan assemblage as Grimston in style. The almost uniformly Grimston character of the Auchategan pottery is perhaps its most surprising feature, for elsewhere in the Clyde region parallels are not easily found, though the influence of the Grimston style upon the development of pottery styles in that region has been suspected (Scott 1977, 32). Luce Bay, in Wigtownshire, a sandhill site, has produced the most numerous comparable Scottish assemblage of Grimston style pottery in the Class I Fine Ware described by Isla McInnes (1964, 42; 61, fig 1). She fully recognised the likely northern English, ultimately Yorkshire origin of these vessels (1964, 46; 1969, 19). The S-profiled open bowl found by Piggott and Powell (1949, 119, fig 7) in the forecourt of the Clyde chambered cairn, Cairnholy I (KRK 2), also in Galloway, has then and since been linked with what would now be called the Grimston style of Yorkshire. Indeed, Isla McInnes considered the Cairnholy I and some of the similar bowls from Luce Bay to be of a fabric so like that of pottery from some of the Yorkshire barrows as to suggest importation (1969, 19). The absence of Grimston style pottery from other Clyde chambered cairns and indeed

from W Scottish chambered cairns generally may be checked by examining Audrey Henshall's illustrations of the finds from those cairns (1972, 302–10). Apart from the Cairnholy I bowl she lists only two other possibly related sherds (1972, 170), from Dunan Beag (ARN 7) and Barpa Langass (UST 6). The implications of this distribution are discussed below.

Also found by Piggott and Powell at Cairnholy I, in the forecourt blocking, was a carinated upright bowl (1949, 119, fig 7). Audrey Henshall's drawing of this bowl (1972, 307) differs in proportions and angle of neck from the earlier illustration, but this does not affect the received classification of the vessel which, because of its developed rim and stepped carination, has been universally accepted as Lyles Hill in style. Yet it is worth drawing attention to Wainwright's illustration (1972, 35, fig 24, P 220) of what seems to be a very similar though larger vessel from Broome Heath, but with a less sharply marked carination. Probably only the stepped carination of the Cairnholy I vessel would still persuade most archaeologists to classify it as Lyles Hill in style.

The superficial similarities and the postulated links between the Grimston and the Lyles Hill styles have led to the use of the portmanteau term Grimston-Lyles Hill by Audrey Henshall (1972, 100) and Isobel Smith (1974b, 106-8). That this is not a helpful concept, and that the term should not henceforth be used, have recently been argued by the writer (Scott 1977, 36-7). The suggestion that much of the pottery from the *Clyde* chambered cairns should be classified as Lyles Hill was made by Atkinson (1962, 16), but there is now evidence to show that this view is no longer tenable, and that the majority of the pottery so classified is in the Rothesay style, which owed little if anything to Lyles Hill influences (Scott 1977).

In the absence of the evidence from Broome Heath, an argument could have been advanced for classifying the Auchategan upright bowls (fig 13) as Lyles Hill in style, on the grounds not only of their shape but also of their fabric. Such a classification was assumed by the writer (Scott 1973, 125), but it can now hardly be sustained. Of the total number of vessels from Broome Heath, 17.5% were of a 'thin, hard, grey-black fabric, burnished on both faces and with very few grits which are mostly of flint with some quartz' (Wainwright 1972, 23). The fabric of most of the Auchategan upright bowls is very similar, except for the flint grit. The carinations of the Auchategan vessels, though often distinctly defined, tend to be bevelled, agreeing with the practice at Broome Heath. The stepped or even peaked carinations found in the Lyles Hill and other Irish styles do not occur at Auchategan.

Nevertheless, there is Lyles Hill style pottery which does closely match pottery from Auchategan. From the type site itself Evans illustrates an open bowl and an upright or closed bowl which could fit easily into the Auchategan assemblage (1953, 33, fig 11, no 5; 35, fig 12, no 8). Case (1961, 178-80) has used the term Lyles Hill in a more restricted sense than other writers, preferring to abstract from the Lyles Hill pottery as understood by Atkinson (1962) and Piggott (1954, 167–70) certain classes of pottery which he allocates to the Dunmurry, Ballymarlagh and (as he understands it) Lyles Hill styles: unless otherwise stated, Lyles Hill is here used in the broader sense. Case describes pottery in his Dunmurry and Ballymarlagh styles which recalls not only the Auchategan pottery specifically but the Grimston style generally (1961, figs 2, 3, 4, 6). In fact Case's Dunmurry style, except for the occasional peaked carination and 'most uncommon' T-headed rim, could be described as Grimston style pottery in Ireland (1961, 175). The largest collection of Dunmurry style pottery comes from the dual court cairn at Carnanbane, Ballybriest, County Londonderry (Evans 1939). Evans considered that, with the exception of five or six plain bowls, all the sherds appeared to be from shouldered bowls; his illustrations show sherds which, except for occasional stepped or peaked carinations, compare well with sherds from Auchategan (1939, 8, fig 3, 11-12). The Dunmurry style pottery from the court cairn at Creevykeel, County Sligo, as described and illustrated by Hencken (1939, 73-4, fig 3), with the exception of two sherds, agrees even more closely with the Auchategan pottery.

In view of the general resemblance between Case's Dunmurry style pottery and the pottery from Auchategan, as thus pointed out, it might be asked whether the Auchategan assemblage should be classified as Dunmurry rather than Grimston. This possibility has been seriously considered. So far as the internal evidence from the pottery itself is concerned, it is felt that the entire absence of the peculiarly Irish characteristics of stepped or peaked carinations and of exaggerated rims is in favour of a Grimston origin. Moreover, the presence of two Group VI axeheads at Auchategan (fig 5) points to connexions with Britain rather than with Ireland. It is perhaps unwise to stress the statement by Isla McInnes (1964, 47) that mica was not used in Irish pottery, for Evans (1939, 11) specifically records it as present in Dunmurry style pottery at Carnanbane. However, in view of the occurrence of micaceous fabrics at Auchategan her observation that 'the use of mica as a backing would appear to be a Yorkshire trick' may be noted here.

Nevertheless, it is pertinent to ask whether the Auchategan settlement has anything to offer as a link between the predominantly eastern sites of England and Scotland which have produced Grimston style pottery and the northern Irish sites with Lyles Hill or, more particularly, Dunmurry style pottery. Auchategan would seem on the archaeological evidence to represent a stage in the movement from Yorkshire to northern Ireland. Yet radiocarbon dates suggest that the Lyles Hill style in Ireland may have started earlier, from about 3750 bc, and finished sooner, perhaps about the middle of the 3rd millennium bc, than the Grimston style in Britain (Smith 1974, 106-7, fig 13). The chronological range at Broome Heath was from 3474 ± 117 to 2217 ± 78 bc (Wainwright 1972, 70). The issue is perhaps confused because of misunderstanding of what is meant by Lyles Hill pottery. Case regards his Dunmurry style, which compares most closely with the Grimston, as the earliest of his Irish series, and indeed as parental to the others (1961, 220-1). It would appear, then, at first sight that Auchategan might be an early link between eastern Britain and Ireland: in fact, this need not be so.

A further factor to be taken into account is the distribution of Grimston style pottery in the Clyde region. It is clearly peripheral to the distribution of *Clyde* chambered cairns (Scott 1969, 176-7, fig 61; Henshall 1972, map 7). It has been shown that Cairnholy I (KRK 2) is of composite construction, and that the forecourt belongs to the latest phase (Scott 1969, 192-5). The Grimston style open bowl deposited in the forecourt must therefore be correspondingly late (Piggott & Powell 1949, 115). The inference is that the builders of Clyde cairns were well established and, for whatever reason, were unwilling to make use of Grimston pottery. One is tempted, following suggestions of Giot and Powell (1969, 270-1) to postulate a Clyde façade at this stage of the Neolithic period, against which westward moving ideas and influences were halted, eventually to be modified, or by which they were diverted. A version of this concept was put forward in 1969 (Scott 1973, 122) to explain the manner in which Irish ideas of chambered cairn construction, and no doubt other influences, reached and were received into the Clyde region. It was pointed out that Irish constructional practices could be detected in Clyde chambered cairns in Islay, on Loch Aweside and on Loch Fyneside, whilst the influence of Irish ideas of cairn construction could be traced in chambered cairns in Bute and Arran. In other words the existence of the Clyde façade confined the overt expression of those Irish ideas to the periphery of the Clyde region, thence to be received into Bute and Arran only in modified form. Auchategan is on this periphery, and the use of Glendaruel as a channel for Irish influence is to some extent confirmed by the excavation between 1972 and 1976 of a Neolithic cairn at Hilton, in Bute, which produced sherds of shouldered bowls with well defined peaked carinations and other features suggesting an Irish origin (Marshall 1976, 21-3, fig 2).

It has already been pointed out that Case (1961, 220-1) considered his Dunmurry style to be the earliest of his Irish series, and this view is supported by a date of 3675 ± 50 bc (UB-197) from Ballynagilly, County Tyrone (Wainwright 1972, 74). However, as Case says, 'the only considerable collection' of pottery in this style comes from the dual court cairn at Carnanbane, already discussed (1961, 175; Evans 1939). In the dual court cairn at Aghanaglack, County Fermanagh, abundant charcoal of ash (*Fraxinus*) was found in a primary position, and this tree is known to have been absent over most of Ireland prior to the middle of the 3rd millennium BC. This suggests that the dual court cairn originated in Ireland in a late phase of the middle Neolithic period, lasting into the late Neolithic period (Scott 1973, 127), and that the Dunmurry style cannot at Aghanaglack be earlier. It therefore follows that the Dunmurry style, like the Lyles Hill and Grimston styles, had a long and independent currency. So far as Auchategan is concerned, the radiocarbon date of 2300 ± 110 be obtained from a Neolithic level agrees well with the archaeological evidence discussed above, and may be accepted for the Grimston style pottery found there.

The survival of such pottery traditions over such lengthy periods in virtually unchanged form implies a population of discrete, self-contained and virtually self-sufficient groups, free to exist independently and, as now appears, able to move at will over large tracts of Britain and Ireland, only occasionally encountering obstacles such as the postulated *Clyde façade*, representing more closely settled and integrated communities, which might bar or divert their passage. Such a picture of the period is rendered easier of acceptance by the evidence from Broome Heath. Wainwright (1972, 70–1) has shown that, possibly in the late 4th millennium BC and certainly during the 3rd millennium BC, the Broome Heath settlement with its Grimston style pottery coexisted in East Anglia with two other settlements, at Hurst Fen and at Eaton Heath, 40 and 10 miles away respectively which had a quite separate ceramic tradition.

If conditions were as outlined above, it will become necessary once more, and against the trend of fashion, to include population movements amongst the major instruments of change in the Neolithic period. Isobel Smith has pointed out that some variations in pottery styles can now be understood in terms of trade competition, but that some ceramic styles may be the consequence of actual folk movements (1974b, 110–11). She instances the Hembury style as one probably carried to Yorkshire, Wales and Scotland by communities in process of expansion. Such a community movement would surely most economically explain how a Grimston style pottery assemblage, virtually unaffected by other styles, might appear at Auchategan, in a comparatively remote part of Argyll. A similar movement might be the best explanation for the transfer to Scotland of those Abingdon style pottery traits which manifest themselves in the Rothesay pottery style of Scotland (Scott 1977). To this fresh approach to Scotlish Neolithic studies the excavation of the settlement at Auchategan has made a major contribution.

THE BRONZE AGE: PERIOD 2

A Bronze Age cairn (fig 14) with a cist (1) was uncovered while clearing the W wall of the Stone House and the Walls of Hut 1 both belonging to later periods (pl 1a). Further to the E, under the floor of the Stone House, another cist (2) was uncovered (pl 1b). The cairn was semicircular with the cist set in the centre and at right angles to the slightly incurved edge. From a long stone at the edge fairly large stones clearly marked the curving sides of the cairn which finished at both ends in live rock. At the W end this rock showed signs of having been trimmed. The highest point of the cairn was midway between the large stone at the E side of it and the end slab of the cist. If the cairn had been the more usual round form one would have expected

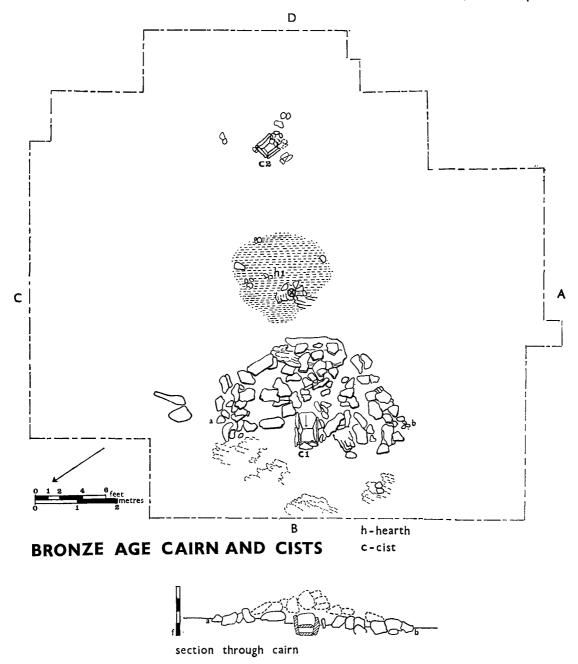


Fig 14 Bronze Age cairn & cists

to have found stones to the W of the incurved edge. There were none. The careful build of what was found made the excavators conclude that the cairn had been designed as a semi-circle.

The fill among the stones of the cairn had clearly been taken from the Neolithic occupation level upon which it had been built. The material varied from clean sandy soil to dark occupation soil. Many sherds of Neolithic pottery were found all over the cairn. It was possible later to join

some of these sherds together. Artefacts of flint, pitchstone and quartz were also found. The upper cairn material consisted of stones not more than 0.30 m long. Schist was used throughout, with no quartz.

The cists, the one in the cairn 0.55 m long and the one in the Stone House 0.35 m long, had distinct similarities in their construction. In both, three sides were well made with well chosen and well placed slabs of stone. Each had one side slab longer than the other side slab. In both the cists one of the short sides was made up of smaller stones, the top of which was lower than the sides. In the cairn cist this was the side at the outside of the cairn. Neither cist had a capstone, but had stones laid on the top of the fill. In Cist 1 these stones were 0.20 m below the top of the side slabs and in Cist 2 were 0.05 m below. A single slab filled the base of Cist 1 and also of Cist 2. Cist 1 lay E-W, Cist 2 N-S.

In Cist 1 the E end slab was well chosen for size and shape. Some small stones were used to fill in between it and the N side slab, but it fitted closely to the long S side slab. This S slab projected 0.15 m beyond the E end. The N side of the cist was made of several stones, the most easterly of which projected 0.30 m beyond the E end. The W, short end was also made up of several small stones, the top of which were 0.30 m below the top of the S slab. Above the covering stones, 0.20 m below the top of the S slab, were two small sherds, one of a well-fired ware with quartz grits and black core, the other of a finer red-buff ware. A third very small sherd, fired buff throughout, with quartz grits was found in the fill under the covering stones. J G Scott originally suspected that certain sherds might be Bronze Age but subsequent examination rendered identification and dating impossible. The fill of the cist, earth with flecks of charcoal contained no bones or chips of burnt bone. One slab of stone covered the bottom of the cist. Under this slab the soil to the N was clean and sandy; to the S it was stained grey. The division between the two soils was clearly marked. It ran down the centre of the cist. The stained soil extended a little way to the W of the S slab and under it. It filled a hollow in the sandy soil, sloping to a depth of 0.06 m. This stained soil probably belonged to the Neolithic occupation and may have been caused by eave's drip. The cist was dug into an accumulation of sandy soil resting on what was later found to be the Neolithic 1 level. No foundation trench could be detected but sandy soil might not have preserved one if the cist has been constructed and then been packed around without delay.

In Cist 2 chips of burnt bone were found in the earth both below and above the covering stones in the cist. Later builders had levelled up the edges of Cist 2 with earth and clay packing. The cist had been set into soil which had accumulated over natural soil and bedrock. A very slight, narrow foundation trench was distinguished on the W side. This indicated that the stones had been pressed into place from inside a prepared hole not much bigger than the size of the cist. Stones set on end were found at the NE and SW corners which obviously had nothing to do with the construction of the cist. Later, in the course of excavation it was found that the more solid of the two sets of stone, the NE, was a post-hole (WW) made to support a post of the Post-Hole Hut and that the SW one (QQ), which was not well defined possibly belonged to the Neolithic level into which the cist had been set.

A semi-circular Bronze Age cairn is unusual. The siting of the cairn with its long axis along the ledge probably dictated the position of Cist 1 which lay E-W. Cist 2 lay N-S.

The construction of the two cists was so similar that it is probable that they were built at the same time. Their use however appears to have differed. As chips of burnt bone were found in the smaller cist (Cist 2) one may assume cremation. In the larger cist (Cist 1) the covering stones were found 0.20 m below the side slabs which suggest inhumation with the soil settling down as the body decayed. The construction with one end made of several stones and considerably

lower than the other three sides is unusual. I have found no description of similar cists. The use of several slabs covering the fill of the cist instead of a cap stone is also unusual. In both cists the proportion of breadth to length is greater than is normal in Bronze Age cists. Cist 2 at 0.35 m long is small but small cists are not uncommon. Miss Hunter in her corpus of Bronze Age inhumed burials (unpublished) remarks that the size of a cist is dictated largely by the stones available. It was at one time thought that small cists were used for child burials, as at Cour, Kintyre, but infant and child burials have been found in full sized cists. Small cists with no bones as at Clachbreck, Knapdale (Maclaren 1969, 111–14) and on the Wee Cumbrae (Lytteil 1886, 131); one of them contained a flint scraper, the other a pot. Remains of cremation are found in both large and small cists. The size of cist varies in groups of burials. On Inchmarnock (Marshall 1963, 11) the largest of three was 1.67 m long, the smallest 0.76 m.

The orientation of Bronze Age cists seems to follow no set pattern. It is more general where there are two or three in a group for them to be roughly aligned, as on Inchmarnock, (Marshall 1963, 75) N-S, at Kilmory (Marshall JN 1935, 73) and Auchenteerie (Bryce 1904, 57) on Bute NE-SW and NNE-SSW respectively: and at Kintyre a group of five cists, scattered within an area of 275 m two lay N-S, one NW-SE one NE-SW, for the fifth no orientation is noted. At Clachbreck, Knapdale ten cists were found with a seeming haphazard orientation but on excavation they were found to be in three groups, each group being sunk in the ground at a slightly different level. The orientation within each group was roughly the same. I am grateful to Mr A Morrison for this so far unpublished information.

Miss Doreen Hunter very kindly lent me her corpus of Bronze Age inhumation burials where from 700 examples recorded the orientation of only 117 had been noted. It is from her corpus and from the orientations given in reports of cists in *Proc Soc Antiq Scot* 1949–1974 and from *Discovery and Excavation* that I have made these notes. Admittedly the sample is small, 208 cists with the orientation recorded; of these 62 are from the W of Scotland.

	All Scotland	W of Scotland	Proportion in W
Total	208	62	29%
N-S	33	14	42%
NNE-SSW	19	8	43 %
NE-SW	54	24	44%
ENE-WSW	23	3	13%
E-W	57	6	10%
ESE-WNW	8	4	50%
SE-NW	7	2	20%
SSE-NNW	7	1	14%

It appears from these figures that the people in the W preferred their cists to lie from N-S to NE-SW. Of the 57 cists orientated E-W only six were from the W, one from Portpatrick, one from Arran and four from Argyll. Few, only nine, are reported as lying NW-SE.

BRONZE AGE: HEARTH 1

To the E of the Bronze Age cairn an area of red, burnt soil, much larger than any hearth found on the site, extended 2.4 m N-S and 1.8 m E-W and was up to .220 m deep at the centre. Over part of it was a thin layer of black soil with charcoal in it. A few stones were found at the perimeter but not enough to make a defining edge. Those which remained show signs of having been burnt with an intense heat. On the N side there were small pieces of clay-stone, split and reddened with heat. Little charcoal was found and no burnt bones.

As the small Neolithic Hearth 6 was found under Hearth 1 and as the red soil underlies the later Post-Hole Hut, though the levels at this part have been much disturbed by successive building, it seems that Hearth 1 was connected with the Bronze Age or with some activity carried on before the time of the Post-Hole Hut, of which no trace survives.

It is possible that Hearth 1 may be the remains of a pyre of Bronze Age times. Chips of burnt bone were found in cist 2.

THE POST-HOLE HUT: PERIOD 3

The Post-Hole Hut (fig 15; pl 2a), lying E-W, was 5.49 m and 4.28 m wide. Its outline was defined by post-holes Y, V and G on the N side, W at the E end is set 1.83 m E of the line between G and P making a pointed end. Post-holes P, R and O define the S side and N and X 1.07 m apart,

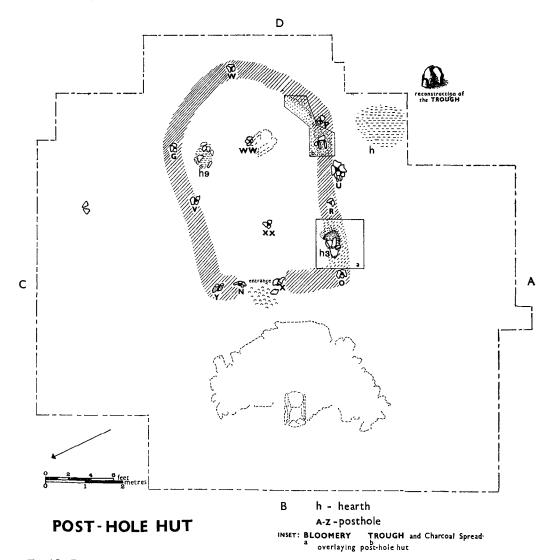


Fig 15 The post-hole hut

on the W end mark the sides of a probable door, set off centre to the N. Just W of post-hole X there was an area of light cobbling 0·13 m below the bottom of the Stone House/Hut 1 walls which at this point were indistinguishable one from the other. Post-holes WW and XX lay in the centre of the Hut. They, less well constructed than those of the main walls, seem light to have supported a main beam so the hut may have been constructed with collar beams across the gable ends to carry the weight. Bits of daub found during the excavation of the Hut point to wattle and daub walls.

Post-hole U set to the S of the line of the wall may perhaps have held the post of a porch at another doorway. If so the other post-hole has disappeared. The construction of U is different from those in the walls being made of stones lying flat on the ground round the hole instead of being set upright. E of U, outside the S wall of the Hut on the same level as post-hole P was a fairly widespread area of tramped and blackened soil. At one part the charcoal was concentrated to a depth of 0·14 m. This possible hearth (Hearth 11) was not surrounded by stones. The presence of this trampled earth makes the possible doorway in the S wall more probable, although the evidence is not conclusive. Near post-hole G, at a level 0·19 m below the base of the Stone House Wall, was an occupation level. It was not very well defined but had clay tramped into the brown soil with flecks of charcoal throughout. A few stones surrounding an area of charcoal indicated a hearth (Hearth 9). No other stones were found on the floor.

The plan, indeed the existence of the Post-Hole Hut, only became clear when the walls of the Stone House were taken down. In 1967 when excavating Hut 1 three post-holes were found which did not fit in with any pattern of the site then uncovered. They were recorded, planned and then demolished. Two of them O and Y were of a distinctive character being deep and constructed with long narrow stones. When G was uncovered, just inside and under the level of the N wall of the Stone House it, too, was found to be 0.47 m deep and made of long narrow stones. As W, P and R were found under the walls of the Stone House the plan of the Post-Hole Hut became clear. Iron pan had formed round the stones of post-hole XX showing that peat had probably been formed after the abandonment of the Post-Hole Hut. As there was no trace of peat above this area and as the floors of the Stone House and Hut 1 were above the iron pan this indicates that the Post-Hole Hut had never been burnt.

The only associated finds – two discs of schist, each about 0.08 m in diameter, possible pot lids, and two sandstone rubbers one 0.08 m long, the other 0.02 m long, are of no help in dating the Post-Hole Hut.

The outline of the Post-Hole Hut is clearly marked by the post-holes but little is left to tell of its interior arrangements or of its function.

A firmly set construction of stones lay between and just N of the line made by post-holes P and R. Two stones, parallel to each other, 0.25 m long stood 0.23 m high and about 0.31 m apart. To the E other flat stones had collapsed. The bottom of the 'Trough' was paved with stones. Among these stones and below them was an area of intense black soil with much carbon in it. This black level under the Trough (Hearth 17) rose steeply by about 0.15 m to the E and continued under the E wall of the Stone House. The Trough was dug into levels associated with the Post-Hole Hut.

FINDS

- AG 225 Pot lid, disc of schist, trimmed to shape, 90 mm diameter, 25 mm thick.
- AG 226 Pot lid, oval, schist, trimmed to shape, 172 mm by 134 mm, 20 mm thick.
- AG 227 Rubbing stone, sandstone, triangular in section, 80 mm long sides by 60 mm.

THE BLOOMERY: PERIOD 4

All over the site stray pieces of iron slag were found with a greater concentration in the area under the threshold stone of Hut 1 which had also been part of the wall of the Stone House. Here too were found one furnace bottom and part of another showing that there must have been iron working on the site. A lump of bog iron found in this area indicated that it rather than iron ore from an outcrop was used. Iron staining can be seen in some of the burns on the hillside near the site. Just beside the area of the furnace bottom was a large flat stone lying under and in the centre of a heavy black layer and showing signs of burning. To the S of this flat stone were one large and several smaller stones with slag among them. This large stone may have been a support for bellows. A sherd of a very coarse gritty ware with a piece of slag attached to it was found beside the flat stones. When Mr R B K Stevenson, Keeper of the National Museum of Antiquities, examined the sherd he did not think that it was part of the bellow's nozzle. Some clay was found in the area. There were also pieces of clay silt stone which had been reddened by fire. Mr Collins of the Institute of Geological Sciences, Edinburgh, thought that this could have been accomplished by an open fire, given correct draught conditions and that a temperature of 300°-500°C would be necessary.

Running S from the Bloomery was a 0.76 m wide pathway of small (0.15 m) flat stones. It faded out after about 1.25 m. Beside the end of it was a round deposit of charcoal, not hearth material. This may have been where charcoal for the furnace had been piled.

Mr W Glen Aitken, when visiting the site in May 1969, was surprised to see no real waste heap of slag. He considered it to be an early working as the slag was so rough in appearance. In medieval bloomeries, where a greater heat was obtained the slag has a more molten, glassy appearance (Aitken 1970).

The area where the Bloomery is situated has been so much disturbed by subsequent buildings that its relation to the other periods is difficult to establish. It is certainly earlier than the Stone House.

THE STONE HOUSE: PERIOD 5

The rectangular stone house which lay under the hut circles measured 7 m by 2.75 m (fig 16; pl 2b). Only one course of wall remained at any part. The S and E walls remained well defined, the E end of the N wall was also well defined, but the rest of the N wall and the W wall were difficult to trace. The largest of the Hut Circles (Hut 1) was built over this part and many of the house stones must have been used in the construction of the hut.

The S wall was well constructed with two rows of stones set on edge with a space between. In the earth packing of this space were two possible stake-holes, circled by small stones (postholes GG and HH). This type of building continued until Hut 1 walls overlay the house, destroying it. As there were many large flat stones used in Hut 1 walls it may perhaps be assumed that this manner of building continued round the W wall and the W end of the N wall. At the E end of the S wall and at the E wall the inside face of the wall had fallen forward. The E end of the S wall had a bottoming of fist-sized stones, while the N wall was set on clay. A clearly defined doorway, 0.60 m wide, with cross slabs at each side, in the S wall had been carefully blocked. Light paving lay both inside and outside of this doorway. There was a less well defined doorway in the N wall. The absence of any clay foundation was one of the clues to its existence. Leading to this doorway and just inside it, were traces of peat which perhaps link the peat stack uncovered to the N with the period of the house.

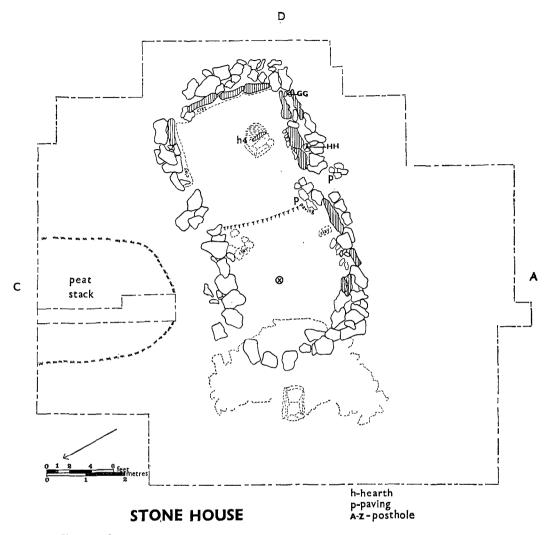


Fig 16 The stone house

The E end of the house lay 0.40 m higher than the W and as the floor levels in the upper and lower parts ran fairly level there was perhaps a step between them. The wall of Hut 1 overlay where this would have been and has destroyed any dividing wall which may have been there and has also destroyed the stratification. The stones of the E end of the N house-wall were set on clay and traces of such clay foundations were found under Hut 1, indicating where the dividing wall may have been.

The stratification of the E, upper end of the house differed markedly from the W end, indication of different uses. Hut 2 which overlay the E end was lightly built. Under its stones was a layer of peaty soil which was probably formed between the occupation of the stone house and Hut 2. Under this were two levels of burning which stretched over most of the E end of the house, the upper one going nearer to the E wall than the lower level. As there was no bone debris or kitchen midden material in the burnt layers it seems that they were destruction levels when wattle

walls or thatch roof may have been burnt. There was no definite floor level, only a firming of the soil. A definite area of greasy black soil at the S side indicated a hearth, Hearth 4. This was set on stones which proved on excavation to be over a small Bronze Age burial cist.

The levels of the lower W end of the house showed no destruction levels, no hearth and no firm floors. There were some pieces of iron slag found scattered sparsely over most of the site. These would have come from the Bloomery which was in use at an earlier period.

THE PEAT STACK

Under the courtyard, associated with the complex of hut circles and spreading out on either side of it was a layer of peaty soil running into the baulk. As it was cleared down a well defined area of weathered peats 3.60 m by 3.35 m was uncovered. This layer of peats was at most 0.21 m deep. As traces of peaty soil spread over to and through the N doorway of the Stone House it seems more likely that the peat stack was connected with this period than with any of the others.

A still unexplained feature of the peaty soil is the many small pieces of bone found through it especially to the W of the area.

THE COMPLEX OF HUT CIRCLES: PERIOD 6

When the site was first examined only the tops of stones were to be seen above a turf covered mound. Excavation uncovered a complex of three structures Hut 1, 2 & 3 (fig 17; pl 3-4). Hut 1 was a well built sub-rectangular hut; Hut 2 was a slightly defined circular hut with a possibly later intrusive box-like construction within it; Hut 3 was an area contained by a massive wall on one side, a collapsed wall on the other side, opening on to a paved courtyard. Within these walls was what seemed to be a cooking and working area.

Hut 1, 3·35 m by 2·74 m was more rectangular with rounded corners than circular. The walls were constructed of large stones, those to the E being larger and more firmly placed than those to the W. Stones set upright marked the entrance at the S side. Between them was a threshold stone, later found to be part of the earlier Stone House. On either side of the entrance orthostats lined the inside of the wall. To the E the outside of the wall was also defined by an upright stone making the wall, at this part, about 1·06 m wide. Orthostats were found against most of the inside of the E half of the hut, some still in place, others slipped forward. The inner stones of this part of the wall were set on clay which was later found to be connected with the earlier Stone House. The placing of these stones was noticeably irregular. The loose, uneven setting of the smaller upper stones of the wall indicated that turf must have been used in its construction.

Comparatively little tumble was removed from the interior of the hut, showing that the stone built walls were never very high. A level of red sandy soil, tramped firm, with patches of black and occasional fragments of charcoal seemed to mark the occupation level. A light paving, also at this level, lay inside and outside of the entrance. No hearth was found inside, but outside the hut, to the W of the entrance, was an area of black greasy soil with charcoal (Hearth 2) among it set on flat stones, extending 0.45 m by 0.38 m. It was 0.05 m deep, and was on the same level as the top of the threshold stone. Another floor level found 0.15 m below the foot of the walls probably belonged to the earlier Stone House. The post-holes O, N and XX uncovered at this time were later found to be part of the Post-Hole Hut.

An area of packed soil and light paving stretched roughly 1.5 m outside the W walls of the hut. It was here that half a quern stone and a piece of lignite were found. Turves had been packed against the outside of the walls. The banded profile of the soil typical of turf build was clearly

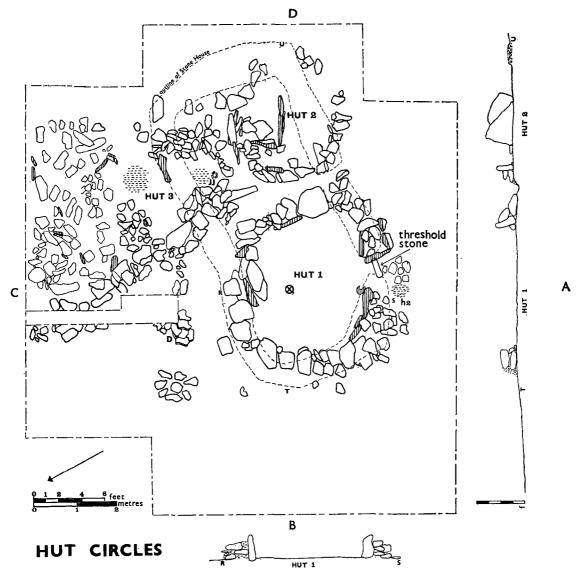


Fig 17 Hut circles

seen against the walls on the N and W. The soil which filled the spaces between Huts 1 and 2 and Huts 1 and 3 had probably been packed in, not accumulated naturally.

The circular outline of Hut 2, about 2.43 m in diameter was defined by a setting of stones. As the line of stones was broken at the E side the entrance was probably there. No occupation debris or floor level was found to go with this structure. To the N and S the wall was only one course high. To the W where there was a gap of 0.6 m between it and the walls of Hut 1 a collapse of stones showed where it had stood higher. Within the area of Hut 2, stones were set upright making three sides of a box-like structure. The stones were not set deeply in the soil. The tallest stone which was to the S stood 0.83 m high. Flat stones found just under the turf seemed to have slipped from the N side. The structure had no definite floor and the irregularity of the tops of

the stones still standing would have made roofing difficult. It was not possible to postulate a use for this setting of stones which may have been inserted after the huts had been abandoned.

Hut 3 was less well defined than either of the others. Massive stones had been used on the SW side, the build there must have been as substantial as the walls of Hut 1. To the S and SE the stones used were smaller. The spread of stones from the collapsed wall at this part made it difficult to be certain of the line. One large stone made a partial partition of the area contained by these walls. Very definite hearth material of greasy black soil was found on both sides of the dividing stone. No bone was found. A slight post-hole (JJ) in the S part might indicate that this part had been roofed. The area to the N was not enclosed but opened on to a roughly paved courtyard stretching 2·43 m, and continuing under the baulk. The fairly large stones were laid irregularly but purposefully as they had uprights jammed among them. A gap of about 0·90 m between the heavy wall and that of Hut 1 had been packed with turf.

These three structures appear to have been in use at the same time but unfortunately no dateable artefacts were found. Hut 1 would have made a substantial well built home with the turf packing outside the walls rendering it draught-proof and warm. The loose build found in the walls points to much turf having been used in all the huts. Hut 1 seems to have been the living or sleeping place, Hut 3 the cooking and working area with Hut 2 perhaps a storage place (if it had been an animal pen it would probably have had a cobbled floor). It seems curious that the entrances all faced different ways.

The Statistical Account of 1791 states that there was little enclosed land in the glen so the huts may have been built originally as shielings. The walls of Hut 1 however are much more substantial than those of the normal shieling. Professor Miller points out (Personal communication & 1969) that when there was a pressure of population on the farming land shielings were sometimes enlarged and lived in all the year round. The quern stone found perhaps strengthens this argument. This may well have happened at Glendaruel where between the years of 1750 and 1841 the population fluctuated from 1200 to 351 then to 731 and later 578. Professor T. C. Smout (1969 151, 268) gives this as a feature of the population of Scotland as a whole in these times. When one reads his account of the meagre possessions of the 16th century herdsman, little more than the odd stool, a meal cist, cooking pot and a couple of plates and cups it is not surprising that nothing was found in the abandoned hut.

FINDS HUT 1

- AG 13 Lignite fragment of roughly shaped disc, possibly 110 mm diameter, 15 mm thick.
- AG 152 Chuckie stones, quartz, found together.
- AG 17 Quern half, 320 mm diameter, 65 mm thick.
- AG 18 Hone 160 mm long, 60 mm wide, 18 mm thick, naturally shaped stone utilised, smoothed on sides.

Hut 4 (fig 18a), 4.87 m by 2.74 m, lay on an E-W axis 6 m N of the complex of huts. It had one rounded and one squared end, large stones set on the ground outlined the hut. On the E, S and W sides some of these stones were set upright. On the N rather smaller stones were laid flat. The entrance on the S was made of two slabs standing proud, 0.90 m high. The square E end was firmly built with stones outside the orthostats, but neither here nor elsewhere was the wall more than one course high. Very little tumble was removed from the interior. A slightly raised area of paving filled the E end. Gritty, hard packed soil on a level with the bottom of the wall made the only floor found. Darker soil with some flecks of charcoal stretched a short way in from the entrance. No hearth and no post-holes were found.

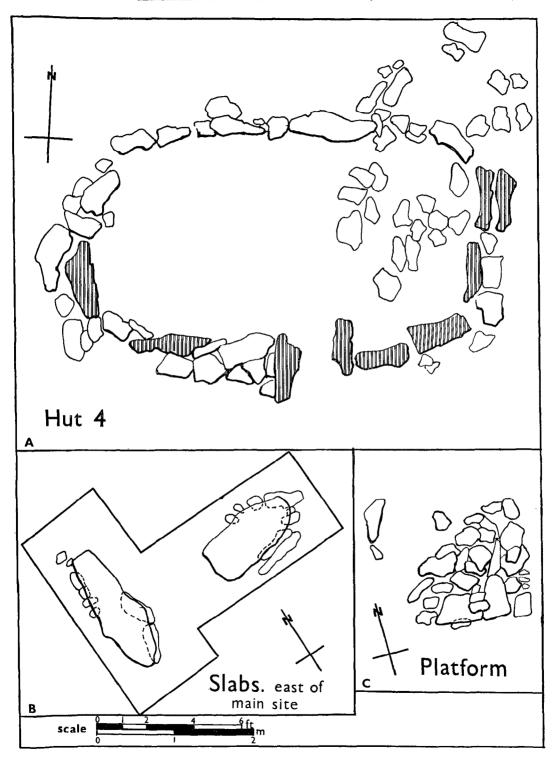


FIG 18 a, Hut 4; b, The 2 slabs; c, The stone platform

Systematic probing of the area to the N of the Hut circle complex led to the uncovering of two slabs of schist (fig 18b), one 1·20 m by 0·61 m, the other 1·52 m by 0·61 m. They lay just under the turf at right angles one to the other, 1·06 m apart. As both were pointed at one end they appear to have been shaped or chosen for their shape. They were both set upon a line of stones in a fashion that seemed deliberate. Simple pointed grave slabs, with no carving, of Medieval date can be seen in the Kilmodan churchyard beside the river. They are similar to the longer of the two slabs on the hill side. A fragment of pitchstone was found beside the smaller stone.

To the W of these slabs a platform of stones (fig 18c) was uncovered below the turf. The stones, one course deep, were set on the natural sandy red soil of the area. Two sides of what would probably have been a (1.52 m) square were clearly defined. From its construction it could have been a working platform as was found at Barra (Young 1956, 300) but there was no occupational debris of any kind. There was no suggestion of a post hole either among the stones or in the soil around. While a few of these stones were rounded the majority appeared to have been freshly fractured.

There is nothing to date or to link these structures. The distinctive build of Hut 4 would lead one to suppose that it had served some definite need which is not now obvious. There is the strong tradition of Modan's chapel having been up on the hillside. Apart from the paving at the E end of Hut 4 there is little in its build to suggest that it was ecclesiastical. It could just as well have been some outbuilding belonging to the shielings. The tradition of a holy well with curative powers up on the hillside is also strong. A search for this was made in the neighbouring burns and marshes. To the N of the Hut complex a pool seems to have been backed by a large stone which was held in place by other stones. More than 20 white pebbles were found during the clearing of the pool. There is a recognised connexion between a holy well and white pebbles. An old track, paved in places can be traced climbing the hill, crossing the burn and leading to the pool. The evidence is admittedly slight but this may well be Modan's well.

DISCUSSION

The excavation on the ledge on the hillside has demonstrated once again how, given a favourable situation, the site is used again and again by successive peoples. In this case six main periods could be distinguished. Jericho (Kenyon 1957, fig 4) is one of the classic examples. Ardnadam, near Dunoon is another site where a Neolithic settlement underlies Iron Age, Early Christian and medieval levels (Discovery & Excavation, 1976 17; 1977 6; 1978 24). The same sort of sequence was found at Gwithian (Piggott 1965, 145-50). The dating of the periods at Auchategan is difficult as, apart from the abundance of Neolithic artefacts and pottery, no objects were found which could be used for dating. The C14 reading of 2300 ± 110 bc uncalibrated, puts the Neolithic occupation in the late middle of the Neolithic period. The construction of both Bronze Age cists and cairn is atypical but cists in cairns are considered to be early Middle Bronze Age (Scott 1966, 16) and it is probable that that was the period when they were built. The Post-Hole Hut shows some sophistication of design and skill on the part of its builders, an advance from the round huts of Early Iron Age. As Hearth 17 and the evidence of ironworking lay between this occupation and the Stone House and as the C14 reading for Hearth 17 is 660 ± 100 ad (GaK-2768) the Post-Hole Hut was lived in before that date and the Stone House after it. The Stone House was very substantially built and as the debris on the floor showed successive periods of use it must have continued in occupation for a considerable time. The people who built the complex of Hut Circles may have been attracted to that particular part of the hillside by the well drained ledge and the stones already there in the ruins of the Stone House. The main hut was so well built with turf packed outside its walls where they adjoined the other structures that it seems likely that it was a more permanent dwelling than a shieling. Shielings have been identified on the upper slopes of Glendaruel. This hut may well have started as a shieling.

Hut 4, with its distinctive build, the orthostats at the doorway on the S side, the curved W end, the paving at the S end and the large stones in the wall behind it seems to have been built to serve some special purpose. No artefacts were found to give a clue to this purpose or to date it. When Professor Charles Thomas saw the structure after it had been cleared he thought it might possibly have been a shrine connected with Modan. The two tapered slabs of stone uncovered between Hut 4 and the main site seemed to have been shaped or chosen for their shape. As they had been raised on stones they had probably been prepared for moving and had not covered graves. There is a tradition that stones were taken from the hillside to the Kilmodan burial ground by the river (Inglis 1895, 56). This area may have been the source for the undecorated stones which can be seen at the burial ground. The tapered slab is typical of the late medieval West Highland grave slabs (Steer & Bannerman 1977, 17).

ACKNOWLEDGMENTS

The excavation of Auchategan was undertaken by the Cowal Archaeological Society under the direction of the author from 1967 to 1970 in a series of eight campaigns. Interim reports were circulated during and after the excavation. The Society would like to acknowledge with thanks grants from the Society of Antiquaries of Scotland for the first and last of these campaigns. As the site is on Forestry Commission land the work would not have been possible without the cooperation of the Commission and its officers. Grateful thanks are also due to Mr and Mrs J G Scott for their repeated visits to the site and for their continued interest and helpful advice. Mr Scott has undertaken the report on the pottery and Mrs Scott drew many of the finds for publication. The Society is grateful to Professor Charles Thomas for his encouragement in the early part of the excavation, to Mr Bibby of the Macaulay Institute who visited the site and discussed the nature of the soil deposits especially round the hut circles, to Mr Collins of the Institute of Geological Sciences who examined the pitchstone, to their surveyor and draughtswoman Miss Lesley Ketteringham for all the help so generously given and to the numerous archaeologists who visited the site giving of their time and interest to the excavation. Finally the Society would like to thank all the volunteers who came from many parts of the country to help with the actual digging.

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a Bronze Age cairn with cist, S wall of Hut 1 and Stone house in background



b Bronze Age cist 2 with wall of Stone house



a Post-hole Hut with stakes in the post holes



b Stone House from E, cairn in background



a Hut 1



b Hut 1 doorway with threshold stone



Complex of Hut Circles showing the Clachan of Glendaruel 90 m below



Hut 4