

EXCAVATIONS AT KEIR HILL, GARGUNNOCK

BY

A. MACLAREN, M.A., F.S.A.Scot.

Reprinted from the Proceedings of the Society of Antiquaries of Scotland,
VOL. XCI, SESSION 1957-58

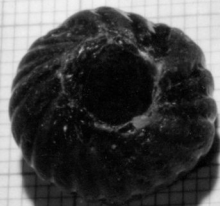
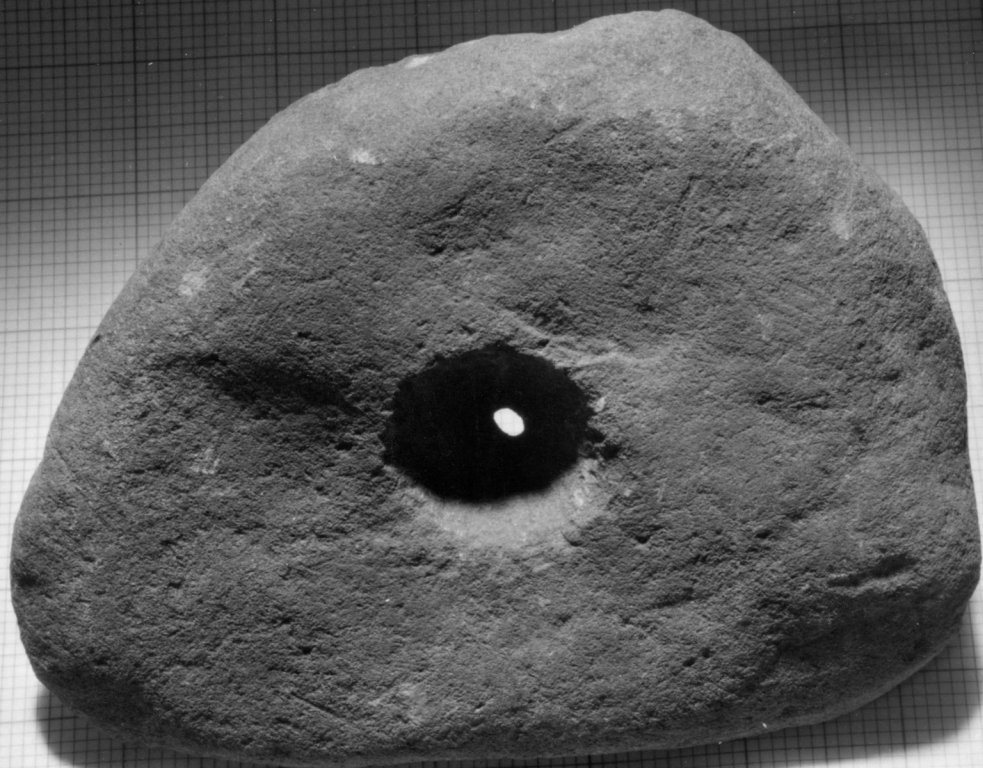
[Excavation made
in June & September, 1957]

Presented to Gargunnoch Kirk Session
by Miss Stirling.

Nov. 1960.

Reprinted from the Proceedings of the Society of Antiquaries of Scotland,
VOL. XCI, SESSION 1957-58

EXCAVATIONS AT KEIR HILL, GARGUNNOCK



V.

EXCAVATIONS AT KEIR HILL, GARGUNNOCK.

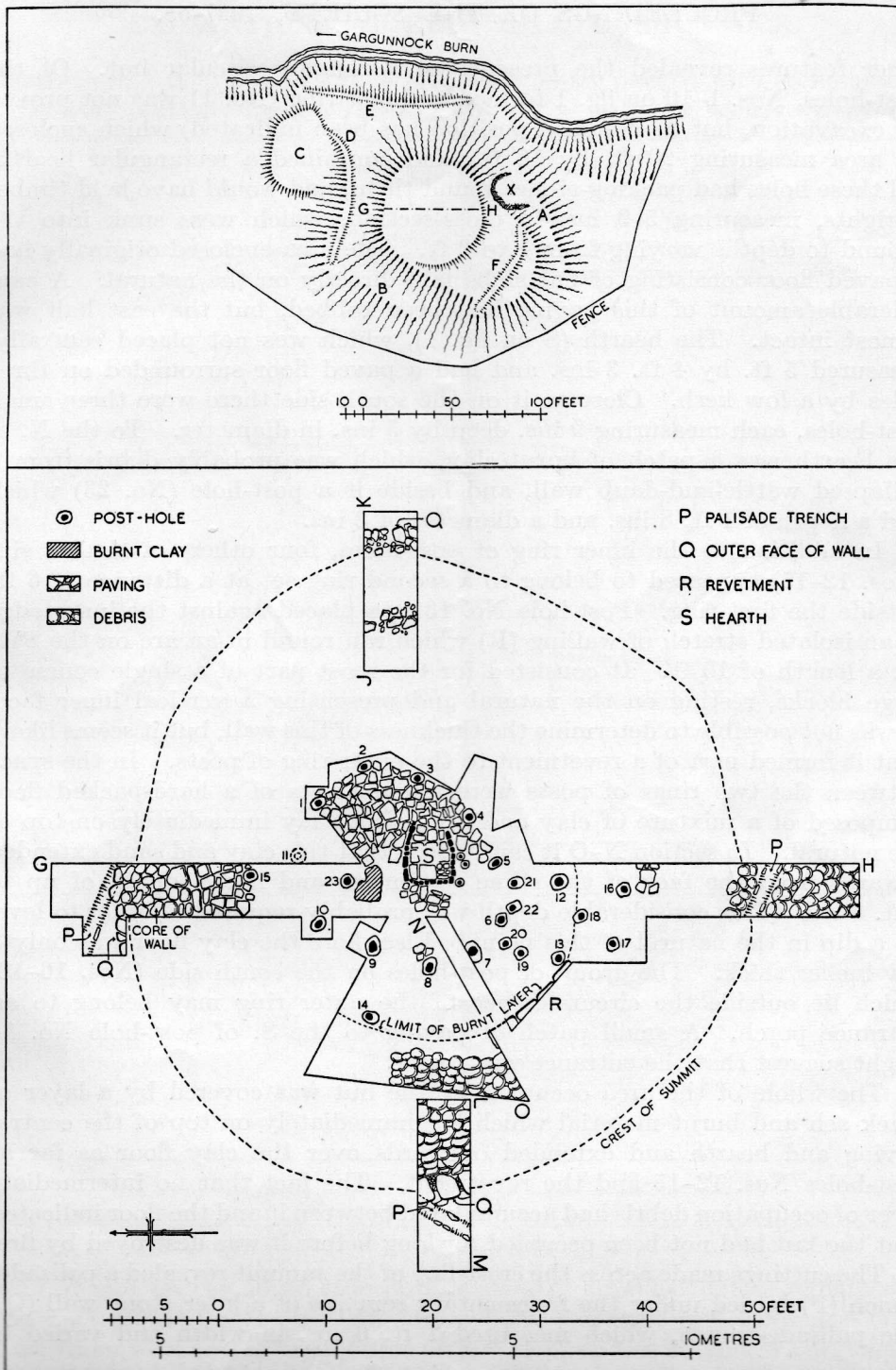
By A. MACLAREN, M.A., F.S.A.Scot.

Keir Hill is the name given to a prominent grassy knoll situated near the east end of Gargunnoch village, 100 yds. SW. of the parish church and immediately N. of Mill Farm.¹ The knoll rises to a height of 25 ft. and is bordered on the E. by the Gargunnoch Burn. The top is ovoid on plan and measures 95 ft. from NE. to SW. by 56 ft. transversely, and at its north-east end a flattish circular area, measuring about 56 ft. in diameter, is slightly raised above the remainder, which slopes gently to the SW. The flanks of the knoll are interrupted on the S. and NW. by two isolated stretches of terracing (A and B on fig. 1) set at a level some 6 ft. below that of the summit. At the foot of the knoll on the NNE. there is a sub-rectangular platform (C), measuring 48 ft. by 35 ft., which has probably been the site of a building of comparatively recent date. From it a low bank (D) accompanied on the S. by a quarry-ditch, runs westwards across the north face of the knoll for a distance of 80 ft. At the foot of the east slope of the knoll another bank (E) runs parallel to the burn, and just above it, for a distance of 100 ft. A third bank (F), now greatly reduced, crosses the south-west part of the summit. These banks do not appear to be of any great age, and, like the terraces, they probably have no defensive significance. On the south-south-east flank there is a small quarry (X), now disused and overgrown.

The work here described was one of two excavations carried out by the Royal Commission on Ancient Monuments in preparation for the forthcoming *Inventory of Stirlingshire*. The results of the other, at the Keir Knowe of Drum, will appear in the *Inventory*. The excavations were undertaken in order to investigate representative samples of a series of apparently natural mounds, all bearing the name "Keir," on some of which structural remains are visible. A cutting was made right across the north-east portion of the summit from N. to S. (fig. 2, section G-H), and the crest-line was further examined by small cuttings on the E. (section J-K) and W. (section L-M). These cuttings revealed that the site had been severely disturbed, and work was therefore confined to stripping a limited amount of the central area. The knoll is composed of sandstone, the top of which has decomposed to a soft yellow sand varying in depth from 6 ins. to 2 ft. The whole of the area excavated was found to be covered by an unstratified layer of debris, comprising earth and rubble, bonfire remains and other modern refuse, which in places extended from beneath the turf right down to the natural sand. Beneath this debris, however, a number of post-holes and

¹ Nat. Grid ref. NS/706942.

EXCAVATIONS AT KEIR HILL, GARGUNNOCK.



other features revealed the presence of a roughly circular hut. Of the post-holes, Nos. 1-10 on fig. 1 formed an inner ring (No. 11 was not proved by excavation, but its assumed position has been indicated) which enclosed an area measuring 20 ft. by 16 ft., and contained a rectangular hearth. All these holes had packing-stones round them, and would have held timber uprights, measuring 5-9 ins. in cross-section, which were sunk into the ground to depths varying from 1 to 2 ft. The area enclosed originally had a paved floor consisting of flat slabs laid directly on the natural. A considerable amount of this paving had been robbed, but the east half was almost intact. The hearth (S on fig. 1), which was not placed centrally, measured 5 ft. by 4 ft. 3 ins. and had a paved floor surrounded on three sides by a low kerb. Close to it on the south side there were three small post-holes, each measuring 9 ins. deep by 5 ins. in diameter. To the N. of the hearth was a patch of burnt clay, which was probably debris from a collapsed wattle-and-daub wall, and beside it a post-hole (No. 23) which had a depth of 1 ft. 8 ins. and a diameter of 8 ins.

In addition to the inner ring of post-holes, four others of similar size (Nos. 12-15) appeared to belong to a second ring set at a distance of 6 ft. outside the first ring. Post-hole No. 13 was placed against the inner edge of an isolated stretch of walling (R) which ran round in an arc on the SW. for a length of 10 ft. It consisted for the most part of a single course of large blocks, resting on the natural and presenting a vertical inner face. It was not possible to determine the thickness of this wall, but it seems likely that it formed part of a revetment to the outer ring of posts. In the space between the two rings of posts were found traces of a hard-packed floor composed of a mixture of clay and sand which lay immediately on top of the natural. In section N-O it can be seen that this clay and sand extended inwards from the face of the stone revetment and had a depth of up to 1 ft. 6 ins. This considerable depth was probably required in order to level up a dip in the natural at this point. Elsewhere the clay floor was only a few inches thick. The group of post-holes on the south side (Nos. 16-18) which lie outside the circumference of the outer ring may belong to an entrance porch. A small patch of paving to the S. of post-hole No. 16 might suggest that the entrance was paved.

The whole of the area occupied by the hut was covered by a layer of black ash and burnt material which lay immediately on top of the central paving and hearth and extended outwards over the clay floor as far as post-holes Nos. 12-15 and the revetment. The fact that no intermediate layer of occupation debris had accumulated between it and the floor indicated that the hut had not been occupied for long before it was destroyed by fire.

The cuttings made across the crest-line of the summit revealed a palisade-trench (P) buried under the fragmentary remains of a later stone wall (Q). The palisade-trench, which measured 1 ft. 6 ins. in width and varied in

depth from 1 ft. 3 ins. to 2 ft. 6 ins., was tightly packed with stone and its sides were partially lined with flat slabs. The wall had been very severely

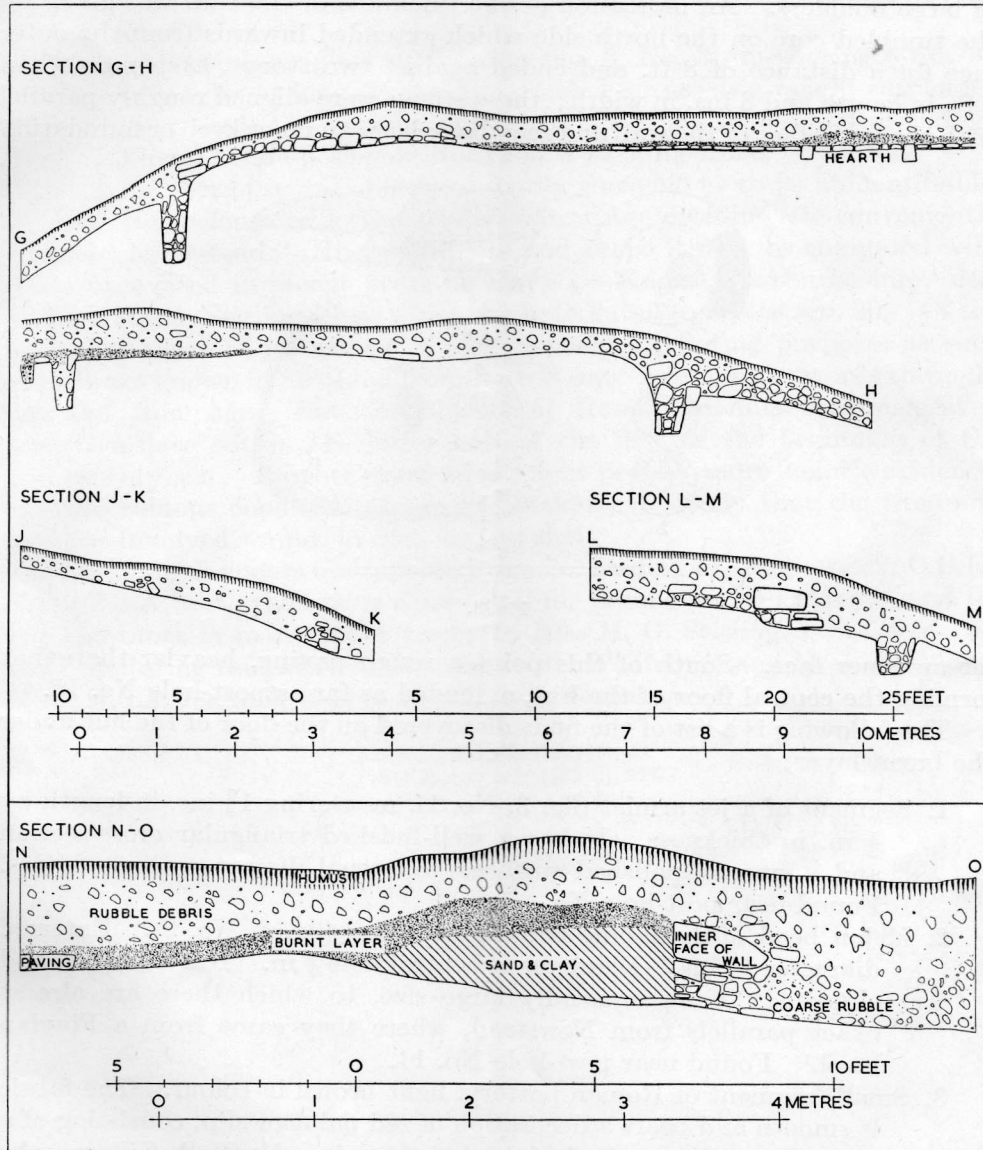


Fig. 2.

robbed and on the south side only a mass of tumbled debris remained to show its approximate position. Elsewhere, however, just below the crest-line, there were traces of an outer face, which, on the N. and W., was found

to be crossing the palisade-trench at an oblique angle. All that remained was a foundation of flat slabs which, on the west side, carried a single course of large boulders. An indication of the thickness of the wall was given by the tumbled core on the north side which extended inwards from the outer face for a distance of 8 ft. and ended against two stones, each more than 2 ft. in length and 8 ins. in width; these stones were aligned roughly parallel with the outer face of the wall and may have been an inner kerb or foundation,

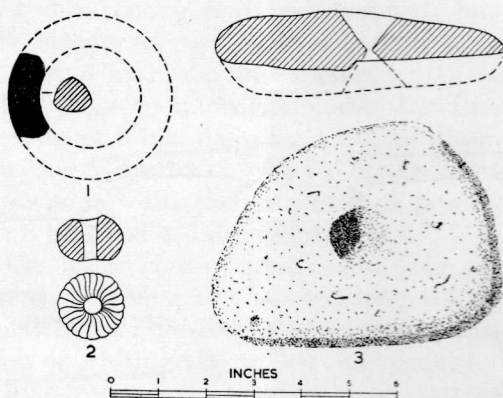


Fig. 3.

for an inner face. South of this point a rough paving, heavier than that forming the central floor of the hut, extended as far as post-hole No. 15.

The following is a list of the finds discovered on the floor of the hut under the burnt layer:

1. Segment of a jet armlet (fig. 3, No. 1), measuring $1\frac{3}{4}$ ins. in length by $\frac{5}{8}$ in. in thickness. It has a well-finished triangular cross-section and a smooth polished surface. External diameter about $3\frac{3}{8}$ ins. Found near post-hole No. 23.
2. Melon bead of dark blue translucent glass (fig. 3, No. 2). External diameter $1\frac{1}{4}$ ins. Diameter of central hole $\frac{3}{8}$ in. Heavily worn and chipped. Of an unusually large size, to which there are almost exact parallels from Newstead, where they came from a Flavian level.¹ Found near post-hole No. 14.
3. Small fragment of Roman pottery, light brown in colour. The fabric is smooth and bears a decoration of red paint or slip, consisting of a wavy line with a raised blob at one angle. Mr J. P. Gillam, who has seen the piece, regards it as being of Agricolan date and compares it with similar fragments from Oakwood.²

¹ J. Curle, *A Roman Frontier Post and its People* (1911), 336 and pl. XCI, Nos. 8 and 10.

² *P.S.A.S.*, LXXXVI (1951-2), 102, fig. 8, 3.

4. Eleven tiny fragments of glass. Thin and blue-green in colour Mr W. Bulmer, who visited the site during the excavations, confirmed that they are of Roman manufacture. Found near the hearth.
5. Stone with hour-glass perforation (fig. 3, No. 3), measuring 6 ins. by $4\frac{1}{2}$ ins. by $1\frac{1}{4}$ ins. Probably intended for use as a weight suspended by a cord, but broken, possibly while being made, and discarded. Found inside post-hole No. 12 as a packing-stone.
6. A number of metal objects, so badly corroded as to be unidentifiable.

Keir Hill belongs to a class of Early Iron Age dwelling site conveniently termed "homestead." In general size and shape it may be compared with those excavated in recent years at Hayhope Knowe, Roxburghshire,¹ and at West Plean, Stirlingshire,² which are both dated to before A.D. 80. Of the finds, the piece of jet armlet is of little help for dating purposes as such objects are known in Scotland from Late Bronze Age times onwards throughout the Iron Age. But the objects of Roman manufacture suggest a tentative date within the latter half of the first or the beginning of the 2nd century A.D. Further excavation might provide more definite evidence, but the ruinous condition of the site makes it unlikely that the time and expense involved would, in fact, be justified.

The Commissioners are indebted to Miss Stirling of Gargunnoch, C.B.E., T.D., F.S.A.Scot., the owner of the site, for permission to excavate, and for her assistance in many other ways; to Miss M. G. Stirling, F.S.A.Scot., for her help during the excavations; and to Mr W. Bulmer and Mr J. P. Gillam, M.A., F.S.A. for their help in identifying the finds.

¹ *P.S.A.S.*, LXXXIII (1948-9), 45.

² *P.S.A.S.*, LXXXIX (1955-6), 227.

Keir Hill (National Grid Reference 706 942) is a prominent knoll situated immediately north of the Mill Farm (now Millmuir). An excavation was carried out by the Royal Commission on Ancient Monuments to investigate samples of a series of apparently natural mounds all bearing the name Keir. An excavation report is published in the proceedings of the Society of Antiquaries of Scotland, 1957-58, pp78 - 83.

Dwelling

Post-holes dug into the surface of the summit of the knoll revealed the former existence of a roughly circular hut enclosing an oval 4.07 x 5.08 metres. The post-holes held timber uprights 127-229mm in cross section. The floor of the hut had been paved with flat slabs. A rectangular hearth was constructed of stone.

In addition to the inner ring of post-holes there was an outer ring set 1.50 metres outside the first ring. The area occupied by the hut was covered by a layer of burned material. The lack of occupation debris suggests that the hut had not been occupied for long before it was destroyed by fire.

The archaeologists made cuttings across the crest-line of the knoll revealing a palisade trench buried under the remains of a later stone wall. The palisade trench was 40 cm wide and varied in depth from 39 to 66 cm.

In appearance the palisade looked much like the forts familiar from old western films although considerably lower. Its function was not to keep out armed men but rather to deter predators such as bears or wolves. The site on Keir Hill belongs to a class of early Iron Age dwellings termed "homestead" or "defended homestead" a similar structure at West Plean has been dated to AD80.

Artifacts

Hut circles of this kind often yield very little in terms of artifacts which makes precise dating problematic. The half dozen finds include a section of a jet armband; a glass bead; a fragment of Roman pottery; eleven fragments of glass, blue-green in colour and of Roman manufacture; a perforated stone probably intended as a weight suspended by a cord and a number of badly corroded metal objects which could not be identified. The piece of jet armband is of little use for dating purposes.

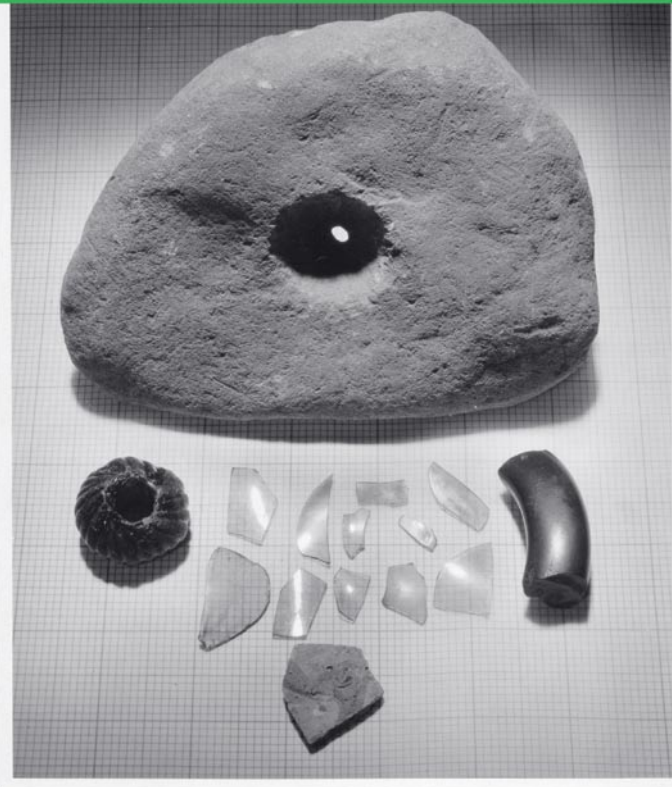
Similar objects are known from Scotland from late Bronze Age times onwards throughout the early Iron Age. The objects of Roman manufacture indicate a date within the latter half of the first century or the beginning of the second century AD. Finds of Roman artifacts in Iron Age structures are not uncommon. It is impossible to be sure if they represent barter or loot.

All the people who lived in Scotland during the early Iron Age depended, essentially, on farming. Communities had to be self-sufficient. Farms produced meat, dairy products and cereals. Local natural resources such as can be exploited by hunting, fishing and foraging formed a significant part of the diet.

Ordnance Maps

Study any 1:50,000 Ordnance Survey maps of Scotland outside the urbanised areas and the words "enclosure" or "hut-circle" or "field system" printed in Gothic type will almost certainly occur. These represent the farm houses and fields of our ancestors dating from 2,000 to 3,000 years ago. Despite the very large numbers of these sites distributed from the far north to the border and beyond many questions remain concerning domestic antiquities built before the

KEIR HILL EXCAVATION REVEALS ROMAN REMAINS



Sketch of a typical homestead dwelling such as the one on Keir Hill

eighteenth century, not least the time-span of their occupation.

Hut Circles

In its simplest form a hut circle is an oval or circle ranging in internal size from 4 or 5 metres to more than 14 metres. The average lies around 10 metres in diameter providing a floor area of 78 sq. metres or the equivalent of a small modern three-bedroomed house.

In upland areas boulders form an inner/outer wall 1.1 to 2 metres thick. A core of earth and rubble provided insulation. Some huts were partly built of turf.

In lowland areas the boulder walls were replaced by timber posts interleaved with branches of willow or alder and plastered with mud. This building technique is known as wattle and daub construction and has a wide British distribution in both time and space and was commonly used throughout rural England in the later Middle Ages.

Hut circles occur singly or in groups. Doorways usually face south east, away from the prevailing wind and some are provided with entrance porches as at Keir Hill and West Plean. The sites chosen for occupation and cultivation are almost invariably on well-drained gently sloping ground away from valley floors which would tend to be poorly drained. A location giving access to running water was essential.

Burning Question

Lastly a question posed but not answered. Why did our Bronze Age and Iron Age ancestors build round or oval houses while their continental counterparts preferred square or rectangular dwellings?

Think back to school days and Euclidian geometry and it is clear that a circle gives the best ratio of floor space to length of enclosing wall, but that, at best, can only be a very partial answer and probably none at all: such is archaeology.

Ken Reid

RONALD J. CARSON LTD
Building Contractor
 Piperland, Kippen Station, Stirling FK8 3JJ
 Tel. (01786) 860634 Fax. (01786) 860634
FOR ALL TYPES OF BUILDING WORK

JOINERY, PLASTER, SLATING, TIMBER PRESERVATION
 & INJECTION DPC WORK.
 TIMBER AND PVC DOORS, WINDOWS, CONSERVATORIES
ELECTRICAL WORK

A long established local firm Ronnie is a regular advertiser in this mag.