

SOUTERRAINS IN SUTHERLAND

Alex. Morrison

BACKGROUND

The terminology of these sites has varied considerably over the past 150 years, with labels such as *Pict's house*, *eirde house*, *earth-house* (RCAHMS *Sutherland Inventory* 1911), *weem* and *leabidh fholach* being used at different times, and mostly suggesting a dwelling or refuge function. Some of this has been discussed by Brothwell (1977. 179), who avoided the word *souterrain* as:

... a more cautious term – covering as it does an underground passage, tunnel, subway structure – but does not imply any expanded or terminal 'living' or 'storage' area which some seem to show, and it is difficult to determine how much of some structures was originally underground.

Most recent writers on the subject appear to be well aware of the limitations involved in the use of the word 'souterrain', and of the implications for living, storage and even possible 'ritual' functions of the surviving remains. Despite the lack of evidence, in some cases, as to whether the structures were completely or partially underground, the word 'souterrain' will be retained here, and will be used to refer to structures of 'typical' souterrain shape – to passages, more or less curved; and to underground chambers which might not be passages but which seem, in some examples, to have good evidence of being attached to surface structures.

The number of structures under this heading [Fig. 10.1] is not large for the size of the area involved, nor is the information available consistent in quantity and quality. Not all structures recorded in the 1911 Royal Commission *Inventory* and later sources are undoubted souterrains, and some of the sites listed here have a question mark against them as an indicator of incomplete information. Some sites are listed from hearsay reports, others have disappeared or perhaps been destroyed – for example, the site at Deanside, Tongue (no. 7 on the present list), which was 'washed away in a flood' (Horsburgh 1868. 276).

In some cases a 'depression' in the ground has been accepted as evidence of an underground structure. The dimensions listed for some can, therefore, be only indications. However, enough is known to allow some discussion and comparison, particularly in the light of more recent excavations, avoiding, for the present, too many firm conclusions. It can also be argued that such structures should not be discussed as separate entities but rather as part of the overall settlement complex. This would indeed be the ideal situation and some attempt will be made here to review evidence for possibly

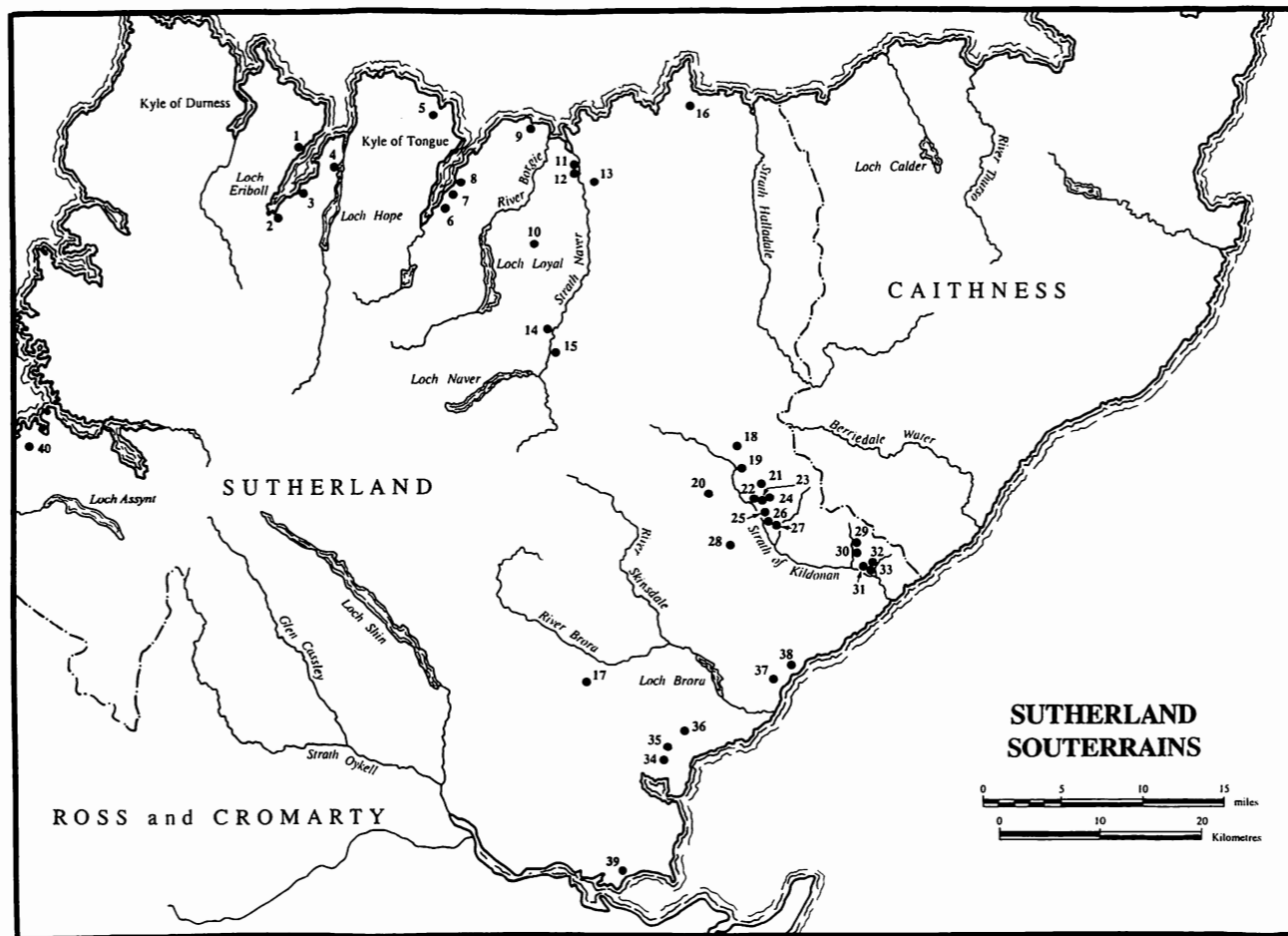


Fig. 10.1 Distribution map of Sutherland souterrains. Numbers refer to the souterrains listed in Fig. 10.2.

linked surface structures, but it should be remembered that, by the very nature of their subterranean construction and survival, as against the destructive activities which have occurred on the surface, many have no evidence of associated structures at all.

DISTRIBUTION

Of the 40 certain and probable Sutherland souterrains listed, 29 (72%) lie between sea level and 107 m, and 10 (26%) lie between 120 m and 200 m [Fig. 10.1; 10.2]. The vast majority of the sites, therefore, lie in the zone of greatest archaeological destruction, and they have mostly been discovered by man's activities, agricultural or otherwise. The Fouhlin souterrain (no. 2) is the lowest-lying site at around 6 m above sea level. A single site, on Beinn a'Bhragie at Golspie (no. 36), lies at a height of about 350 m, near the monument to the first Duke of Sutherland. It is listed as a souterrain by the Royal Commission (1911) and the description is in keeping with many others of known souterrains, but an Ordnance Survey field worker (NMRS Archive) noted 'the situation on a steep, exposed hillside would be unusual for a structure of this type'. It is unusual only because of its extreme height above sea level, but it serves as a reminder that souterrain sites, and thus settlements, may be located higher than 200 m in Sutherland. It is likely that more of these structures await discovery, and that in remote areas with land of little modern value, many will never be discovered. We are thus mapping survival and fortuitous discovery, and the 'real' distribution of souterrains and its significance are likely to remain elusive.

The distribution is fairly scattered, apart from what might be considered a concentration in the Strath of Kildonan – 16 souterrains (or 40% of the total) lying between 61 m and 183 m above sea level in this region. This is again an example of a zone of discovery/destruction: a strath, quite narrow in places, broadening out elsewhere, with water supply, routeway, accessible tributary glens and soil suitable enough to have been used for settlement and farming since prehistoric times.

SHAPE, SIZE & STRUCTURE

Early descriptions of souterrains can be deceptive as to depth and surviving length, since many were examined without any attempt at excavation, and sometimes the first description was recorded long after discovery. As James Horsburgh (1868, 276) noted of the site at Ribigill, Tongue (no. 6) in 1867: '... it had often been opened before'.

The RCAHMS *Sutherland Inventory* (1911, xxxi-xxxiii) defined three types of souterrain:

LIST OF SUTHERLAND SOUTERRAINS

<i>No. on Location Map [Fig. 10.1]</i>	<i>Grid Ref.</i>	<i>Height OD</i>	<i>Length</i>	<i>Width</i>	<i>Height</i>	<i>Surface Structures</i>
1. Portnancon, Durness	NC 428 613	24m	7.7m	0.71-1.7m	0.9-1.4m	X
2. Fouhlin, Durness	NC 404 541	6m	21.9m	0.6-1.2m	1.07-1.58m	X
3. Eriboll, Durness	NC 433 563	76m	12+m	0.6-1.1m	1.2-1.4m	
4. Loch Hope, Durness	NC 469 590	46m	c.20m	-	-	X
5. Achintyhalavin, Tongue (?)	NC 566 643	30m	-	-	-	
6. Ribigill, Tongue	NC 582 545	30m	-	-	-	
7. Deanside, Tongue (?)	NC 591 557	12m	-	-	-	
8. Kirkiboll, Tongue	NC 59 57	61m	7.6+m	0.76-1.2m	-	
9. Skerry Mains, Tongue (?)	NC 660 631	15m	-	-	-	
10. Cracknie, Farr	NC 665 509	168m	12.8+m	0.6-1.82m	1.3-1.47m	?
11. Achnabourin, Farr	NC 709 585	15m	c.16.5m	c.2.7m	-	
12. Achnabourin, Farr	NC 710 582	18m	c.13.4m	-	-	
13. Skelpick Burn, Farr	NC 728 563	76m	c.2.3m	-	-	X
14. Syre, Farr (?)	NC 692 440	51m	12+m	-	-	
15. Rosal, Strathnaver, Farr	NC 689 417	98m	12.8m	0.6-1.06m	0.84-1.45m	?
16. Strathy, Farr	NC 836 651	15m	-	-	-	
17. Cnoc Achadh na h-Uaighe, Rogart	NC 717 075	198m	c.12m	2.5-3.0m	-	X
18. Creag nan Caorach, Kildonan (?)	NC 86 31	183m	-	-	-	X
19. Kinbrace Hill, Kildonan	NC 86 29	137m	c.7.6m	1.2m	1.67m	X
20. Loch Ascaig, Kildonan	NC 845 253	137m	c.14m	-	-	?
21. Allt Bad Ra'fin, Kildonan	NC 900 265	128m	-	1.2m	-	X
22. Suisgill I, Kildonan	NC 892 251	82m	7.3+m	0.76-0.91m	-	
23. Suisgill II, Kildonan	NC 898 251	82m	3.6+m	0.95-1.45m	1.3m	

<i>No. on Location Map [Fig. 10.1]</i>	<i>Grid Ref.</i>	<i>Height OD</i>	<i>Length</i>	<i>Width</i>	<i>Height</i>	<i>Surface Structures</i>
24. Suisgill III, Kildonan	NC 897 251	82m	4.5+m	0.6+m	1.4m	?
25. Ach an Fhionn- fhuaraidh, Kildonan	NC 904 240	152m	c.10m	-	-	X
26. Achinnearin, Kildonan	NC 903 232	122m	12.2m	0.71- 1.37m	0.81- 1.88m	?
27. Kildonan Burn, Kildonan	NC 91 22	122m	7.9m	3.4m	(chamber)	X
28. Tuarie Burn, Kildonan	NC 825 204	183m	-	-	-	X
29. Allt Cille Pheadair, Kildonan	NC 993 193	91m	-	-	-	X
30. Allt Cille Pheadair, Kildonan	NC 992 190	91m	9.6m	0.6- 1.2m	0.71- 1.37m	X
31. Salscraggie Lodge, Kildonan	NC 999 183	61m	6.7m	0.6- 1.06m	0.71- 1.57m	
32. Caen Burn, Kildonan	NC 011 184	91m	7.9m	0.83- 1.06m	1.2- 1.47m	X
33. Caen Burn, Kildonan (?)	NC 01 18	61m	-	-	-	X
34. Kirkton, Golspie	NC 797 987	40m	11.28m	1.3m	1.8m	
35. Silver Rock, Golspie (?)	NC 80 99	107m	-	-	-	
36. Beinn a'Bhragie, Golspie	NC 814 009	351m	c.12.2m	1.2m	1.5m	
37. Clyne Milton, Clyne (?)	NC 912 068	30m	-	-	1.67m	
38. Kintradwell, Loth	NC 919 077	46m	-	-	-	?
39. Cyderhall, Dornoch	NH 753 883	17m	7.2+m	1.7m	1.5m+	X
40. Gleann Leireag, Assynt (?)	NC 153 312	c.60m	c.11m	0.80- 0.90m	0.6- 1.0m	

Fig. 10.2 List of Sutherland Souterrains.

X Evidence of associated surface structures

? Possibility of associated surface structures

First, those having access from one end only, measuring 20' to 40' or thereby in length, with no definite chamber attached other than that produced by a slight expansion at the end, curving in their course inwards more or less to the right, with a width along the gallery of from 2'6" to 3', and a slightly greater width towards the inner end.

... Those of the second variety differ conspicuously from the first by having an opening at both ends and definitely formed chambers. There are but two examples, viz. one at Kirkton [no. 34 on the present list; Fig. 10.3E] and the other at Kintradwell [no. 38 on the present list; Fig. 10.3I].

... The examples which form the third variety resemble the so-called 'pit-dwellings'. They have been oval chambers with their sides built and only partially sunk in the ground. Three of these are noted, but as all are roofless, few details are obtainable regarding them without excavation. One by the Kildonan Burn [no. 27 on the present list; Fig. 10.4B] is connected with a hut circle, while that situated by the Silver Rock near The Mound [no. 35 on the present list] and the other close to the broch of Carrol show no remains of a related structure adjoining them.

The Sutherland souterrains vary in size if not greatly in shape [Figs. 10.3-10.5]. Wainwright (1953. 225-6) suggested that they had a similarity in shape and plan with the souterrains of Angus, and:

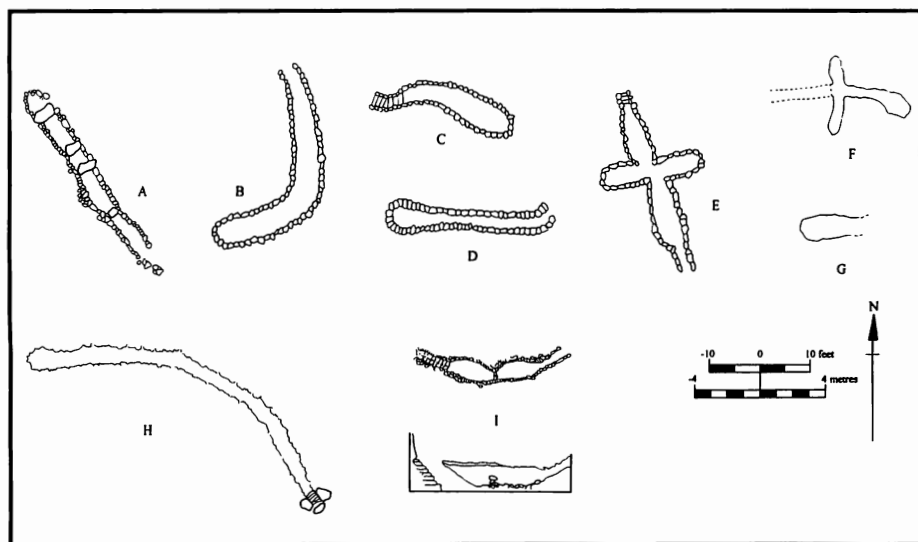


Fig. 10.3 Sutherland souterrain plans.

A: Rosal, Strathnaver
B: Achinnearin
C: Salscraggie Lodge
D: Eriboll
E: Kirkton, Golspie

F: Suisgill III
G: Suisgill II
H: Fouhlin, Loch Eriboll
I: Kintradwell

... the fact that they are all essentially passages, as distinct from chambers, sets them apart from the structures of the northern isles.

... Perhaps the Sutherland souterrains of this kind were normally adjuncts to surface structures, in which case they would have more in common with the souterrains attached to Hebridean wheel-houses than with the souterrains of Angus. The latter ... were not subsidiary to any other structure.

The excavations at Newmill (Watkins 1980b) and the greater numbers and forms of souterrains now identified by aerial photography in 'Southern Pictland' (Maxwell 1987), suggest that simple comparisons based on size and shape can no longer serve to distinguish the Sutherland structures from those of Angus. Nor can the Angus souterrains any longer be assumed to be generally independent of surface structures, or to be specifically intended for sheltering animals.

The majority of Sutherland souterrains so far discovered are indeed 'essentially passages', but there are a few exceptions. The descriptions of a

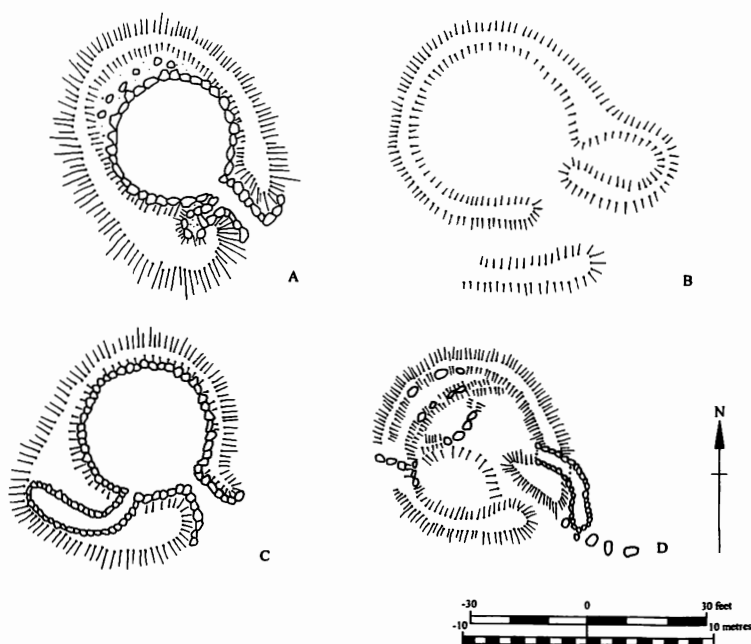


Fig. 10.4 Souterrains or possible souterrains attached to surface structures in the Strath of Kildonan. The numbers in brackets refer to the site numbers in the RCAHMS *Sutherland Inventory* (1911), from which the plans were taken.

A: Allt Cille Pheadair (No. 327)

B: Creag Druim nan Rath, Kildonan Burn (No. 344)

C: Allt Cille Pheadair (No. 328)

D: Caen Burn (No. 318)

couple of the sites in the Strath of Kildonan indicate something like an underground oval chamber approached through, and buried under, the wall of a hut – emphasising the essential association of the surface and subterranean structures. At the site on Creag Druim nan Rath, Kildonan (no. 27) [Fig. 10.4B], the roof covering has disappeared, leaving the oval outline of the underground chamber beneath the foundation of the hut circle wall. The souterrain listed as Suisgill III (no. 24), excavated by Gordon Barclay in 1980, is cruciform-shaped [Fig. 10.3F], and it is possible that Suisgill II (no. 23) [Fig. 10.3G] could also be of this form (Barclay 1985: 194). In their cruciform shape they resemble the site at Kirkton, near Golspie (no. 34) [Fig. 10.3E], but that structure has two entrances and door checks resembling those on brochs and some duns. Barclay (*loc. cit.*) has suggested that Suisgill III should be dated to the mid-first millennium BC. If this is accurate, then it might be argued that the cruciform-shaped sites are an earlier form than the simple passages, but much more excavation and dating evidence is needed.

Another exception in shape is the site at Kintradwell (no. 38) [Fig. 10.3I], which was originally described as ‘... two chambers, separated by a low division wall, each having an entrance from the outside at its extremity’ (RCAHMS 1911. no. 469). The plan (from Joass 1864) shows that there was a definite entrance with steps down into the passage, but the opposite end, according to Joass, was simply an ‘opening’. The dividing wall was only 0.6 m high and did not completely block access from one part of the passage to the other. Unless a more formal entrance had been destroyed before Joass’s visit to the site, the eastern opening might be regarded as a later means of access to what could have originally been a single-entry structure.

The Fouhlin souterrain, Durness (no. 2) [Fig. 10.3H] has a western, lower entrance with four steps down into the passage (Morrison & Reid 1964, 1965: report forthcoming). This entrance and the steps are at the rounded, slightly expanded, end of the souterrain passage. In many of Sutherland’s single-entrance souterrains this is the shape of the inner, closed end of the passage – the ‘pear-shaped expansion’. It could be suggested that this western entrance is a secondary construction inserted into the ‘dead end’ of a pre-existing single-entrance souterrain – perhaps found necessary because of the unusual length of the passage, or because of an extension of that passage – but there is no definite proof of this. The actual entrance gap is very narrow, only 0.58 m wide. It is flanked by two large, upright orthostatic stones which play no part in supporting the last roofing slab. These orthostats are surrounded by very well-constructed dry-stone walling which continues the walls of the passage out into the open and above the top of the last slab of the roof. Despite its smallness and narrowness, this western opening is a true entrance with steps and vertical ‘doorway’. By comparison, the south-eastern, upslope entrance looks much more like a ‘trapdoor’ leading down through the floor of a house, but this was perhaps the original and ‘proper’ entrance. Three large slabs around the opening are very like paving on the floor of a surface structure or dwelling, and there were traces of the ruined wall of a possible hut circle running just beyond the edge of the

opening, so that it could be suggested that the entrance to the souterrain passage at this end was through the floor of a hut. This would not be unusual, considering the number of souterrains known to be connected with the walls of hut circles in the Strath of Kildonan [Fig. 10.4] and elsewhere. The 'steps' leading down from this end, to the passage below, are quite unlike those at the western end. They consist of thin slabs, almost flagstones, projecting from the end of the souterrain passage, with a gap under each slab, more resembling a ladder than a stairway. The Fouhlin structure thus had two entrances, one of which might have been a later addition. There are relatively straight-passaged souterrains such as Eriboll (no. 3), Rosal (no. 15) and Beinn a'Bhragie (no. 36), but the majority of the passage forms are curved. The curving might have been related to the nature of the surface structures with which the souterrains were associated. Some appear to curve around the periphery of a hut wall, as, for instance, at Allt Cille Pheadair, Kildonan (no. 30) [Fig. 10.4C] or perhaps at Caen Burn, Kildonan (no. 32) [Fig. 10.4D].

Only 27 out of the 40 sites recorded here have information on length. Allowing for truncated passages, the range of lengths among these 26 runs from 2.3 m (surviving) at Skelpick Burn, Farr (no. 13) to 21.9 m at Fouhlin, Durness (no. 2), the Fouhlin structure being the longest so far discovered in the county. Bearing in mind the incompleteness of some of the information, there is a clustering of lengths around 6-8 m (7 sites) and 11-14 m (11 sites). Internal widths (again where information is available, in 20 cases) range from 0.6 m to 3.4 m, but the 0.6 m width is for the narrowest part of eg Rosal (no. 15) which widens to 1.06 m in places, and the 3.4 m width is for the widest surviving part (the rounded 'end chamber') of the Kildonan Burn souterrain (no. 27). Even fewer (17 sites) have surviving evidence of internal height, ranging from 0.71 m (lowest part of Allt Cille Pheadair, Kildonan (no. 30) and Salscraggie Lodge, Kildonan (no. 31)) to 1.88 m (highest part of Achinnearin, Kildonan (no. 26)).

The component parts of most Sutherland souterrains would appear to be:

- * the trench
- * the stone-built walls of the passage lining the trench, with any steps leading out
- * the roofing.

At Fouhlin (no. 2) [Fig. 10.3H] the trench was dug into fluvio-glacial material, and the line of the original cutting could be seen in profile in the face of some of the sections excavated. The ochreous, compacted fluvio-glacial material had been excavated by the souterrain-builders to form a trench about 2.1 m deep and 2.1 - 2.4 m wide (the trench for the souterrain passage at Cyderhall, Dornoch (no. 39) was 2.25 m wide).

The dry-stone walling along the sides of the trench is fairly typical of souterrain construction, having large basal stones supporting several courses of smaller stones. Building material was available from the surrounding hill slopes, which are strewn with glacial boulders. Since the majority of the boulders used are rounded rather than slabby, a fair amount of selection must

have been necessary in order to produce a stable wall, and wedging or pinning stones had been jammed or hammered into the gaps between the larger stones to improve stability (cf. Watkins 1980b. 169-170).

The roofing slabs are of irregular shape but they fit closely enough to leave only small gaps in the roof. The roof and wall tops had been packed with stones to increase stability and to seal any gaps. The largest and heaviest roofing slabs, up to 2.4 m in length and 0.3 m thick, are at the western end, and this is also where the passage expands into the rounded 'end chamber' shape. The problem of roofing the passage with slabs, which in some places were rather shorter than desirable, was overcome by having two courses of large flat stones at the top of the wall projecting slightly in a crude form of corbelling and weighted at their outside edges with boulders. This device enabled the builders to construct a passage wider than would otherwise have been possible with the available slabs. In general, the information for the roofing of Sutherland souterrains, while incomplete, indicates that stone slabs were used on most sites. But for reasons varying from the absence of suitable building material to the requirements of function, some appear to have had other forms of roofing. At Rosal (no. 15) [Fig. 10.3A], Corcoran, despite the presence of three roofing slabs *in situ*, noted the general absence of stones of passage-roofing proportions in the vicinity and suggested partial roofing with timber (1968. 115):

In souterrains roofed entirely by stone slabs, the side walls are usually given a slightly inward batter so that the weight of the roof gives stability to the walls. At Rosal the walls were given a slightly backward batter, and so retain their stability without the weight of roofing stone.

At Cyderhall, Dornoch (no. 39) [Fig. 10.5] the surviving length of souterrain passage had four opposite pairs of post holes, which appeared to be primary features, along the inner face of the passage wall, three pairs 0.8 - 0.9 m apart transversely and the fourth pair only 0.45 m apart, possibly representing the end or entrance to the passage (Pollock 1992. 152-153, illus 2-4). On Pollock's plans, a 'gully', running off to the west and interpreted as being associated with the round house, looks remarkably like the surviving stretch of souterrain in form, including the pairs of post holes along the sides of the structure, but without the stone lining. There might have been a continuous structure here, considering how much of the site had been cut away, and the excavator does state that the gully had 'some similarities to the souterrain'. It would admittedly produce a structure with a highly unusual 'kink' to the line of its passage. The presence of posts close to the wall of the souterrain might have been torevet the wall itself and/or support a roof where the stone walls were perhaps not stable enough, because of the sandy gravel matrix, to support the roof on their own. The space between each post along the wall-face seems rather wide to offer much support to the wall, unless the posts were also supporting horizontal timbers against the wall face. No stone slabs long enough to bridge the passage were found during the excavation, so a timber roof seems likely. Watkins (1980b. 195-196) reached

similar conclusions about the very much wider souterrain at Newmill, Perthshire, where slabs up to 5 m in length would have been necessary. At Cyderhall and Newmill, the excavators see no problems in the construction of a timber roof by groups who were well experienced in the use of wood in the building of surface round houses.

ASSOCIATION WITH SURFACE STRUCTURES

As listed, there are only 15 sites with evidence for surface structures associated with the souterrains, 38% of the total. This rises to 54% if the sites where there is possible evidence are included. Much of the surviving evidence shows souterrain entrances opening from the inner face of the wall and down through the floor of a hut circle. Portnancon (no. 1) is noted as having been entered from what was originally the south-east arc of a hut circle. Loch Hope (no. 4) was entered probably from under a 'lintel slab' on the south side of the interior of a hut circle. At Skelpick Burn (no. 13) the wall of a hut circle was expanded to incorporate the souterrain, and at Cnoc Achadh na h-Uaighe, Rogart (no. 17) the souterrain was attached to one of three hut circles. The greatest quantity of evidence for entrance from surface habitations comes from the sites in the Strath of Kildonan (nos. 18, 19, 21, 25, 27, 28, 29, 30, 32, 33), and at Cyderhall, Dornoch (no. 39) the souterrain was associated with a possible round house.

During the excavation of the Fouhlin site (no. 2), traces of surface structures were detected. Some of these appear to have been built across the line of the roof of the souterrain, but they were fragmentary and not easy to follow. What seemed to be parts of the foundations of hut-circle walls petered out before much of the circumference could be determined, and in places the stones were missing altogether. Examination of the remains of what might have been a surface hut foundation above the south-eastern entrance revealed parts of querns. A matching lower quern stone for one of these was found on the floor of the souterrain passage just at the bottom of the steps of this south-eastern entrance, supporting the suggestion that, at this end at least and at one stage of its use, the souterrain could have been entered through the floor of a surface building. At Cyderhall (no. 39), a possible round house above the souterrain [Fig. 10.5] had a sunken floor, which may have been deliberately hollowed out to allow easier access to the underground structure.

It seems now logical to suggest that no souterrain existed in total isolation and, where not directly connected to one, some may have been positioned within reach of several habitations. This could have been the case at Rosal (no. 15), where Corcoran (1968: 117) noted that the souterrain's floor area of about 9 square metres would perhaps have been more than needed for storage of a year's supply of foodstuffs for a single family unit. At Fouhlin (no. 2), the sheer length of the souterrain would have provided

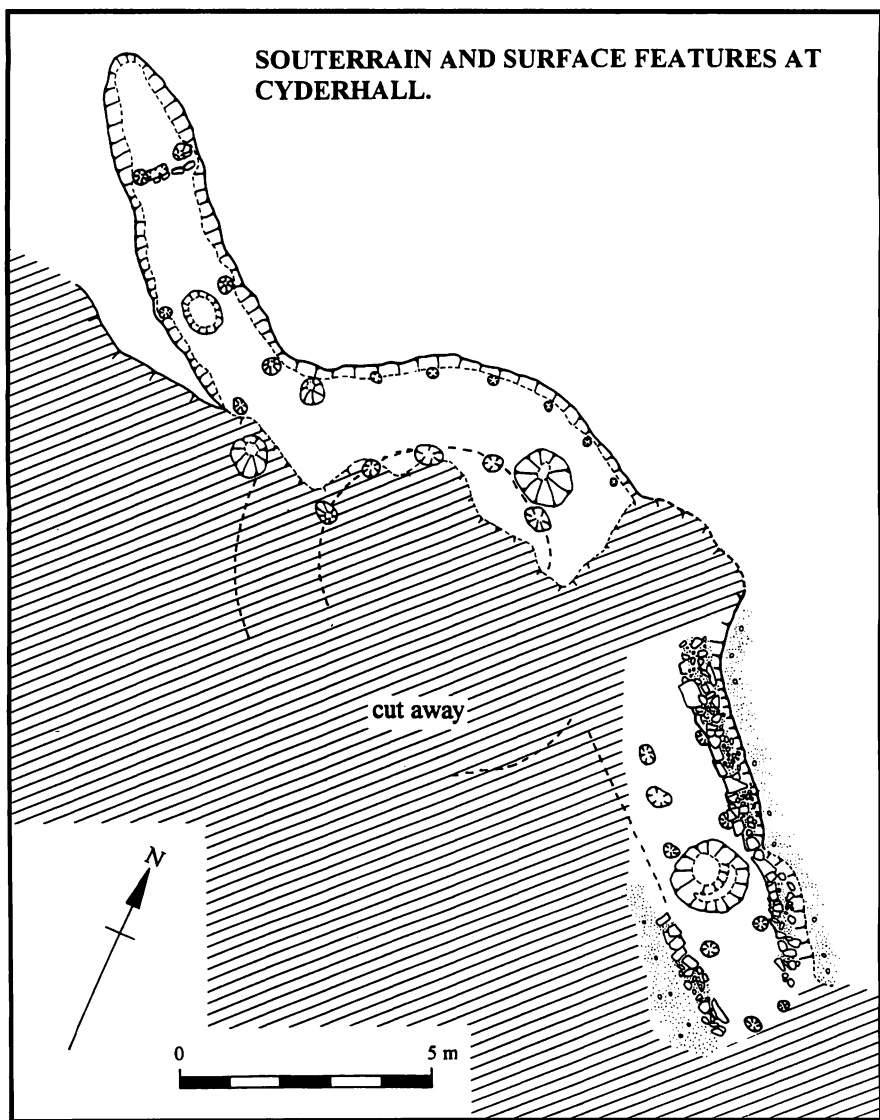


Fig. 10.5 Souterrain and surface features at Cyderhall. After Pollock (1992): illustrations 2, 3 & 4.

space for storage for a number of families, and the double entrance might have been an adaptation towards allowing access from different surface structures or by different users. The question of size and space for storage is thus bedevilled by the problem of access. Even two 'end-entrances' would not bring within easy reach materials stored in the middle of a souterrain the length of Fouhlin. There is still a possibility that some structures had roofs not below, but flush with the ground surface, and that occasional (or regular) removal of roofing slabs was necessary to get at the contents. This would also remove such structures from consideration as 'places of refuge'.

FUNCTION, CONTENTS & DATING

There are 3 subterranean passages, or tumuli, in this parish, which, it is said, lead from one cairn, under the bed of the river of Helmsdale, to another on the opposite side. They are covered at the top with large flags, above a trench of 3 feet broad, and 5 or 6 feet high [0.9 m x 1.5-1.8 m]. From their construction and direction, they seem to have been places of retreat for the inhabitants, with their effects and cattle, from the pursuit of invading enemies, in troublesome times; or sally ports, for facilitating their escape from a victorious enemy.

Thus Donald Sage, minister in Kildonan parish, described three of the souterrains in the Strath of Kildonan, in the *Old Statistical Account* of 1791. The 'cairns' from which the 'subterranean passages' lead were no doubt the ruinous remains of hut circles or round houses such as those at Caen Burn [Fig. 10.4D] or Allt Cille Pheadair [Fig.10.4C], with which souterrain passages are connected. The theory that these structures were places of refuge was current for a long period of time. In one of the earliest descriptions, Martin Martin (1716. 154) writing of the island of Skye, stated: 'There are several little stone Houses, built underground, call'd Earth-houses, which serv'd to hide a few People and their goods in time of War.' Describing the *eirde house* at Eriboll [Fig. 10.3D], Arthur Mitchell (1866) noted that other underground structures in the district were known as *leabidh fholaich* ('hiding beds'). Wainwright (1963. 14) dismissed the 'refuge' theory, noting the impossibility of defending such a structure from the inside and particularly that their location would not be unknown to a potential attacker. It would also be unlikely if, as suggested above, the roofing were visible on the surface. The Sutherland sites are even less likely, on account of their narrowness and lower roofing, to have offered safe refuge in times of trouble. By contrast, many of the Irish souterrains, with their elaborate air vents, angled passages, hidden chambers, drop holes and 'creeps', seem to be constructed for defence or protection rather than storage (Warner 1979).

The 1911 RCAHMS *Sutherland Inventory* (1911. xxxii-xxxiii) casts doubt on the possible use of the structures as dwellings or 'sleeping-chambers' because:

... the extreme narrowness of the first variety [see above] and the small dimensions of the expansions at the inner end, together with the lack of air and light, make them very unsuitable places for human habitation.

[As hiding- places they were too conspicuous] ... notably in the hut circle by the Cille Pheadair Burn ... with its huge covering bank, or in that of the third variety by the Kildonan Burn ... which must have displayed a marked elevation close to the entrance of the hut circle. Situated as some of these are, opening out of conspicuous hut circles, presumably the daily abodes of the people, they do not seem to answer to the requirements of a secure retreat.

But the writer did note the checks and constrictions in the passages at Cracknie and Caen Burn and that '... much food refuse, as well as other signs of occupation, were discovered in both examples'. No mention of food remains is to be found in the descriptions of these sites in the *Inventory* (nos. 220, 318) or elsewhere, and in this respect they seem to have been confused with Kirkton (no. 34) and Kintradwell (no. 38), which had checks, constrictions and food refuse in the form of animal bones and shells of limpet and periwinkle. For some sites, storage was not ruled out: '... if these galleries were used as granaries, the presence of querns, as in that at Salscraggie, is easily understood'.

As far as the Scottish souterrains are concerned, and despite arguments of dampness and difficulty of easy access, the storage function has most support at the present time. Other suggestions have been smoking or curing places for fish or meat, and sunken dairy compartments. The Cyderhall souterrain (no. 39) had a pit, 1.5 m deep and 1.5 m in diameter, dug into the floor. 'This would have made access up and down the interior of the souterrain very difficult, unless it was covered over by planking, and the purpose of such a unique feature is not clear, unless it was simply to create an extra volume of storage space.' (Pollock 1992. 153). Traces of hemp and cultivated flax were recovered from the souterrain floor, suggesting either storage of these crops or the presence of hemp or linen sacks. Other uses are hinted at by the presence of evidence for faecal material on the floor. Storage of grain in the souterrain is regarded as unlikely – there was a grain pit in the floor of the associated round house, with the main evidence being for six-row barley but also traces of emmer wheat and oats, and possibly spelt and rye.

P-R. Giot, in a discussion of Armorican souterrains (1960), discussed the difficult problems posed by interpretation of their use. Many had been found completely empty, yielding little information. If some had been used as grain stores, traces of organic material might be expected. Earlier interpretations included suggestions that they had been burial places, with slight traces of ash and burned bone (of indeterminate nature) seeming to indicate cremation burials. This was opposed by the argument that these underground structures were meant to be used primarily by the living, although this would not rule out the possibility of their later use as burial sites or even deliberate back-

filling by subsequent users of the site. 'Le fait que le boyau ou les puits d'entrée de tant de souterrains était soigneusement obturé peut aussi avoir une signification analogue, plutôt qu' une raison de sécurité, pour éviter des accidents ou le comblement par dégradation' (Giot 1960. 60).

'The careful excavation of the souterrain of Kervénarc'hant in Pleyber-Christ [Brittany] showed clearly that pottery sherds, bone debris, charcoal, burnt stones and earth were mixed together in successive levels and ... thus this souterrain had been deliberately blocked with a variety of debris from neighbouring dwellings' (Giot *loc. cit.*). From this it was concluded that souterrains were complementary to dwellings.

In a later account, Giot (1971. 158) noted:

Most often the chambers and tunnels contain absolutely nothing left from their period of occupation, and all that one finds come from this fill. And, in the more rare occasions when there are some objects in the occupation layer, it is possible to ascertain that there are sherds of more recent pottery types amongst the material of this fill.

The interpretation here appears to be of an original storage function, always associated with a surface structure. After normal use the passage, or at least its entrance area, becomes a dump for rubbish, in the process acquiring materials of a period or of periods much later than that of the souterrain's original use. This is reminiscent of the re-use of grain pits as rubbish dumps in some Iron Age settlement sites. A reasonable conclusion would be that of Christie (1979. 210): 'The function of souterrains still eludes us, if indeed there ever was one overall function applicable to the whole group of monuments under this heading, which seems unlikely'.

The infilling of souterrains could have taken place for a variety of reasons, and the above-mentioned evidence suggests that some sites were dumping places for rubbish from the surface settlement, obviously at some time after the original function of the passage had been superseded. At Cyderhall, the excavator has proposed that the deliberate infilling of the passage there might be related to some of these structures having 'a significance beyond the purely utilitarian for their Iron Age builders' (Pollock 1992. 159). The site at Northwaterbridge, Kincardineshire (Small, Cottam & Dunbar 1974) appears to have been back-filled before the structure was completed, perhaps because of the unstable nature of the material into which the trench had been dug.

The reference to burials is interesting, since there are reports of human remains being discovered in association with souterrains. Among the Sutherland souterrains, a human arm bone was recovered during the clearing-out of the passage of the structure at Salscraggie Lodge in the Strath of Kildonan (no. 31) [Fig. 10.3C]; two 'urns' or vessels of clay which 'crumbled away' were said to have been found in the souterrain at Skerray Mains, Torrisdail, Tongue (no. 9), and Stuart (1868) refers to portions of an urn with chevron ornament in relief and bits of charred wood being found when an *eirde house* on the bank of the Helmsdale River at Torrish was

cleared out. The 'urns' could have been domestic pottery, and charred wood is no guarantee of cremation, but there are other instances of human remains being found in Scottish souterrains.

The major question is *when* the material came into the souterrain passage – whether during the 'normal' initial use of the structure, or in a later secondary phase or phases when perhaps the initial function had been forgotten and the passage had acquired another, possibly quite different, purpose. A bronze spiral finger ring and a bronze spherical object '... showing numerous small hammer-marks', were said to have been found in the souterrain at Eriboll (no. 3) (Mitchell 1866). A small ring of shale about 2.5 cm in diameter and a fragment of another were recovered from the site at Kirkton, Golspie (no. 34) and 'much food refuse lay on the floor' (RCAHMS 1911). At Salscraggie Lodge (no. 31), apart from the human arm bone, parts of two rotary querns and a saddle quern were recovered from the interior of the souterrain; it was noted that the querns were found around the entrance but the human arm bone was not.

At Kintradwell, Joass, in what can only be described as a cursory examination of the souterrain there, discovered a low dividing wall, not unlike the 'creeps' in some Irish souterrains. Built into this wall was a large block of stone which bore on one perpendicular face scratches which Joass likened to 'early Scandinavian letters'. The stone was subsequently lost before proper analysis could be carried out, but the marks shown on Joass's sketch of the stone do not resemble 'runes' so much as accidental scratches. Even if they had been runes, this can only be seen as further evidence that many of these passages could have been open at a late date, that structural alterations might have been made for functions quite different from those of the original building, and that finds in the passage do not necessarily date the primary use of the structure. Joass (1864) also noted '... numerous shells of the limpet and periwinkle, with animal bones, and portions of very hard black peat', suggestive of midden remains (no. 38) [Fig. 10.3I].

Shell midden material in the passage at Fouhlin (no. 2), including mussel and oyster shells, was part of what may have been a much larger concentration on the surface. It is possible here, too, that a roofing slab of the souterrain might have been deliberately removed in order to dispose of some of the surface accumulation, at a time when the souterrain itself was no longer serving its original purpose. There are two areas where roofing slabs are missing. One is where modern clearance for house foundations broke through the roof of the souterrain; there is no shell midden beneath this. The other gap is immediately above the concentration of midden material in the passage. There is no midden material at the bottom of the 'steps' at the south-eastern entrance to the souterrain passage; the shelly mixture begins about 2.4 m along the passage from this end. This suggests that, if the rubbish were deliberately dumped in the passage through a gap made in the roof, the true entrance was already obscured or blocked. It also means that any objects under the midden material in the passage (eg there were discrete patches of rust in the floor at this point) pre-date the intrusion of that material. They too

may have been dumped, but they may also belong to the period of original use of the souterrain.

At the time of the discovery of the Fouhlin souterrain, a small pair of bronze toilet shears was discovered projecting from between the wall stones near the roof and just beyond the collapsed roofing slab (*Proc. Soc. Antiq. Scot.* vol 94. 1960-61. 327). The shears are unique in Scotland, if not in the British Isles, and comparisons of form and decoration have been made with bucket handles from Traprain Law and Dowalton Loch, Kirkcudbright, the Benwell torc and the Newstead tankard holdfast (McGregor 1976. no 277). Again, the completely unstratified location can indicate only deposition at some period, probably early, in the souterrain's use. Excavation of the surface structure connected with the south-eastern entrance to the souterrain uncovered a bead of greenish glass with a yellow enamel spiral running through it. This type has been classified by Margaret Guido (1978. 85-87, Fig. 33/2) as a North Scottish spiral-decorated bead, possibly derived from, but later than, the Meare spiral beads. These Scottish beads were presumably made in the early 1st century AD or shortly before. It is impossible to say accurately when they ceased to be produced, but it may have been in the late 1st century AD. Some may have survived until the late 2nd century, but probably not later. This unfortunately does not tell us when the bead arrived at Fouhlin, although the discovery of the matching quern stone at the bottom of the south-eastern steps indicates that souterrain passage and hut circle floor were connected at some point.

At Cyderhall (no. 39), calibrated radiocarbon dates show occupation of the site somewhere between 400 and 200 BC or earlier, the souterrain contemporary with at least one phase in the use of the surface structure. At Dalladies, Kincardineshire (Watkins 1980a), a number of ditch features associated with round houses had characteristics (timber or dry-stone wall lining) which the excavator sees as being related to souterrains; some of these show evidence of having been deliberately filled in. The time-range for occupation of the site, based on several calibrated radiocarbon dates, is from the 3rd century BC to the beginning of the 7th century AD. At Newmill, Perthshire, a souterrain of the Angus type was excavated and radiocarbon dates (uncalibrated) were obtained for the souterrain itself: 55 ± 90 bc, ad 40 ± 70 and ad 195 ± 55 (Watkins 1980b). The latter date (charcoal from the souterrain infill) is presumed to date the destruction or deliberate filling-in of the structure. There were also dates for the adjacent house: ad 40 ± 55 , ad 60 ± 55 and ad 85 ± 60 , demonstrating the contemporaneity of the structures. But:

... the adjacent house continued at least for a while, and the site was apparently still in use in the ninth century. The present indications, imprecise and insufficient as they may be, seem to point to the abandonment of souterrain use by or soon after the third century (Watkins 1984. 78).

Alcock, in considering the Angus souterrains, has no doubts of their proto-Pictish and Pictish attribution, and in the case of sites beyond the Angus/Fife

region, suggests a main period of use in the early first millennium AD (Alcock 1980. 68-69).

The Cyderhall radiocarbon determinations suggest a 3rd century AD date for the end of souterrain use there also, but the overall secure dating evidence is minimal and we are still a long way from a firm chronology for the building and original use of souterrains; some might have been built much later than the dates suggested here. These, and other tantalising scraps of evidence raise many important questions:

- * What had the function of these deliberately infilled structures been?
- * Had the function ended or was it continued elsewhere, on the surface, using other structures or methods?
- * Was the infilling simply for purposes of safety or hygiene, or perhaps for some ritual associated with a hitherto unrecognised function?

The investigation of the hut-circle site and the dates obtained at Kilphedir, in the Strath of Kildonan (Fairhurst & Taylor 1971), may be mentioned here as generally relevant to chronology. The range of radiocarbon dates (uncalibrated) for two phases of the occupation of the site show a 5th/4th century bc early phase and a 3rd century bc/1st century ad later phase. The later phase dates are from the massive-walled, expanded-entrance Hut V, which Fairhurst & Taylor (1971. 92-93) compared with other hut circles which have souterrain structures attached – at Kilphedir (nos. 29-30) and Caen Burn (no. 32) in the vicinity, and at Kildonan (no. 27).

CONCLUSIONS

From the foregoing, it will be appreciated that many souterrains contain and preserve evidence for a succession of developments and changes on the surface, and perhaps in the functions of the structures themselves. Some of these developments obviously occurred after the souterrain's 'original' function had ceased, and when it may have become a receptacle for some of the rubbish of the surface settlement or have been re-used for a totally different function, possibly even by groups unconnected with the original builders. The study is complex, and although storage has been proposed as a reasonable interpretation, it does not have unqualified approval. Even the incomplete evidence for the group discussed here indicates differences of usage and, as Patricia Christie noted (1978. 332), in referring to Cornish *fogous* '... each monument has its unique qualities and, like all man-made structures, certainly in prehistory, no two are quite alike'.

Chronology, particularly dates of construction and primary use, is still tenuous, and can obviously not be based on material discovered in the passage or in the floors of surface structures, directly connected or not. There is thus a need for excavation under and behind the stone wall linings of souterrain passages in all future excavations, and in known sites where there has been no major disturbance of these elements.

The evidence from about half of the known Sutherland souterrains suggests that they were connected or associated with surface structures, and careful examination or excavation of the areas immediately surrounding some of the other sites listed might reveal similar evidence. If we can demonstrate that most or all souterrains were constructed as important adjuncts of surface structures, then we may be closer to answering the question of their functions and to using them as a true indication of settlement distribution.

Now I believe the Troglodytes of old,
Whereof Herodotus and Strabo told;
Since everywhere about these parts, in holes
Cunicular men I find, and humane moles.
(Brown 1673, quoted in *Antiquity* 1938)

Acknowledgement

I am grateful to Lorraine McEwan, Department of Archaeology, University of Glasgow, for drawing the distribution map and plans, and to the National Monuments Record of Scotland for allowing me to check my list against theirs.

References

- Alcock, L. 'Populi bestiales Pictorum feroci animo: a survey of Pictish settlement archaeology', in W.S. Hanson & L.J.F. Keppie (eds) *Roman Frontier Studies 1979* (Papers presented at the 12th International Congress of Roman Frontier Studies). B.A.R. (Int. Ser.) 71. 1980: 61-95.
- Anderson, J. 'Notes on the structure, distribution and contents of the brochs, with special reference to the question of their Celtic or Norwegian origin', in *Proc. Soc. Antiq. Scot.* 12. 1876-78: 314-355.
- Anderson, J. *Scotland in Pagan Times - The Iron Age*. 1883.
- Anon. 'Underground dwellings in Central Europe', in *Antiquity* 12. 1938: 359-361.
- Barclay, G. 'Newmill and the souterrains of Southern Pictland', in *Proc. Soc. Antiq. Scot.* 110. 1980: 20-208.
- Barclay, G. 'Excavations at Upper Suisgill, Sutherland', in *Proc. Soc. Antiq. Scot.* 115, 1985: 159-198.
- Brothwell, D. 'On a mycoform stone structure in Orkney, and its relevance to possible further interpretations of so-called souterrains', in *Bull. Inst. Archaeol. Univ. London* 14. 1977: 179-190.
- Brown, E. *A Brief Account of Some Travels in Hungaria*. 1673.
- Buxton, R.J. 'The earth-house at Portnancon, Sutherland', in *Proc. Soc. Antiq. Scot.* 69. 1934-35: 431-433.
- Childe, V.G. *The Prehistory of Scotland*. 1935.
- Christie, P.M. 'The excavation of an Iron Age souterrain and settlement at Carn Euny, Sancreed, Cornwall', in *Proc. Prehist. Soc.* 44. 1978: 309-433.
- Christie, P.M. 'Cornish souterrains in the light of recent research', in *Bull. Inst. Archaeol. Univ. London* 16. 1979: 187-214.
- Corcoran, J.X.W.P. 'The souterrain at Rosal, Strath Naver', in *Proc. Soc. Antiq. Scot.* 100. 1967-68: 114-118.
- Curle, A.O. 'On the examination of two hut circles in the Strath of Kildonan, Sutherlandshire, one of which has an earth house annexe', in *Proc. Soc. Antiq. Scot.* 45. 1910-11: 18-26.
- Fairbairn, A. 'Account of the discovery of a cinerary urn with other relics, near Marchhouse, Muirkirk, and the Excavation of an Earth-house at Yardhouses, Carnwath', in *Proc. Soc. Antiq. Scot.* 58. 1923-24: 333-343.

- Fairhurst, H. & Taylor, D.B. 'A hut-circle settlement at Kilphedir, Sutherland', in *Proc. Soc. Antiq. Scot.* 103. 1970-71: 65-99.
- Friell, J.G.P. & Watson, W.G. *Pictish Studies: Settlement, Burial and Art in Dark Age Northern Britain*. B.A.R. 125. Oxford. 1984.
- Goudie, G. 'An Underground Gallery recently Discovered on the Island of Tiree; with a note of another in the same island, from a Plan of Sir Henry Dryden', in *Proc. Soc. Antiq. Scot.* 51. 1916-17: 100-108.
- Giot, P.-R. 'Les souterrains armoricains de l'âge du fer', in *Annales de Bretagne* 67. 1960: 45-65.
- Giot, P.-R. 'Hill settlements, souterrains and the chronology of the Iron Age in Brittany', in D. Hill & M. Jesson (eds) *The Iron Age and its Hill-forts* (University of Southampton Monograph Series No. 1). 1971: 155-159.
- Guido, M. 'The Glass Beads of the Prehistoric and Roman Periods in Britain and Ireland', in *Soc. Antiq. London, Research Report No. 35*. 1978.
- Henderson, I. *The Picts*. 1967.
- Home, D.M. 'Account of a subterranean building found near Broom-house, the property of Colonel Logan Home, in the parish of Edrom, Berwickshire', in *Proc. Soc. Antiq. Scot.* 8. 1868-1870: 20-28.
- Horsburgh, J. 'Notes of cromlechs, duns, hut circles, chambered cairns, and other remains, in the county of Sutherland', in *Proc. Soc. Antiq. Scot.* 7. 1866-68: 271-279.
- Hutcheson, A. 'Early underground buildings in Scotland', in *Proc. Trans. Dundee Naturalists' Soc.* 1 (ii). 1913-15: 33-51.
- Joass, J. 'Two days diggings in Sutherland', in *Proc. Soc. Antiq. Scot.* 5. 1862-64: 242-247.
- Kendrick, J. 'Excavations at Douglasmuir, 1979-80', in D.W. Harding (ed) *Later Prehistoric Settlement in South-East Scotland*. 1982: 136-140.
- Macgregor, M. *Early Celtic Art in North Britain*. 1976.
- MacRitchie, D. *The Underground Life*. 1892.
- MacRitchie, D. 'Earth-houses and their occupants', in *Proc. Soc. Antiq. Scot.* 51. 1916-17: 178-197.
- Martin, M. *A Description of the Western Islands of Scotland*. 1716 (2nd edition).
- Mathieson, J. 'Earth-house or galleried building near Durness, Sutherland', in *Proc. Soc. Antiq. Scot.* 59. 1924-25: 221-223.
- Maxwell, G.S. 'Settlement in Southern Pictland: a new overview', in A. Small (ed) *The Picts: a New Look at Old Problems*. Dundee. 1987: 31-44.
- Mitchell, A. 'Eirde house at Eriboll, in the parish of Durness, Sutherlandshire', in *Proc. Soc. Antiq. Scot.* 6. 1864-66: 249-250.
- Mitchell, A. 'On some remarkable discoveries of rude stone implements in Shetland', in *Proc. Soc. Antiq. Scot.* 7. 1866-68: 118-122.
- Morrison, A. & Reid, R.W.K. 'Fouhlin earth house', in *Discovery and Excavation in Scotland*. 1964: 51.
- Morrison, A. & Reid, R.W.K. 'Fouhlin earth house', in *Discovery and Excavation in Scotland*. 1965: 39.
- Munro, R. *Prehistoric Scotland*. 1899.
- Pennant, T. *A Tour in Scotland*. 1774. 3rd edition, Warrington.
- Pollock, R. 'Cyderhall Farm (Dornoch parish)', in *Discovery and Excavation in Scotland*. 1988: 17.
- Pollock, R. 'The excavation of a souterrain and roundhouse at Cyderhall, Sutherland', in *Proc. Soc. Antiq. Scot.* 122. 1992: 149-160.
- RCAHMS. *Inventory of the Historical Monuments in Sutherland*. 1911.
- Ritchie, A. 'The archaeology of the Picts: some current problems', in J.G.P. Friell & W.G. Watson (eds) *Pictish Studies*. B.A.R. 125. Oxford. 1984: 1-6.
- Scott, L. 'Gallo-British colonies. The aisled round-house culture in the north', in *Proc. Prehist. Soc.* 14. 1948: 46-125.
- Small, A., Cottam, M.B. & Dunbar, J.G. 'Souterrain and later structures at Northwaterbridge, Kincardineshire', in *Proc. Soc. Antiq. Scot.* 105. 1972-74: 293-296.
- Stevenson, R.B.K. 'Metal-work and some other objects in Scotland and their cultural affinities', in A.L.F. Rivet (ed) *The Iron Age in Northern Britain*. 1966: 17-44.
- Stuart, J. 'Report ... of a fund left by the late Mr. A. Henry Rhind, for excavating early remains', in *Proc. Soc. Antiq. Scot.* 7. 1866-68: 289-307.
- Tait, L. 'Notes on the shell-mounds, hut-circles, and kist-vaens of Sutherland', in *Proc. Soc. Antiq. Scot.* 7. 1866-68: 525-532.
- Thomas, C. 'Souterrains in the Irish Sea Province: a note', in C. Thomas (ed) *The Iron Age in the Irish Sea Province*. CBA. Research Report No. 9. 1972: 75-78.
- Wainwright, F.T. 'Souterrains in Scotland', in *Antiquity*. 27. 1953: 219-232.

- Wainwright, F.T. 'Houses and graves', in F.T. Wainwright (ed) *The Problem of the Picts*. 1955: 87-96.
- Wainwright, F.T. *The Souterrains of Southern Pictland*. 1963.
- Warner, R. 'The Irish souterrains and their background.', in H. Crawford (ed) *Subterranean Britain*. 1979: 100-144.
- Watkins, T. 'Excavations of an Iron Age open settlement at Dalladies, Kincardineshire', in *Proc. Soc. Antiq. Scot.* 110. 1978-80: 122-164.
- Watkins, T. 'Excavation of a settlement and souterrain at Newmill, near Bankfoot, Perthshire', in *Proc. Soc. Antiq. Scot.* 110. 1978-80: 165-208.
- Watkins, T. 'Where were the Picts? An essay in settlement archaeology', in J.G.P. Friell & W.G. Watson (eds) *Pictish Studies*. B.A.R. 125. 1984: 63-86.
- Welfare, H. 'The southern souterrains', in R. Miket & C. Burgess (eds) *Between and Beyond the Walls*. 1984: 305-323.
- Welsh, T.C. 'Glen Leirag – structure', in *Discovery and Excavation in Scotland*. 1971: 46.
- Wilson, D. *The Archaeology and Prehistoric Annals of Scotland*. 1851.

