

The Souterrain at Rosal, Strath Naver, Sutherland

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A souterrain, situated almost at the centre of the deserted settlement of Rosal,¹ was excavated during 1962 as part of the expedition directed by Dr Horace Fairhurst and described elsewhere in this volume (see *infra*, p. 135). Before excavation the walls of the structure were visible along approximately 28 ft. of its length. Three roofing stones remained *in situ*; one lay fallen into the souterrain, and what may have been a fifth lay on the surface to the W. of the site. It was apparent that there had been some considerable disturbance involving removal of most of the roofing in the W. part of the structure. The latter area had been dug into some few years before, but there had also been earlier disturbance, possibly associated with agricultural activities, and dating either from the occupation of Rosal as a settlement in historic times, or subsequently. Remains of what appeared to have been a metal stanchion and large pièces of worked timber suggest that some sort of gate had been fitted in recent times to the NW. end of the structure. A depression in the ground surface to the SE. of the disturbance suggested that the souterrain continued in that direction and on the same alignment.

Excavation showed that the whole of the structure had been disturbed down to original floor level. In the NW. sector, which could be seen to have been disturbed before excavation, there was assorted debris to an average depth of one foot above floor level. Debris included a modern metal file, part of an iron fire-basket, other metal fragments and animal bones, mixed with earth and small stones. The level of this disturbance rose sharply at a distance of approximately 24 ft. from the NW. end. Filling in the SE. part of the souterrain consisted of light dry soil in the upper levels, to a depth of 1 ft. 9 in. below the turf line. Below this was black, rather moist soil, in a layer 2 ft. thick. A layer of clean, dark brown soil was sandwiched between the latter and another layer of black, damp soil which lay on the floor of the souterrain. At all levels there were numbers of stones, some fairly large boulders measuring more than one foot across, although there were rather fewer in the lower levels. None of these stones had fallen from the walls of the souterrain, which remained intact except at the NW. end. A fourth roofing stone remained *in situ* at a distance of 13 ft. 6 in. from the SE. end.

After the removal of infilling the structure could be examined (Pls. 8 and 9, and fig. 1). It was almost 42 ft. long with an average width of 3 ft. The four roofing stones which remained in position show that vertical clearance varied between 2 ft. 9 in., near the entrance, to a maximum of 4 ft. 9 in. in the body of the souterrain. The souterrain itself was slightly sinuous, almost straight, in plan. A trench, apparently having almost vertical sides, had been dug into the subsoil. The sides were lined with carefully built dry-stone walling. Although the stones used varied in size, stability was achieved by giving the walls a slight backward batter, so that the upper courses were slightly wider apart than the lower.

¹ National Grid Reference NC 68854167. Marked on 6-inch Ordnance Survey map as *earth-house*.

The entrance was at the SE. end, slightly offset to the N., and access was gained by means of a slope cut into the subsoil at an angle of 45°. The slope levelled out about one-third of the way down to form a step. This was necessary, as in damp conditions the slope would have been slippery. From the entrance the floor of the souterrain sloped downwards to conform to the slope of the ground surface, falling approximately 3 ft. in a distance of 35 ft. At a distance of 7 ft. 6 in. from the entrance the souterrain narrows to a width of 2 ft. and this constriction is marked by a pair of jamb-like stones set vertically, in contrast with the remaining stones of the wall, which were placed horizontally (section G on fig. 1). Although the inner end of the structure had been disturbed and damaged, the basal layer of the wall remained, and showed that the end was rounded. Of the four roofing stones *in situ*, three were fairly flat slabs, approximately 4 ft. long, resting on the upper surface of the side walls. The fourth, the easternmost and set immediately above the constriction referred to, was much more rounded and only 2 ft. long. It was tightly wedged between the side walls so that only an area of one or two square inches was in contact with the walls on each side (Pl. 8b). There was no evidence of paving.

Eight feet from the entrance on the S. side, there had been a small semi-circular alcove set into the S. wall (Pl. 9b). Its greatest depth was 2 ft. 3 in. and it was 3 ft. 9 in. wide at the entrance. Like the remainder of the structure, the alcove had been lined with dry-stone walling, although only the lower courses survived. It is not known how this had been roofed, but the surviving portion suggested that it had been scooped out of the subsoil, and was therefore entirely underground. A shallow socket, half way across the entrance, may possibly have held a post to support the roof at its most vulnerable point. If so, it would appear that this support had not been effective and the whole of the alcove became unsafe. Stones and black earth mixed with charcoal were thrown in and the entrance was sealed by walling, which continued the line of that of the souterrain proper (Pl. 9a).

No finds, other than of recent date, were found in the body of the souterrain. It is not known when the structure was first disturbed, but this may have been coincident with the collapse of the roofing. This collapse may have been due to the robbing of the roofing stones, assuming that the whole of the roofing was of stone. It is possible, however, that the roofing was partially of timber. Stones of the size and proportions of the three westernmost roofing stones appear to be rare in the vicinity of Rosal. If the whole of the roofing had been of stone, it is strange that these three, together with the one fallen into the souterrain and a possible fifth lying on the surface, were not also removed. Similarly, had more suitable stone been available at the time of building, it is unlikely that the fourth roofing stone still *in situ* would have been chosen. Were the two fallen roofing stones replaced, the distance between any adjacent pair need not have exceeded five feet. 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 slight backward batter, and so retain their stability without the weight of roofing stones (Pl. 8a). It is possible then, but cannot be proved, that timber was used in roofing the souterrain, as in some similar structures in Ireland.¹

Had timber been so used, part of the roof would have collapsed after a time. With the collapse, the turf and humus covering the roof would also fall inwards. This might explain the black, damp soil lying on the floor of the E. part of the souterrain. The layer of fine clean earth overlying this may represent soil blown from ploughed fields and trapped inside the structure. The souterrain lies close to some of Rosal's arable. The stones found in such numbers in the upper levels are possibly the result of field clearance. From time to time a line of turf and humus would have had the opportunity to form and this would account for the upper layer of black moist soil

¹ S. P. Ó. Riordáin, *Antiquities of the Irish Countryside* (1953), 28.

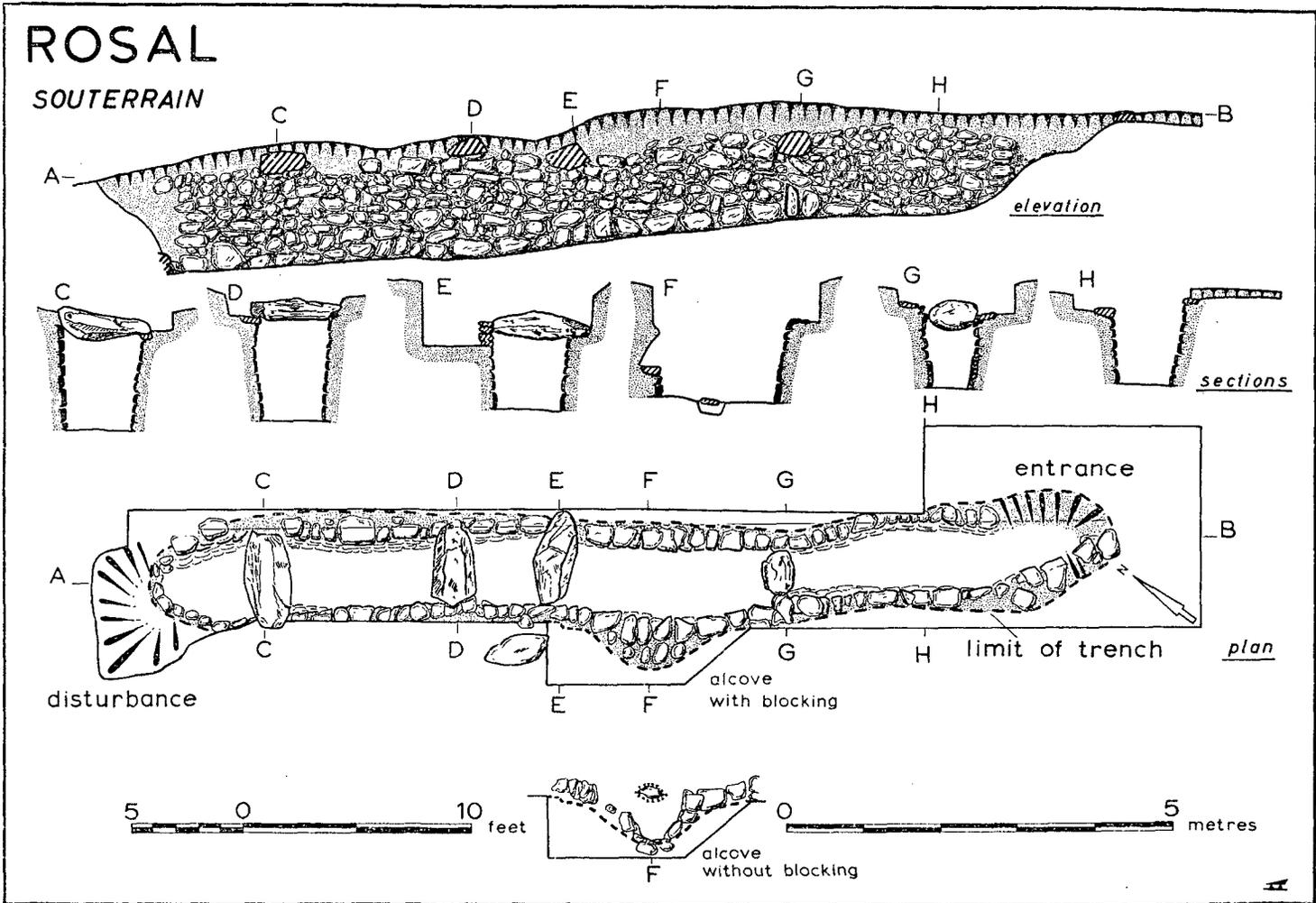


FIG. 1. Elevation, sections and plan.

sandwiched between lighter, dry soil. There is also the possibility that the partially open souterrain would have been used as a rubbish dump. Such an interpretation adds nothing to the understanding of the souterrain itself, but it may provide additional confirmation that Rosal had been occupied over a considerable period of time.

The souterrain had been built on a small knoll and cuttings were made on both sides of the former in an attempt to locate possible associated structures. Before excavation the surface of the knoll was marked by depressions and low mounds, including spoil heaps from the clearance of the NW. sector of the souterrain. There were no definite indications of a hut-circle or the like, although to the N. of the souterrain there were intermittent traces of a very low annular bank. When excavated it was seen that this bank was composed of small stones which would have provided inadequate foundations for a hut. It is possible, however, that this does represent the remains of a hut-circle, approximately 30 ft. in diameter, from which all the larger, and more useful, stones had been removed. Elsewhere on the summit of the knoll there were no traces either of structures or of occupation, and undisturbed subsoil lay immediately below the turf.

A small quantity of iron slag was found inside the apparent remains of a hut-circle, but without any associated evidence. To the S. of the entrance to the souterrain and lying below the humus, was part of the handle and body of a brownish-green glazed vessel, probably late medieval in date. Part of an apparent whetstone was found close by.

Excavation of the souterrain at Rosal adds little to the understanding either of the class of structure as a whole or of other known examples in Sutherland. Of the three types defined in the Royal Commission's *Inventory*,¹ that at Rosal belongs to the first, '... 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. Though very low at the entrance, the height increases inwards from 4'6" to 6'.' There appear to be eleven known souterrains of this type in Sutherland, including that at Rosal. Five are known in the strath of Kildonan, and the others are widespread throughout the county.

It is difficult to determine the function for which structures of this type were built. The theory that they may have been either temporary refuges or work-shops may be discontinued on account of their size and proportions. It is also difficult to envisage their use as storehouses. In the first place, the total floor area is quite large, in excess of 100 sq. ft. This would have allowed space for the storage of a considerable quantity of foodstuffs or the like, perhaps more than would be required by a single family unit over a period of one year. Second, the design of a souterrain, such as that at Rosal, would not have allowed easy access and removal of stored material. Once any quantity had been placed in the structure, it would have been difficult to gain access to the inner parts of the souterrain, owing to the narrowness. The low roof and the constriction near the entrance would also have made doubly difficult the deposition and removal of any large objects.

Despite these objections, it is difficult to offer an alternative hypothesis. Perhaps the intention was to provide a strongly built structure having a large floor area. As Wainwright suggested, in discussing the souterrains of Angus, this was most readily achieved by the building of a subterranean structure. Solidity of construction was achieved and the greatest problem was the provision of an adequate roof. This was successfully overcome in Angus in such a way that the average width was more than twice that of the souterrain at Rosal. Wainwright also suggested that Angus souterrains may have been used as byres.² A dry-stone structure of adequate propor-

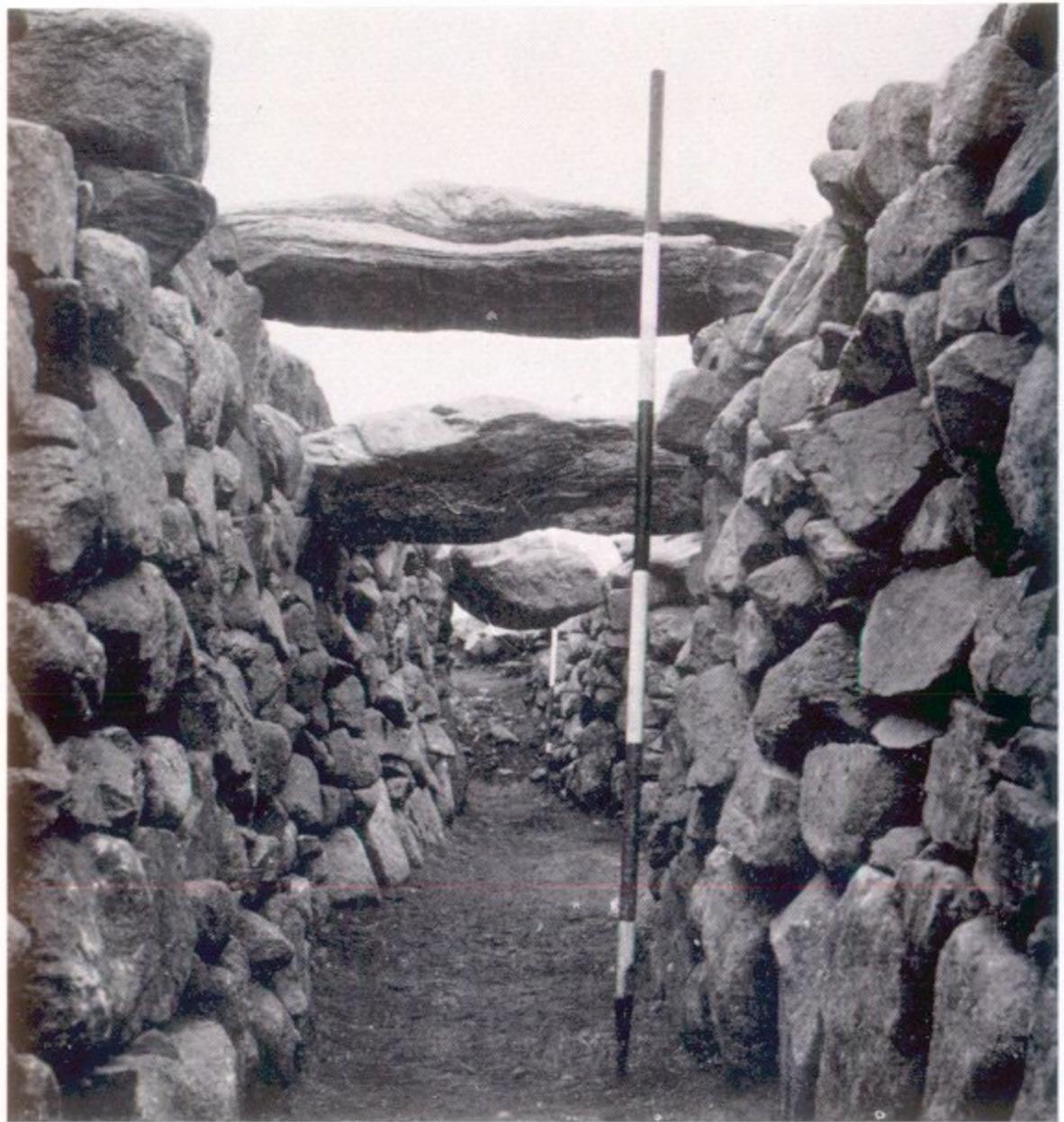
¹ Royal Commission on the Ancient and Historical Monuments of Scotland, *Second Report and Inventory of Monuments and Constructions of the County of Sutherland* (1911), xxxi-xxxiii.

² F. T. Wainwright, *The Souterrains of Southern Pictland* (1963), 16-19.

tions would have been unstable, but one built underground would have great stability. Such great strength would seem unnecessary in a structure designed solely for storage. It must be remembered, however, that at Rosal, stone suitable for roofing may have been scarce, and that which was available would not have spanned a souterrain of Angus type.

The purpose and date of the souterrain at Rosal remain unknown, and are likely to remain unknown until a detailed study is made of similar structures in Sutherland and elsewhere in Scotland. Wainwright made a preliminary survey of Scottish souterrains and defined different types and regional groups.¹ Future detailed research on these lines, coupled with excavation of selected types, may provide some answers to the many questions which still must be asked concerning Scottish souterrains.

¹ F. T. Wainwright, *Antiquity*, xxvii (1963), 219-32.



a View of interior looking towards the entrance



b Souterrain viewed from the SE. end



a Alcove in SW. wall of souterrain, with blocking



b Alcove without blocking