

Rosal: a Deserted Township in Strath Naver, Sutherland

by Horace Fairhurst

INVESTIGATIONS AT ROSAL

In the preparation of the new Ordnance Survey 6-in. map of the Highlands, a problem unique in Britain arises in connection with the ruins of the numerous settlements deserted during the depopulation of the last hundred and fifty years. They are not 'antiquities' in the normal sense but clearly are a characteristic feature of the Highlands which should be recorded; they were rather casually included on the old 6-in. map of the middle of last century. In Sutherland, the notorious evictions of 1806-20 add particular interest to these ruined settlements.

While working in northern Scotland as archaeology officer for the Ordnance Survey, Mr A. L. F. Rivet was forcibly struck by the character of a number of these sites in upper Strath Naver which were located on land intended for ploughing and planting by the Forestry Commission. In some cases the depopulated townships have largely escaped interference since the time of the evictions and have preserved in a remarkable way evidence for a study of the folk life of the period. In particular the township of Rosal¹ (NC 690415) appeared to have exceptional possibilities and called for immediate consideration as it was to be ploughed and planted in the near future; an Iron Age souterrain occurred in the middle of the site, indicating occupation from a remote period. Consultation with the Forestry Commission resulted in a postponement of planting on the area of the old arable lands and the ruined dwellings until a detailed survey could be made.

Meanwhile, the writer had been directing investigations on a deserted settlement of much the same period at Lix near Killin in west Perthshire. An invitation from the Inspectorate of Ancient Monuments to make a study of Rosal was accepted largely because of the possibilities of Rosal itself but also because there would be opportunity of comparison with the Perthshire evidence. The project was financed jointly by the Ministry of Works and the Court of the University of Glasgow. The Ordnance Survey provided base plans specially enlarged from the plots for the new 6-in. map: the Forestry Commission gave every facility including the use of a hut on the site. Two colleagues from the University assisted in the work, Mr Gordon Petrie with the survey and Dr John Corcoran in the excavation of the souterrain. Students, mainly from the University Archaeology and Geography Departments, provided the labour force and during the period 16th June to 7th July 1962, about sixteen of us worked on the site in dull and windy but dry weather.

The preparation of the following report has involved consideration of evidence from ground survey, excavation and documents. The task of welding together this diverse and sometimes very incomplete information has been a task of some complexity; the thorny problem of the authenticity

¹ O.S. 1-in. (7th Series) Sheet 10, Tongue. The new O.S. 6-in. Sheets NC 63 NE, 63 SE, 64 SE, 73 NW, 73 SW, 74 SW.

of some widely current statements on the Sutherland Clearances has had to be considered. The final form of the report reflects the varied nature of the material and, inevitably, the limits of one's competence.

THE SITE AND SITUATION OF ROSAL: GENERAL SURVEY

Northern Sutherland for the most part consists of a wide irregular plateau, rarely rising much above 800 ft. O.D. and taking the form of an extensive peaty moorland interspersed with shallow lochs and rocky rounded hills. Above the general plateau surface, there arise at intervals, the great mountain masses such as Klibreck, Ben Hope and Ben Loyal, to heights of 2,000-3,000

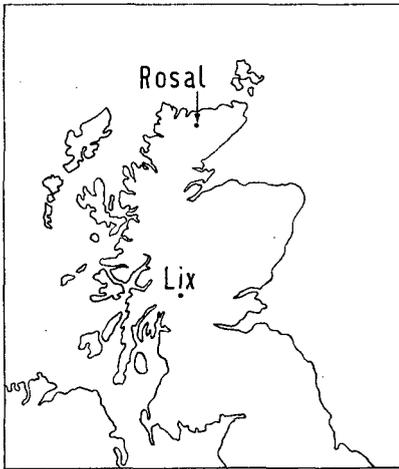


FIG. 1. The position of Rosal

ft. The straths are not usually incised to any great depth and upper Strath Naver is a rather shallow, gentle-sided valley, much in contrast with the great glens which are characteristic of the Central Highlands and the West (Pl. 10a).

The old township of Rosal lies about fourteen miles up Strath Naver from the coast at Bettyhill, on the E. side of the river (figs. 1 and 2). It is in the angle between the road S. towards Altnaharra and Lairg, and that which branches off to the SE. at Syre bridge towards the Strath of Kildonan and Helmsdale. The name is not marked on the O.S. 1-in. sheet but the outline of the old settlement area was shown on the first 6-in. sheet (Sutherland, sheet XLIV NE.) together with a very small number of the ruined buildings; on the new 6-in. sheet (NC 64 SE 1961) a much more adequate representation of the site has been made.

From the narrow haughs along the river which are only about 200 ft. above sea-level, the ground slopes up rather sharply in a rocky terrace about 100 ft. high, and then, beyond this shoulder lie the arable lands of the old township in a wide stretch of smoothly rolling grassland which rises in the extreme SE. to 440 ft. (Pl. 10b). Still further away from the river, the land continues to rise irregularly to the water parting with the Helmsdale River which flows down to the Strath of Kildonan. Beinn Rosail (851 ft. O.D.) is one of the highest points on this ridge which used to be called the Heights of Strath Naver.

The old settlement of Rosal was separated from the rough grazings and moor around by a dry-built stone wall which can be traced most of the way round the eighty acres or so of ground

STRATH NAVER SETTLEMENTS PRIOR TO THE EVICTIONS

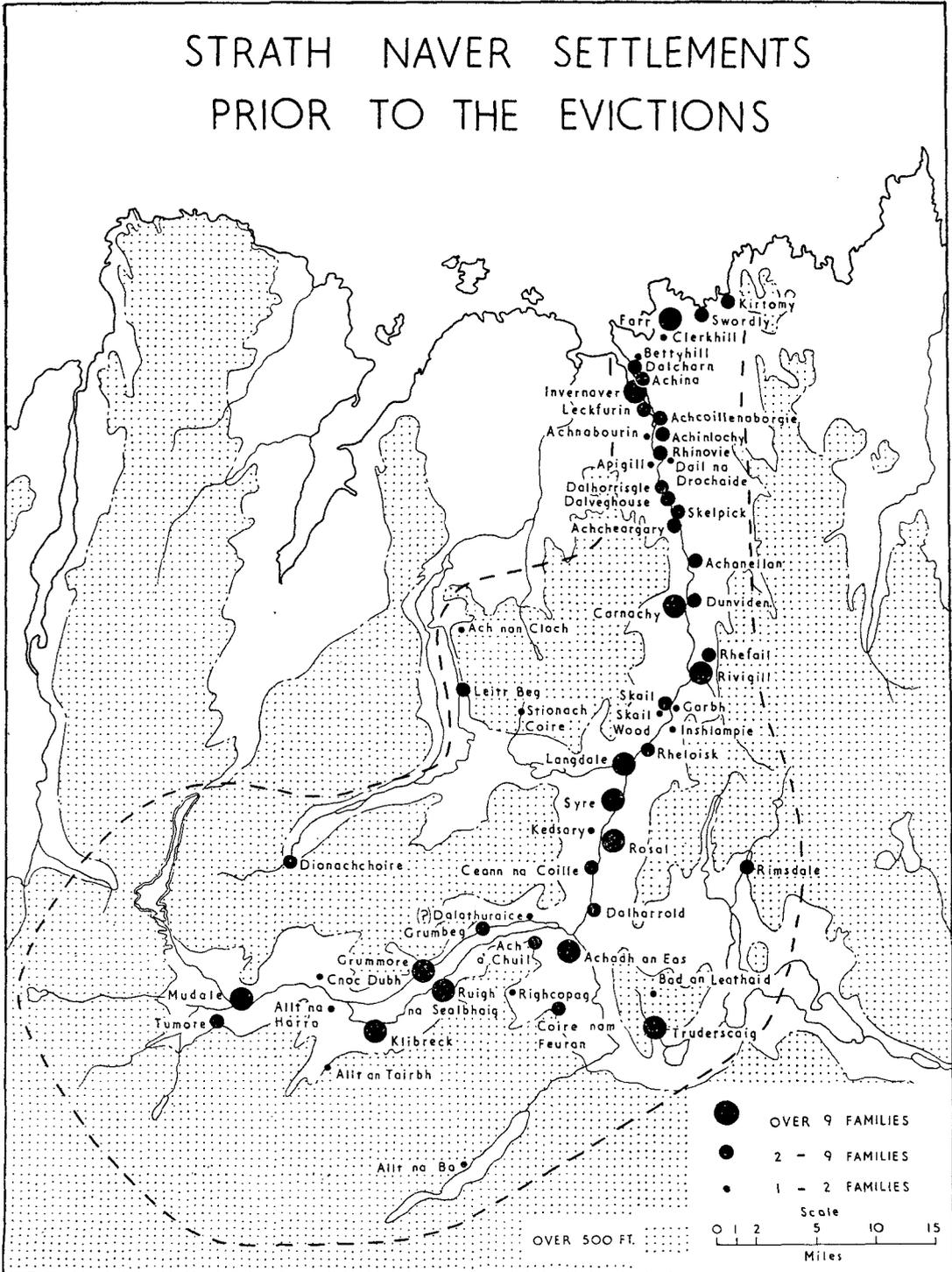


FIG. 2

which had once been included. This 'ring-dyke' corresponds to the 'head-dyke' which is a continuous feature along the edge of the moorland in many parts of Scotland. In Upper Strath Naver, however, the arable land was not continuous along the valley and together with other settlements of the same date, Rosal must have appeared like an isolated island of cultivation in a wide expanse of moor. At the present time, the contrast between the smooth, green area within the ring-dyke and the rough moorland outside has been heightened by the plough of the Forestry Commission which has torn great furrows in the coarse grass and heather; the young conifers will soon transform the setting of the old township. By no means all the land within the ring-dyke had, however, been improved for cultivation and at least one-third of the area is rough and covered

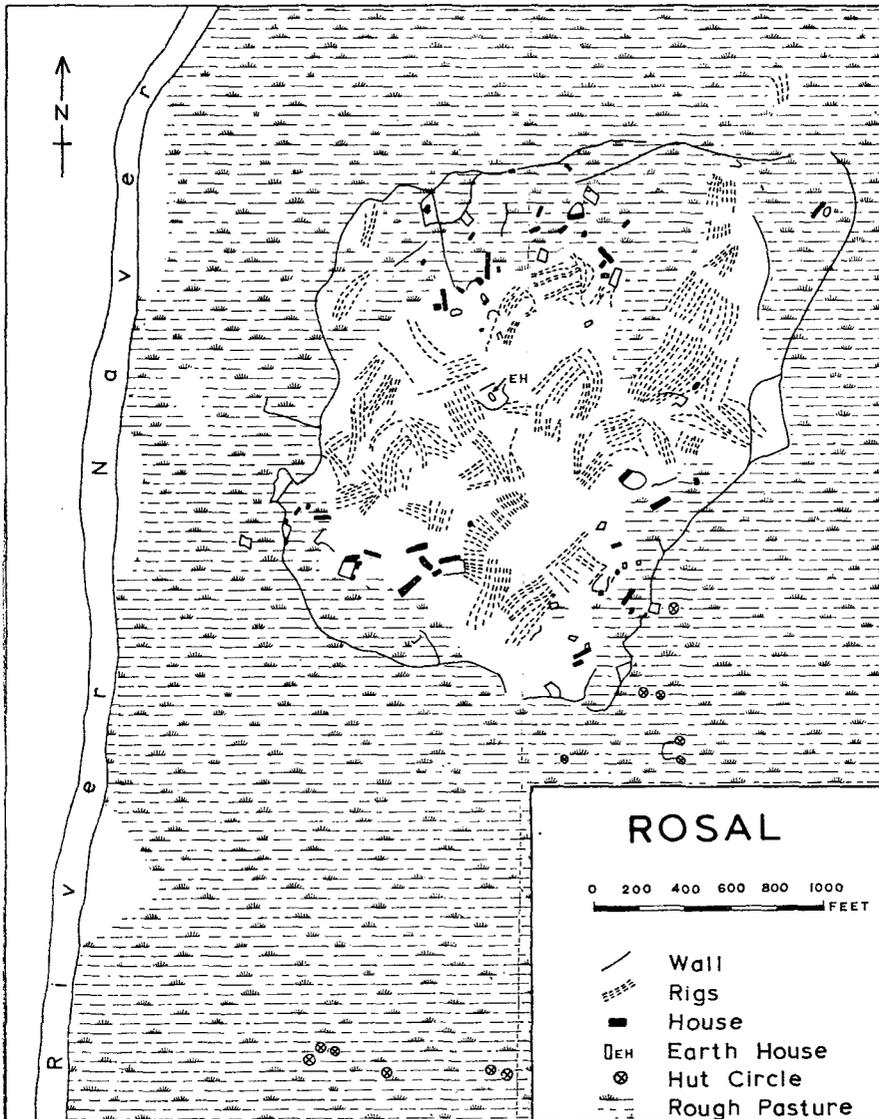


FIG. 3. The plan of Rosal

with heather. Over the other two-thirds, including the plough rigs themselves (Pl. 11a), the underlying Boulder Clay had been picked comparatively clean of boulders which had either been utilised in the old dry-stone walling, or had been piled in clearance cairns, some of which were of great size. In places, isolated patches of peat bog occurred between the better drained ground.

One of the remarkable characteristics is the amount of good grassland which occurs after a century and a half of neglect. Mr J. C. C. Romans who came from the Macaulay Institute at Aberdeen to examine the soils while we were investigating, and whose findings are discussed later, emphasised the relatively high fertility which was difficult to explain in terms of the farming practices of the pre-Eviction period. Only rarely, too, had the heather colonised the old plough lands, though here and there bracken had spread on the drier slopes. Down by the river, most of the ground was very rough fluvio-glacial material and had not been brought within the ring-dyke. Although the land is nowhere at any great elevation above sea-level, there is very little shelter from the wind, and in the mild, damp climate of this part of Sutherland, peat formation has occurred on most level or gently sloping ground. The Rosal lands must have represented an exceptionally large extent of arable in a region where settlement even at its maximum was always discontinuous.

Within the 'ring-dyke' the outlines of over a dozen long dwelling-houses can readily be traced, together with the associated barns, outhouses, yards and corn-drying kilns which made up the characteristic loosely clustered settlement of the eighteenth century (fig. 3 and Pls. 10a and 11b).¹ The ruined buildings were markedly peripheral in their distribution within the township, and no explanation is readily apparent in terms of slope or drainage for this arrangement.

CONTINUITY OF SETTLEMENT FROM THE PREHISTORIC PERIOD

In Sutherland it is often possible to find evidence of settlement over a long period of time within some small pocket of attractive land, and Rosal is no exception.

An indication of an early occupation may occur in the SW. part of area of the area enclosed by the ring-dyke, where a rounded heap of stones stands on the summit of the highest hillock (690413). The new O.S. 6-in. map (Sheet NC 64 SE) singles it out as a 'cairn', presumably because the site and form suggest a Bronze Age burial cairn rather than one of the numerous clearance heaps which occur nearby.

On another hillock near the centre of the old arable lands, there is an Iron Age souterrain which was discovered some years ago by two amateurs who partially cleared it. Under Dr Corcoran,² the whole passage was excavated and proved to be some 42 ft. long by 2 ft. 6 in. wide by 4 ft. 6 in. high. The structure had been lintelled with stone slabs just below turf-level, but at some stage had been filled in with earth and stone. Excavation around the upper end revealed what may have been the traces of a roughly circular hut and further to the SW. there was a curious curving bank possibly forming part of some larger enclosure.

There are other indications of settlement in relatively ancient times. Within a space of two or three hundred yards outside the ring-dyke there are the sites of three or four hut-circles each some 30 to 40 ft. in diameter and formed by a low bank of earth and boulders (O.S. 6-in. map NC 64 SE). Another group of seven or eight occurs about a quarter of a mile to the south. All had largely been destroyed by recent ploughing and planting operations, though Mr Ian Crawford succeeded in finding a fragment of soft brown pottery in a carbonised deposit near the centre of one immediately SW. of Rosal. Yet another group may still be seen to the N. on the side of the

¹ Excellent air photographs are available in 106 (G)/ Scot/UK 76, Nos. 8188-9 or CPE/Scot/UK 181, 2071-2.

² Dr Corcoran's report appears separately on p. 114.

road from Syre towards Kildonan, about a mile away. To the S. in the direction of Truderscaig and Dalharrold, there are other examples (Sheets NC 63 NE and NC 73 NW).

Such groups of hut-circles are a very characteristic feature of the moorlands of eastern and northern Sutherland, and are almost always accompanied by ancient clearance cairns indicating cultivation at the same period. The cairns were often plotted on the old 6-in. map as 'tumuli' as at Rosal; on the new 6-in. map, the ambiguous term 'Enclosure' has been used for the larger hut-circles and the exceedingly numerous cairns detected in the survey, have perforce been omitted. There was no time to excavate any of these sites during our investigations in 1961, and in any case, the destruction had been relatively complete in the examples close to the ring-dyke. Subsequently, however, the writer has been able to examine a small cluster of similar circles, with their associated cairns and well defined cultivation plots at Kilphedir in the Strath of Kildonan (O.S. 7th series, Sheet 15, Helmsdale, NC 990193). It would appear that each circle consisted of a low, thick stone wall; the conical roof was supported internally by an inner ring of posts. It is possible that the structures go back to a very late phase in the Bronze Age, but an Early Iron Age date is probable.

While some form of occupation at this period can be envisaged for Rosal, it must be emphasised that the circles and associated clearance cairns in Sutherland generally show a much wider and far more diffuse distribution than the buildings of the townships dating to the eighteenth century. No continuity of settlement can be postulated and the origin of the townships in general remains a most obscure problem.

CONTINUITY OF SETTLEMENT FROM THE MEDIEVAL PERIOD

The place-name prolongs this state of uncertainty into a later period. According to a private communication from Miss Bridget Gordon,¹ Rosal is a Norse name with (anglicised) Gaelic spelling and with a Gaelic genitive form (e.g. in Ben Rosail). She thinks that it may be derived from *hrōssa voll* (accusative singular) meaning 'horses' field'. The early spellings quoted in *Origines Parochiales Scotiae*,² 'Rossewall' 1269, 'Rosewall' 1525, 'Rossewall' 1542, 'Rosswall' 1525, 'Rosswall' 1570 and 'Rosewall' 1601, are consistent with this interpretation and show regular development of the Norse sounds to the Gaelic. The Norse *völlr*, pl. *vellir*, does not necessarily mean an enclosed field but rather a piece of cleared land perhaps isolated from the main farm-buildings.

The earliest documentary reference to Rosal goes back to 1269 and occurs in a grant by the Bishop of Moray of various lands in Strath Naver to Sir Reginald de Chen and to his wife Mary, daughter of the deceased Friskyn of Moray through whom these lands were claimed.³ Besides Rosal, the charter also refers to Achenedes (Achness or Achadh an Eas on the O.S. map), Langewal (Langdale) and Clibry (Klibreck),⁴ of which the last two are Norse, according to Miss Gordon. There is no certainty, from a mere mention of 'the lands of Rosal', that a permanently inhabited settlement is involved, but it is inherently probable that all four townships had come into being at this period; thereafter, they continue to be referred to regularly in the documentary record.

Using the dates quoted in *Origines Parochiales Scotiae*, the next two names to be mentioned for Strath Naver are Invernaver and Carynnes (Carnochoy) in 1401; Rhinovie and Farr occur in

¹ Personal communication from Miss Gordon, English Language Department, Glasgow University, who is making a study of the Norse element in Scottish place-names.

² *Origines Parochiales Scotiae* (Bannatyne Club, Edinburgh, 1855), Vol. 2 (2), 715.

³ *Registrum Episcopatus Moraviensis* (Bannatyne Club, Edinburgh 1837), 139, No. 126.

⁴ *Origines Parochiales Scotiae*, Vol. 2 (2), 715.

1499 and then, in the sixteenth century, Skail and Skelpick (1530), Moudale, Grummore and Grumbeg (1551). When Timothy Pont compiled the data for his map somewhere about 1600, twenty-three names were noted in Strath Naver as a whole. In the middle of the eighteenth century, Roy's map included thirty named settlements with the sites of several others indicated. Strangely, Truderscaig, which was a large settlement, was not noted in any of the lists, possibly because of its remote situation in the moor.

For the year 1806, Henderson gives what is intended to be a full list of all the townships of Strath Naver with the area of arable land and the number of families on each.¹ The names are very much corrupted. This data has been mapped on fig. 2. The arable was probably very variable in quality, for sometimes there were three or even fewer acres to the family, but sometimes ten or more; no distinction was made between infield and outfield. In all, Henderson's list comprises 49 settlements, excluding some which were clearly outside Strath Naver, and several which cannot be located. Of the 49, however, it is clear that many were very small; 11 had less than 10 acres (with only 1 or 2 families) and only 26 had more than 30 acres. From this list, it would appear that Rosal was one of the largest townships in Strath Naver, with 13 families and 50 acres of arable; it is surpassed in size of population only by Truderscaig and Langdale with 18 families, and Grummore and Syre with 14.

It is noticeable that the lists of settlements in Strath Naver which can be compiled successively from the early records in *Origines Parochiales*, from Pont, then from Roy's map, and finally from Henderson, grow longer with time. Possibly this merely reflects more attention to detail and in fact all the new names in Henderson's list are very small settlements. Another explanation must be considered however. Several of the new names appearing on both Pont's and Roy's map are apparently old shieling names, e.g. Dionach Caraidh, 'Stronchergarry', Achargory, and from their location others might be added. In this connection, one of the striking facts which emerged in the recently published Survey of Assynt² was the extent to which in this neighbouring area minute patches of what had obviously once been shieling ground had been brought under cultivation. It seems only reasonable to suggest that the number of settlements in Strath Naver had been extended since the Middle Ages mainly by the colonisation of shieling grounds and that this process was greatly accelerated in the later eighteenth century. The situation at Rosal itself on the eve of the Evictions seems understandable only on the assumption that such a process was at work, but this problem must be discussed in another context.

A PLAN OF ROSAL IN 1811

There is preserved in the muniments room at Dunrobin Castle a valuable collection of plans covering various parts of the Sutherland Estates and hitherto unpublished, which seem to have been compiled on the eve of the Evictions. They were in all probability used by advisors of the Duchess Elizabeth, such as James Loch and Patrick Sellar, in planning the change-over to sheep farming in Strath Naver and the Strath of Kildonan. Normally the plans themselves show the extent of the arable and the position of individual houses. There is much of interest in them, especially those which extend to the coast at Farr and Helmsdale where the new 'lots' to receive the evicted tenants were demarcated.

One of the plans is of the greatest interest in these investigations as it covers 'The Heights of Strathnaver' – the area around and to the SE. of Rosal. It is signed 'B.M.' and dated 1811; the scale is 6 $\frac{3}{4}$ in. to 80 Scots chains, or about 6 in. to the present mile. The area surveyed lies E. of

¹ Henderson, Captain John, *General View of the Agriculture of the County of Sutherland* (London, 1815), 25.

² Adam, R. W. (ed.), *John Home's Survey of Assynt in 1776*, The Scottish History Society, Edinburgh, 1961.

the river Naver and includes Rosal and Dalharrold with their common grazing land, together with Truderscaig and some rough grazing which was an outlying part of Rheloisk. The settlement of Rosal itself is shown as an enclosed area comprising 39 Scots acres and 1 rood of arable, together with 25 acres and 2 roods of pasture (Pl. 12a). On or near the edge of the arable ground which is indicated by a faint yellow wash, there are some twenty-two buildings plotted as small rectangles picked out in red; some are L-shaped, some have small yards attached and all vary rather remarkably in size. In addition, the plan gives a 'table of contents' which lists the amount of land in each holding in terms of arable, grass, shielings, moss pasture and hill grazing. (This is quoted in full in the Appendix (Table 3). It will be necessary to return to the details of the plan in a later section.)

Mr R. J. Adam of the Economic History Department, the University of St Andrews, who has been working on the records of the Sutherland Estates, has suggested that the initials 'B.M.' on the plans refer to a Benjamin Meredith. Mr Adam has also been able to provide a copy of what appears to have been a complementary statement in the form of a 'Report on the present state of possessions in Strathnaver, the property of the most noble the Marquis and Marchioness of Stafford: with the probable means of its further improvements. Surveyed by B. Meredith 1810.' The document, which runs to twenty-one foolscap pages, is mainly concerned with possibilities on the farms below Syre, and with the desirability of establishing the population on the coast as fisherfolk. Some attention is paid to the development of large-scale sheep farming, including one area which obviously included Rosal but which had as yet not been surveyed in detail.

Meredith insists that the main source of income for the tenants of those pre-Eviction days was stockrearing, especially of black cattle, though horses, sheep and goats were also kept. He remarks that the more industrious of the menfolk migrated south during the spring and summer months to supplement their resources.

THE CLEARANCE OF ROSAL

Towards the end of 1813, Patrick Sellar, who was then factor to the Duchess of Sutherland, obtained the lease of a new sheep farm comprising all the old townships on the E. side of Strath Naver from the Mallart River to Dunviden Burn, extending eastwards to Loch Rimsdale and including Rosal. Notice was duly served to all the tenants that they would have to leave; small lots were offered on the coast at Bettyhill where the dispossessed were to make new farms and learn to supplement their living from the sea.¹

This was by no means the first of the evictions. Henderson states that about 77 families were moved from the S. side of the upper Strath, along and above Loch Naver, in 1806.² Sellar himself had superintended other evictions in Assynt in 1812 and again along the Strath of Kildonan in 1813 when people were moved to Helmsdale.³ When Sellar commenced the new series of clearances in June 1814, he was involved both as factor and as prospective sheep farmer, and public indignation became focused upon him personally. He was brought to trial in 1816 on charges of brutality but, on the evidence submitted, the jury had no option but to acquit.⁴ The point was that Sellar had been careful to stay within the strict letter of the law and the evicted tenants had no legal right of redress. In spite of the widespread publicity and resentment which arose over these evictions and the other more extensive clearances in Strath Naver in 1820, the evidence available is still very

¹ Fairhurst, H., 'The Surveys for the Sutherland Clearances 1814-1820', *J. of Scottish Studies*, 8 (1964), 1-18.

² Henderson, *op. cit.*, 24.

³ Statement by Patrick Sellar in December 1825, published personally and reprinted in *The Sutherland Evictions of 1814* by Thomas Sellar, 1883.

⁴ Report on the Trial of Patrick Sellar, Esq., for the crimes of Culpable Homicide, Real Injury and Oppression at Inverness, 1816 (Edinburgh, 1816). (This is reprinted in Thomas Sellar: *The Sutherland Evictions of 1814*, 1883.) For a full statement see I. Grimble, *The Trial of Patrick Sellar* (1962).

unsatisfactory in many details. Sage¹ is often quoted as a reliable eye-witness, but his memoirs were written long after the events he described and in any case, he was primarily discussing the later clearances of 1820. A full understanding can come only with a close analysis of the still unpublished Sutherland Estate records, and especially the papers of Patrick Sellar. Our own problem arises from the fact that we found no evidence that the buildings we excavated had been burnt; admittedly only a small sample was examined but a careful study was made with this point in mind as the name of Rosal specifically has been quoted as an example of Sellar's ferocity. Another interpretation is possible if attention is paid to various circumstantial details from the sub-factor's own statements.

In the course of his trial,² Sellar said that the sheriff's officers in June 1814, '... made void and redd Rhiloisk, Rhiphail, Ravigill, Rhimsdale and part of Garvault' and the only burning which took place was in the ejection of a squatter, the tinker William Chisholm, from Badinloskin.³ In another statement by Sellar in 1826 he remarks of his new sheep farm, 'that one being taken by myself, it was in my power to leave one half of it, for four years in possession of the old tenantry, who were of course allowed the whole of these four years to transfer themselves, their families and property, to the new allotments provided for them; so that in point of fact there were removed, in 1814, only 27 tenants, and one tinker or caird . . .'.⁴ Rosal quite clearly was included within this half of the sheep farm in which evictions may have been protracted over the years 1814-8. It is to be noted that in the trial evidence there is no mention of burning at Rosal itself, either by the prosecution or the defence, and the conclusion may be that the tenants moved out with all their possessions in an orderly fashion.

THE RUINED BUILDINGS ON THE SITE OF ROSAL

The complete eviction of the population brought settlement at Rosal to an end somewhere between 1814 and 1818. The coming of the sheep from the South involved the creation of a wilderness to provide the extensive grazing demanded by the new shepherds who were producing wool for the mechanised textile manufacturers of the Industrial Revolution. Since at that time, the arable lands at Rosal have remained as a grassy island in the moor, completely untouched by modern farms, roads or dykes; the ruins of the old houses have simply crumbled away without outside interference.

At the present time, it is possible to distinguish about seventy structures which appear to have been in use at the time of the evictions or not long before. Each structure is normally freestanding and well spaced from its neighbours, but they can all be very loosely grouped into three peripheral clusters in the N., SE. and SW. of the area enclosed by the ring-dyke (see fig. 3). The ruined dry-stone walls nowhere appear more than 1 ft. or 2 ft. high, but in general, the outlines of the buildings can be recognised with a fair degree of accuracy; the individual sites are not badly encumbered with fallen stones and it is obvious that in many cases, stone-work could have formed only the lower part of the original building (Pl. 10a).

Preliminary inspection suggested a broad fourfold classification. (Measurements are internal in each case. For a detailed catalogue see Appendix, Table 2.)

Dwellings. These seem to have been houses of exceptional length, the average being about 80 ft. and the extreme 108 ft. The width was 9 to 12 ft. In some cases, a small room could be distinguished at one end, but there was no partition elsewhere between what was apparently the

¹ Sage, Donald, *Memorabilia Domestica* (edited by his son, 2nd edit., Wick, 1899).

² Sellar, Thomas, *op. cit.*, p. xlii.

³ The site of Badinloskin is shown in Sellar, Thomas, *op. cit.* See p. 163 for a further discussion.

⁴ Statement by Patrick Sellar in 1826, reprinted in Thomas Sellar, *op. cit.*, 49.

living quarters and the byre. A single doorway was normal, about half-way in a long wall. There were about twelve to fifteen long-houses, but there was no clear distinction with the next category.

Outhouses numbered about thirty and were of very varied dimensions and forms. The majority were rectangular structures about 30 by 10 ft., but three had rounded ends and about nine had one rectangular and one rounded end. Several were quite diminutive. A provisional estimate was that most were barns or stables but three or four were over 40 ft. long and one was as much as 58 ft. by 11 ft.; obviously these could have been cottages or even small byre-dwellings.

Yards numbered about twenty and again were of very varied sizes and shapes; they were as much as 70 ft. across. There is little doubt that they were stackyards, but possibly they could also have been used for stock or even for growing vegetables.

Corn-drying kilns were usually built into the side of a hillock and formed one end of a kiln-house measuring about 16 ft. by 7 ft. There were seven of these kilns.

A purely farming community appeared to be involved at Rosal, with no obvious signs of specialised buildings such as a smiddy, inn or a school. In general, the buildings were so widely scattered and so haphazard in their relation to each other that it was difficult to recognise the basic farming units, i.e. to associate in a complex any one long-house with its barn, yards, kiln or other outbuildings. In the NW., a long-house seemed to be accompanied in several cases by at least one separate yard, with one or more outhouses, and with a kiln at no great distance. In the southern part of the township, however, the yard seemed sometimes to act as a centre for several buildings, as with a modern farm yard; in addition, isolated long-houses appeared. An attempt will be made later (p. 153) to group the buildings so that each is in a complex, taking into account proximity, orientation and surface features, but it must be emphasised that such an arrangement can only be tentative. The groups have been numbered in a clockwise direction on the plan (fig. 7) commencing in the NW.

There are also to be taken into account at Rosal a large number of depressions which appear to be the sites of small storage pits; usually these are in or near a complex, and often inside one or other of the buildings.

COMPLEX A IN THE NORTHERN CLUSTER

In such an extensive settlement as Rosal with so much variation in the buildings pattern, excavation had to be highly selective and a detailed investigation of one complex seemed indicated. Complex A (fig. 4) the most southerly group in the northern cluster of buildings was chosen, largely because of accessibility. It belonged to the 'open' type of complex, which was more common than that grouped vaguely around a 'yard', and it was already in part differentiated from its neighbours by its very position on the edge of the cluster. A significant point was that it seemed to contain representative examples of most types of structure within the township as a whole.

The complex was on smooth hummocky ground just above the steep rough slope down to the river Naver; the periphery wall of the township lay some 100-150 yds. downhill to the W. To the S. and E. came extensive stretches of arable land before the next buildings occurred, but the nearest neighbour to the N. (Cluster B) began some 150 yds. away.

Basically, the complex consisted of the following:

- 1 A rectangular long-house, presumably combining living quarters and byre.
- 2 An adjacent barn-like structure with one rounded end in which was a pit.
- 3 A nearby outhouse with two rounded ends.
- 4 A stretch of dyke to which (3) was adjacent.
- 5 A stack yard.

ROSAL Northern Cluster Complex A

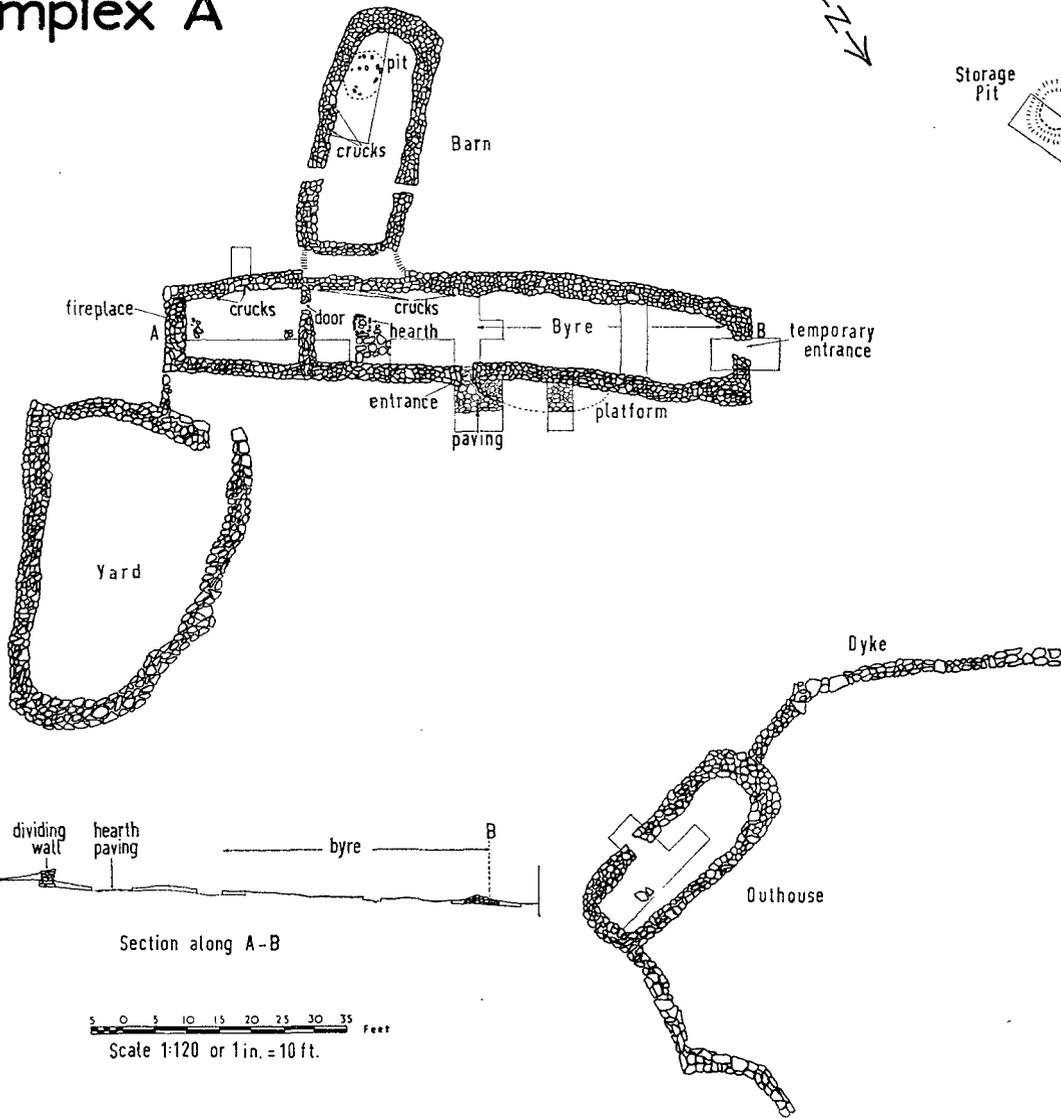


FIG. 4

6 A pit on top of a nearby knoll.

In addition, and possibly to be included, were:

7 A corn-drying kiln.

8 A circular area, possibly a pen.

9 A barn-like structure with a small yard attached in which another pit occurred (this could equally have belonged to the adjacent Complex B).

The Long-house in Complex A

The long-house (fig. 4) had been constructed on a gentle slope down towards the N. so that the higher end was some 4 ft. above the lower. The site was very much exposed to the strong prevailing winds, but was well drained naturally.

Before excavation, the outline was indicated by sub-angular stones and boulders which had obviously been gathered locally. The inner and outer faces of a dry-stone wall 2 ft. 6 in. to 3 ft. 6 in. wide could be seen in places but they rarely reached 2ft. in height and the spread was very slight in view of the fact that no stone robbing had taken place.

Internally, the structure measured 85 ft. in length but the width varied between 9 ft. and 12 ft. as though the walls had been carelessly aligned. The only cross wall was at 17 ft. 6 in. from the upper end; it rose distinctly higher than the main walls, though it was of very poor construction. The entrance door was about half-way along the eastern long wall, but in addition, there was a second rough entrance or a temporary break-through in the lower end-wall.

In all these features, the structure was a typical example of most of the other long-houses at Rosal. Sometimes the cross wall was missing, sometimes in the South-West Cluster, the whole building ran over the top of a hillock instead of down slope (Pl. 10a); sometimes, too, the break-through in the end wall was not present. As the plan indicates (fig. 4 and Pl. 13a) excavation of the long-house was only partial, but it appeared sufficient to indicate the general lay-out.

The stonework of the external walls could never have risen more than about 2 ft. 3 in.; the fallen stones both inside and outside the building were no more than sufficient to level off the walling at the height of the highest boulders still *in situ*. Between the walls, there was everywhere a layer of peat immediately below the sod and resting directly upon the old occupation horizon. This peat was as much as 8 to 10 in. thick and presumably came from the decay of the turf which would originally have carried the walls up to the required height; what this might have been, there was no obvious method of calculating. Documentary evidence fully confirms that the houses in Strath Naver were normally built of turf or 'feal' upon a base of stones; Captain Henderson¹ for instance, remarked that '... the houses of the smaller tenantry, which they and their cattle inhabit together, are very mean and wretched. The walls are of mud (provincially feal) and the roof made water-tight with divots or thin sods, supported by couples and side timbers of birch or fir, made in the form of a semi-circle, having a few holes on the top of the roof to let out the smoke from a fire upon the hearth in the middle of the building, surrounded by the tenant, his wife and children. As the smoke diffuses through the whole of the building, the cattle who are tied by bindings made of birch wythes to stakes in the walls at one end of the house, reap the benefit of the warmth. In some cases the walls are built with a tier of stone betwixt each tier of feal, and in some the first three feet high of the walls and gables are built with stone, and the remainder of feal and sods.'

On the inside of the long west wall of the long-house, excavation showed that slots occurred in the masonry which must have represented the recesses for the crucks, or couples supporting the roof (Pl. 13b). The distances apart were very small, ranging from not much more than 5 ft. to about 7 ft. The first seemed to occur at only 4 ft. from the S. end-wall. Generally, these recesses

¹ Henderson, *op. cit.*, 45.

were 6 in. to 12 in. across, and at the foot, there was a bowl-like depression in the ground, into which the lower ends of the couples fitted, and which was as much as 8 in. deep. In one case, there was a double depression as though the timber had been forked at the lower end.¹ In two other cases, a recess at the expected interval did not appear, but there was a flat stone on top of the walling to provide the seating for the lower end of a cruck which had been markedly shorter than usual. From the variable size of the slots or recesses it looks as though suitable beams were not readily available. Of the couples themselves there was no trace and quite clearly they had been abstracted when the house was deserted.

In the evidence at the trial of Patrick Sellar, it is stated that the couples were normally cut from the woods of the proprietor and were therefore his property, and were left behind when the individual tenant moved: the cross timbers were often of bog wood and belonged to the tenant.

It is strange that in the detailed descriptions of house types in Strath Naver as given by Sage, Lock and Henderson, there are no references to the form of the ends of the buildings. This particular long-house at Rosal was rectangular in plan, the ruins of the short end-wall nowhere rising above the general level of the long walls, rather suggesting that it was hip-ended. Several other alternatives are possible, however. Turf may have formed the upper part of a gable end and left no trace behind. In Home's *Survey of Assynt* decorative illustrations on various individual plans show several types of dwellings including hip-ends, gable ends with a small window, and one variety which somewhat resembles the bow of an upturned boat. The latter may well have been built of turf on a stone foundation and indicate the form of the long-house in Complex A. It seems probable, however, that there was some variety at Rosal, judging from the surviving outlines.

The stonework forming the base of the walls of the long-house was not set in any foundation trench but was placed directly on the old ground surface. Normally, too, the stonework commenced as much as 8 in. above the general level of the rough earthen floor in the living quarters inside the house; this difference can probably be explained by wear and tear in treading and by constant sweeping of the interior.

At the living-, or house-end of the building, the lower stonework seems to have been pointed on the inside with grey clay to make it windproof. There was not enough clay to suggest that the superstructure of turf was also plastered over in this way, but patches in the middle of the rooms did indicate that leaks in the roof were perhaps mended with the same material.

There were no signs of windows or of chimneys in the walling, and the stonework had not been carried up any higher on either side of the entrance to the long-house which was almost exactly central in the E. long wall. The doorway was 2 ft. wide and traces of a wooden jamb were noted on one side. Outside, there was a pavement of large slabs, extending 4 ft. outwards and ending on a straight edge. This pavement was neither smooth nor regular but was an obvious necessity when man and beast were utilising the one entrance into the building.

Against the outside of the long wall on the byre side of the doorway, adjacent to the paved apron, there was a rather neatly cobbled platform in the shape of a rough crescent (Pl. 12b). It was outlined by a row of stones on end, rising about 10 in. above present turf level and about 15 in. above the top of the subsoil; the maximum breadth to the platform was 4 ft. 6 in. and the total length was 17 ft. 6 in. The platform was probably intended for the storage of peats for immediate use; no parallel, however, was noted elsewhere at Rosal.

A second opening into the long-house occurred in the short wall at the lower end. This entrance was about 3 ft. wide but was ill-defined and there was no outside apron of slabs. Instead,

¹ There is an example of such a forked couple in position in an outhouse belonging to Mr Ian Grimble at Newlands, Bettyhill.

a pile of stones on either side suggested that a temporary break-through was involved, possibly to remove the accumulation of dung from the byre after the milch cattle had been kept indoors throughout the winter. Similar gaps were noted elsewhere at Rosal but did not occur invariably.

There were indications that this long-house had at some time been enlarged, certainly at the upper end and possibly at the lower end as well. From the plan (fig. 4) it can be seen that there is a marked change of alignment some 27 ft. from the lower byre end, and the building becomes narrower. At the opposite end there was a change of alignment at 8 ft. 6 in. and also the stonework consisted of small boulders. It seems quite possible that the original building had been about 50 ft. in length and some 12 ft. wide. Several other structures of about 40 to 50 ft. in length were noted elsewhere on Rosal and were difficult to classify as they lacked both the characteristic internal cross wall and the size of the normal long-house.

The cross wall separating off the small room at the upper end of the building was not bonded into the long walls on either side and was flimsily constructed with angular stones and what appeared to be blocks of mud or earth; it had been liberally plastered with clay on both sides. The doorway leading from the main part of the long-house was ill-defined, but there had been a wooden threshold. It is relevant to recall two statements in Donald Sage's memoirs; speaking of the manse at Kildonan he says, 'the partitions within were of "cat and clay" plastered over with lime and finished with a coat of "white wash" . . .'. He also speaks of ' . . . kitchen and byre, divided from each other by "cat and clay" partitions which very soon gave way . . .'.¹

Before proceeding to a description of the lay-out of the interior of this long-house in Complex A at Rosal, another quotation from Sage is illuminating. Writing of the manse at Lochcarron as it was about 1782 when his grandfather moved in, he remarks, 'The manse was constructed after the fashion of all Highland houses about the end of the seventeenth century. About 100 feet long, the walls were built of stone for about three feet in height above the foundations, and around the roots of the couples, which were previously fixed in the ground; over this were several layers of turf or fail so as to bring the wall to the height of 10 feet. The whole was then divided into several apartments: the first was called the chamber, where there was a chimney at one end, a small glazed window looking to the south, and a tent bed inserted into the partition which divided it from the next room. In this apartment the heads of the family sat and took their meals. The bed in it was usually appropriated for guests; the next apartment contained tent beds for the junior branches, with an entry door by which access to the principal apartment was provided for the heads of the family as well as their guests. This second apartment opened into a third where the heads of the family slept. Next came what is called the "cearn" (or servant's hall). This compartment of the Highland house, or "tigh slathait," was larger than the others. It had cross lights, namely a small boarded window on each side. The fireplace was usually on an old mill-stone placed in the centre of the apartment, on which the peat fire was kindled, while no other substitute for a chimney other than a hole in the roof, fenced with a basket of wicker work open at both ends. Around the fire sat the servants, and in the farmers' houses the heads of the family along with their children. Divided from the "cearn", and often by a very slender partition, and as the last division of the tenement, was the cowhouse (or byre) occupying at least 50 feet of the entire length.'²

The description is not entirely specific and clearly refers to something better than a 'farmer's house', but it is fairly obvious that in the long-house at Rosal there was a byre occupying about half the length, next to it the equivalent of the 'cearn' and at the upper end a small parlour bedroom provided with a separate fire-place, corresponding to Sage's 'chamber'. The small room seems to have been a relatively late addition to a simpler type of dwelling made up of 'cearn' and byre.

¹ Sage, op. cit., 56.

² Sage, op. cit., 10-11.

This separate room at the upper end measured 18 ft. internally in length and the width varied between 12 ft. at the partition end and 9 ft. at the end of the house. In the middle of the end wall and set back a foot out from it, there was a setting of flat stones measuring 3 ft. parallel to the wall and 1 ft. 6 in. across. Around, there was peat ash and charcoal, especially in the SE. corner, but the walling at the back showed no sign of scorching. It is possible that the flat stones supported an iron fire-basket with, perhaps, a canopy chimney (Pl. 13c). Another small setting of flat stones 1 ft. across, was noted against the partition wall on the opposite side of the room. Otherwise, the earth floor was featureless. It is noteworthy, however, that the surface was extremely rough and uneven and did not seem to have been much consolidated by trampling; in fact, apart from ash, it was extremely difficult to distinguish the floor from the top of the clay subsoil.

Beyond the partition wall and at a distinctly lower level came the main living room apparently corresponding to Sàge's 'cearn'. The earthen floor was trampled smooth but formed a very uneven surface and patches of the grey clay, up to 2 in. thick, occurred commonly. The outstanding feature was the central hearth (Pl. 13b) which was trapezoid in shape with sides measuring 24 in., 33 in., 33 in. and 34 in. It lay 6 ft. 3 in. from the partition wall. There was a kerb of stones some 5 in. high and the centre was cobbled; on this cobbling lay a thin round stone about 10 in. across which had been used for baking. To the east and almost as far as the inner face of the long wall, the floor was carefully flagged with large flat slabs (see plan, fig. 4).

It was not easy to decide exactly where the living-end gave place to the byre which occupied the lower half of the long-house; if there was a partition between the two, it was of the flimsiest nature and we could find no trace of it on the ground. On proceeding from the main hearth towards the doorway in the middle of the eastern long wall, it was noticeable that the couples became progressively more widely spaced (see plan), that the evidence of the internal pointing with clay disappeared, and that the amount of broken pottery decreased. It seems reasonable to assume that in fact, the byre commenced just above the doorway. This would give a main living space around the hearth about 18 ft. long, and 11 ft. 9 in. wide at the upper end, narrowing to 11 ft. near the door. The byre was about 47 ft. long and it again narrowed from 11 ft. down to 9 ft. at the end wall. Where the excavations exposed the floor of the byre, it was of trodden earth, somewhat hollowed out in the middle but without any signs of the central stone-built drain which we had come to regard as normal in our investigations at Lix.

Other Structures in Complex A

Adjacent to the W. wall of the long-house, near its higher end, there was a separate building which jutted out at right angles and reached to the very edge of a steep downward slope. Generally, the walling appeared to be of the same type as in the long-house and we thought we detected two recesses in the E. wall where the couples had risen (fig. 4). The E. end of the building, contiguous with the long-house, was more or less rectangular but the W. end was markedly rounded; other buildings similar in plan occurred elsewhere in Rosal. The internal dimensions were 34 ft. by 11 ft. 6 in. About 10 ft. inward from the rectangular end, there were doorways on either side, directly opposite to each other and 2 ft. to 2 ft. 3 in. wide. These suggested that the structure was in fact used as a barn with the winnowing floor between the two doors which would give a through draught on a windy day. Within the rounded end, there was a circular depression about 18 in. deep at the surface. Excavation showed that it was a shallow pit about 7 ft. across and 2 ft. 3 in. deep; it was simply dug into the earth without any attempt at lining (Pl. 14a).

There was another pit on the top of a knoll some 20 yds. NW. of the byre-end of the long-house (fig. 5). This was sectioned and proved to be about 8 ft. across measuring from the top of the

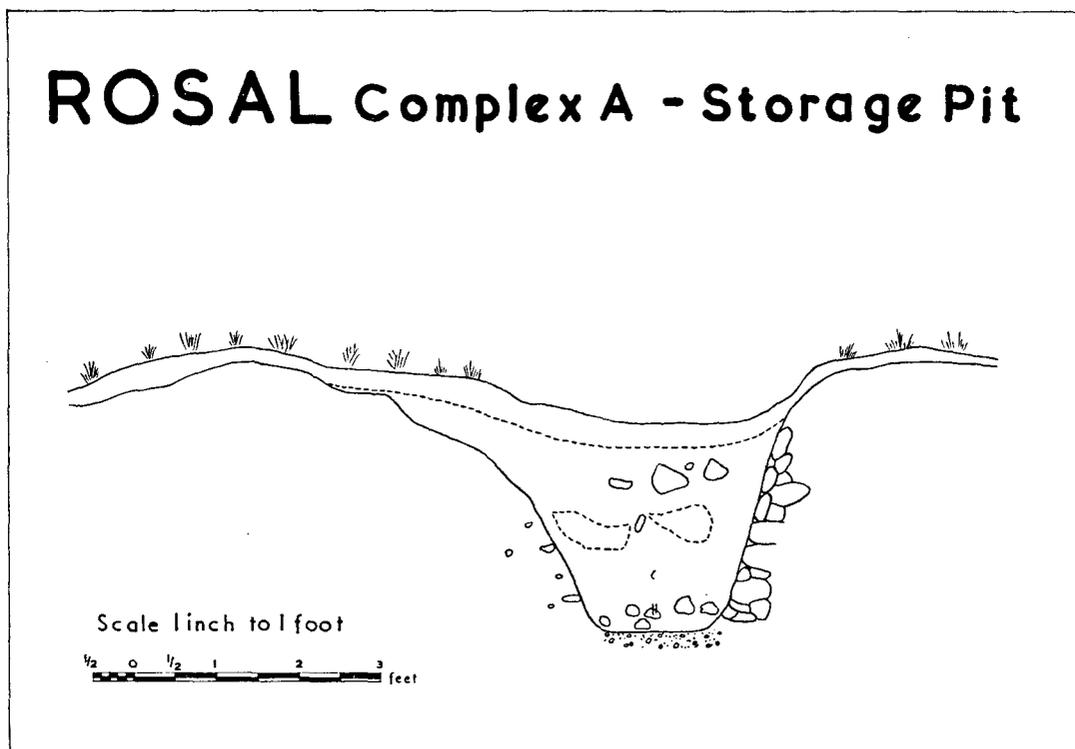


FIG. 5

rim around, and was 3 ft. deep. From near the bottom of the filling came a fragment of china very similar to that which was found frequently in the floor of the long-house.

The third building in the complex (fig. 4) lay some 20 yds. E. of the byre-end of the long-house; it was of a rather unusual form at Rosal but was not unique. The dry-stone walling was similar to that elsewhere in the complex but in this case, the stones were smaller and rougher. The building was rounded at both ends while the two side-walls were distinctly bowed outwards. The length from NW. to SE. was 29 ft.: the doorway was one-third of the distance along the central line from the SE. and went rather obliquely through the wall; it was 2 ft. 4 in. across. The width was 7 ft. 2 in. in the SE., widening to 9 ft. in the centre and narrowing again to 8 ft. 2 in. at the NW. before the rounded end (Pl. 14b).

Excavation revealed very little of interest inside the building. There was some reddening in the NW. centre as though there had been a fire at some time, or possibly a hearth, but there was little sign of ash. Running obliquely across were foundation stones which seemed to continue the line of the dyke coming from Complex B and then turning sharply N. towards the main ring-dyke (fig. 4). The building, in other words, seemed to have been inserted into the line of the dyke for some obscure reason. There was no sign of the clay pointing on the walls, almost nothing in the way of artifacts was recovered, and in the extreme N., the ground-level dipped downwards so markedly that it is difficult to see why the builders chose this particular site, even for an outhouse.

The building remains an intriguing problem. There can be little doubt that latterly it must have functioned as an outhouse, possibly a stable or barn. Nevertheless, the two rounded ends, the bowed out side walls and the oval form generally are suggestive of a building technique some-

what different from that of the long-house. One cannot help but wonder whether this was not in fact a survival from an earlier period.

The stackyard to the E. of the upper end of the long-house was just one example of a very variable type at Rosal. It was triangular in form though with distinctly rounded corners, the internal measurements being 44 ft. by 26 ft. It was massively constructed with large foundation boulders giving a wall as much as 4 ft. thick and 3 ft. 6 in. high; the doorway was 4 ft. 6 in. wide. A short dyke joined the yard and the S. end of the long-house.

STRUCTURES ADJACENT TO COMPLEX A

The structures which have been described seem to comprise Complex A in its essential form. In addition there were three other buildings some 20 or 30 yds. uphill which could also belong to the group.

To the SW. of the long-house were the much dilapidated ruins of a corn-drying kiln built into the side of a hillock. The dimensions of the building comprising the kilnhouse were 18 ft. 6 in. by 8 ft. 3 in. internally. The structure must have resembled very closely another corn-drying kiln which was chosen for excavation as it was much better preserved, and which will be described in detail below. The kiln almost certainly belonged to Complex A, since the adjacent Complex B was apparently provided with its own kiln in a small enclosure near the peripheral wall to the NW.

Near the kiln and a little to the N., on a gentle slope down towards the long-house of Complex B, there was a nearly circular platform about 41 ft. in diameter. The boundary wall, on the downhill side, where we cut a trench for examination, was strongly built with large foundation blocks; it was 4 ft. thick and 2 ft. 6 in. high. Soil had obviously shifted downhill and had accumulated to a depth of 14 in. on the inside of the enclosure. The boundary wall, however, was incomplete over about a third of the circumference on the higher side. Here, purposeful levelling had caused the slope to be scooped out somewhat, and a short trench revealed no sign of walling. Neither in the two short trenches mentioned, nor from a cutting in the centre was there any evidence of domestic occupation (Pl. 15a).

The platform may have been no more than a simple fold, possibly for sheep, but it is difficult to see why the upper third was not completely walled. Probably, it dates back to the Iron Age and represents one of the hut-circles mentioned earlier as occurring in the vicinity of Rosal.

Another problematical structure lies about 20 yds. NW. of this last enclosure and somewhat nearer the long-house in Complex B than that in A. It consists of a building measuring internally 33 ft. by 10 ft. with one round and one rectangular end, similar to the barn which was investigated in Complex A. There are slight suggestions of a cross wall, with the doorway opening into the northern compartment. Adjacent on the W., there is a small yard 22 ft. 6 in. by 20 ft., with a pit in one corner. The structure may be a barn, but could conceivably be a small cottage. It is one of a number of buildings on Rosal which cannot readily be fitted into a simple classification.

These curious pits occur rather commonly over the site of Rosal as a whole in much the same situation as the three which have been mentioned in connection with Complex A. They seem to have been used for storage, possibly for grain in some form of container, and just possibly as potato pits.

ADDITIONAL EXCAVATIONS

A Hump-backed Long-house

In the South-West Cluster, several long-houses were built in a very remarkable situation each over the top of a small hillock (Pl. 10a); it seemed advisable to discover whether the living

quarters continued to be at one end or occupied the summit area as seemed likely. An example was selected (Complex L/59), but unfortunately only a very cursory examination proved possible in the time available. It was quite clear, however, that the lay-out was of the normal pattern with the central hearth more or less at the summit and the living quarters and byre downhill on opposite sides.

A Pen for Stock

In the SE. part of the settlement within the periphery wall, there was a small cairn standing on top of a low hill; it might be a Bronze Age burial but was possibly no more than a clearance heap of stones from the neighbouring arable ground. Just below and at the foot of a heathery slope towards the NW., adjacent to some very distinct cultivation rigs, there was an oval en-

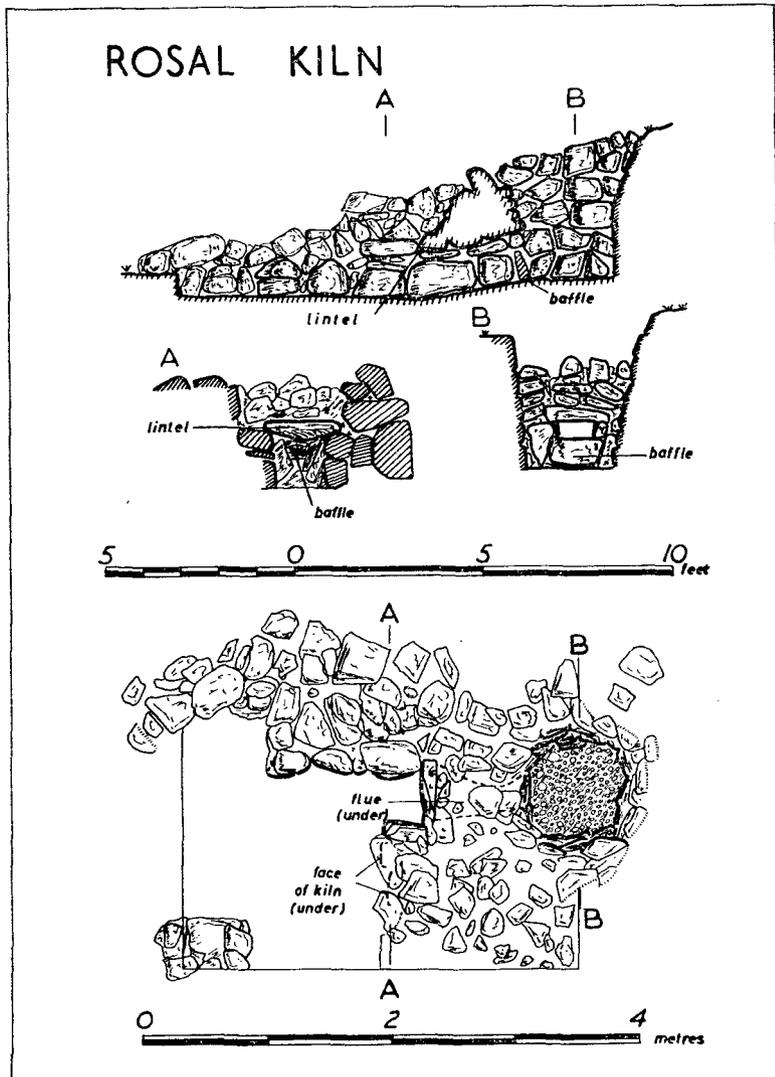


FIG. 6

closure 26 ft. by 14 ft. It excited some comment as a possible domestic site earlier than the long houses of the Clearance period. Excavation showed that it was no more than a pen for stock.

A Corn-drying Kiln

Of the seven corn-drying kilns found at Rosal, some were very dilapidated and may have been obsolete long before the Clearance. All were very similar in form and size; two were very well preserved and it was decided to excavate one (fig. 6 and Pls. 15b and 15c).

The selected example was contiguous with the ring-dyke in the extreme SW. of the settlement and lay on the N. side of a large yard measuring 54 ft. by 33 ft. On the S. side of the yard, against the peripheral wall, there was another small rectangular building measuring 19 ft. 6 in. by 8 ft. 6 in. As with all the others at Rosal, the kiln was built in a kiln house indicated by the stone base of an oval structure measuring 17 ft. by 7 ft.

The kiln itself (fig. 6) was set into sloping ground, and was roughly circular in form; it was carefully built of flattish stones, and was about 4 ft. deep. Internally, it measured about 4 ft. across the top, but narrowed markedly downwards to only about 2 ft. 7 in. at the earthen floor. There was no sign of a ledge to support a framework upon which the corn could be laid. Coming into the base of the kiln along the central axis of the kiln house was a flue, 2 ft. 9 in. long, 1 ft. 3 in. to 1 ft. 7 in. across and 1 ft. 3 in. high, sloping gently upwards towards the kiln. At the kiln end there was an upright slab 1 ft. 5 in. across and 9 ft. high, which partially blocked the flue, narrowing it to 6 in. at the top; this was a baffle to prevent the flames entering the kiln. At the other end of the flue, the fire seems to have burned in a space where the side walls were carried out beyond the limit of the flue roof, the western by 4 ft. 3 in. and the eastern by 1 ft. 2 in.; perhaps this had been necessary to make the fire 'draw'.

EXCAVATIONS AT ROSAL: THE SMALL FINDS

From the long-house in Complex A came a variety of small finds all of which seem to have been discarded in the last few years of the occupation. A list appears in the Appendix, Table 1. Perhaps the interior of the house had been repeatedly swept, as was suggested by the fact that the floor was a distinct hollow in relation to the surrounding walls, but it seems highly probable that the dwelling was of no great age when it was dismantled. All the finds came either from the neighbourhood of the central fireplace, or from the small room at the upper end of the building. The byre below the living-end produced almost nothing at all, and the excavation of both the barn alongside the long-house, and the building with round ends nearby, yielded not one single find.

No coins were recovered and there was no sign of window glass in the excavation of the long-house. Except for part of a door latch, scarcely a single object was found which was other than a discarded fragment. There is every indication of a complete stripping of the dwelling before it was abandoned, including, as already noted, the removal of the couples for the roof. A quantity of plain and decorated potsherds was collected; the fragments are listed below to give an idea of the variety but it has not been possible to reconstruct any of the vessels involved.

The sherds were examined by a colleague from Glasgow University, Dr Denis Stott, who has collected eighteenth-century English pottery and has excavated on kiln sites near Bristol. He had no difficulty in recognising the great bulk as dating to the very end of the eighteenth century and to the first decade or so of the nineteenth. Only one sherd, from a rather fine, blue patterned cup or small bowl, could be placed as early as about 1775; it was discovered deep inside the dry-stone masonry around one of the slots for the couples in the side wall of the long-house. In general,

this dating would indicate an occupation up to the time of the Clearances and that the house had not stood for much more than about three decades.

Dr Stott thought that the pottery had not originated in any of the better known factories in England. It seemed rather to suggest somewhat crude imitations in both form and decoration as though craftsmen without any great skill had copied the products current in the south. A source might well have been in the kilns of the Glasgow or the Forth area which were producing in quantity in that period. Nevertheless, it is interesting to note that the mass-produced wares of the Lowlands were being imported into these inland sites as far away as Strath Naver. Presumably the imports were paid for either by the export of black cattle or by the earnings of the migratory labourers moving to the south during the spring and summer months, as was suggested in the report of Benjamin Meredith quoted earlier.

THE BUILDINGS PATTERN – GENERAL

In the light of the excavations, and bearing in mind such obvious pointers as orientation and proximity, an attempt must now be made to classify the buildings visible at Rosal into functionally related groups and to trace the number of farming units involved in the township (dimensions are given in the Appendix, Table 2). The problem, however, is far from simple for two reasons. In the first place, the various structures themselves do not conform to a rigid pattern, and secondly, it is but reasonable to suppose that some of the buildings which had already become derelict had not been completely dismantled before the evictions actually occurred.

Comparison with Meredith's plan of 1811 is of relatively little help in this respect (Pl. 12a). Some twenty-two buildings are depicted within the peripheral wall, including three L-shaped structures which could represent a house and adjacent barn as in Complex A. The number of buildings is considerably less than half the number recognisable on the ground, mainly it would appear, because most of the small outbuildings and kilns had been omitted. Even so, certain discrepancies are noteworthy. An isolated long-house standing on a ridge within a loop of the ring dyke in the extreme north-east (fig. 3) is absent from the plan but could hardly have been overlooked by Meredith. On the other hand, an L-shaped structure occurs well to the south of Complex A where there are no foundations today. It is to be noted, too, that the spacing and orientation of the buildings on the plan is often inaccurate and a precise identification is not always possible. On the whole, a rather careless approach to the survey of the buildings is indicated, perhaps because they were all relatively impermanent, perhaps because the surveyor knew that evictions were imminent. Changes, too, could have occurred in the short interval between the survey and the evictions. It must be remarked, however, that a study of the buildings pattern from the plan alone would have been decidedly misleading.

THE THREE CLUSTERS

From the point of view of slope, soil and exposure conditions, there is no obvious reason why the houses at Rosal should be grouped into distinct clusters; no such division is traceable at the nearby settlement of Truderscaig, which is of comparable size. Within the clusters, the buildings are so widely spaced that a quite unnecessarily large area of ground seems involved in each farming unit (figs. 3 and 7).

The Northern Cluster

The first cluster, on the N. and NW. side of the township, is for the most part set a little inward from the periphery wall, along the edge of the old arable land where the slope begins to

steepen towards the River Naver and a tributary burn to the N. The ground is more hummocky than the arable in the central part of the township; there was less incentive to plough and at the same time, better natural drainage conditions could be expected than on the smoother land. Overall, the cluster measures nearly 300 by 200 yds. A sub-division within the buildings pattern occurs along the line of a shallow depression; it is also traceable on the plan of 1810, but the break appears to be wrongly shown as a narrow strip of arable.

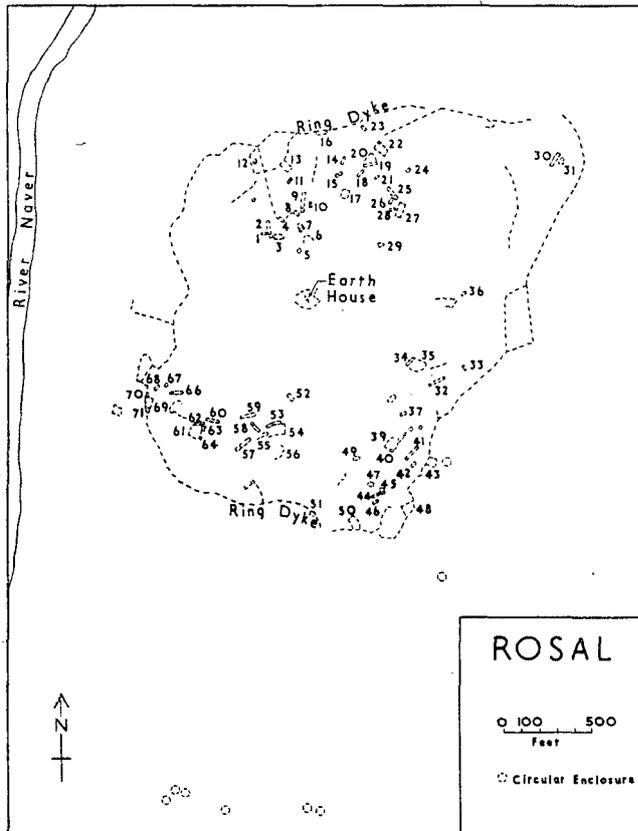


FIG. 7. Reference Plan to the buildings at Rosal

Within the SW. sub-division of the Cluster, two long-houses (A 2 and B 9) can be distinguished, together with two kilns and five barn-like structures. A rather purposeless dyke runs up from the periphery wall, partially separating the two units. Almost certainly, the ruins include some outhouses which had become derelict before the evictions. The NE. sub-division seems to contain at least two long-houses (D 19 and E 25), but there are two other possibilities (C 14 and D 18) and the six or seven outhouses might all have been in use when the site was abandoned.

For the North Cluster as a whole this gives a total of four to six long-houses and about a dozen outhouses; four kilns appear but at least two seem badly ruined and were perhaps derelict.

Away in the extreme NE. corner of the settlement, there is an isolated long-house within a triangular area outside what seems to have been a subsidiary or an older peripheral wall. The ground, which was heather covered, had been ploughed and planted before our investigations took place and the only recognisable structure beside the long-house was a circular enclosure which could have been of Iron Age date.

The South-Easterly Cluster

This cluster extends over a stretch of ground at least 400 yds. long but only about 100 yds. wide; it is near the peripheral wall, where the land is sloping down towards the east from a series of hillocks. A tongue of arable land extends into the cluster, as the 1811 plan would also indicate.

Three long-houses of the type of Complex A are visible (G 32, H 41 and L 44). In addition, there are two other features to be noted, each associated with a yard. One consists of a yard with a possible long-house on one side (G 35 and G 34) and the other is formed by a yard (39) with an outhouse (40) which might once have been a larger building. Somewhat similar structures occur in the South-West Cluster and have provisionally been called yard complexes. There are four other outhouses. The plan of 1811 shows at least one of the yard complexes, and apparently two of the long-houses, but the most northerly building indicated cannot be identified on the ground. Study of the air photograph, however, shows faint indications of a possible long-house precisely where the plan would suggest. It may be that both yard complexes had ceased to function as homesteads (if that were their nature) at the time of the evictions, and that the three long-houses were the critical units, together with about six outhouses and two kilns, one of which was very ruinous.

The South-West Cluster

This occupies an area about 300 yds. by 100 yds. in rather hummocky ground, not all of which would have been too rough for cultivation; in fact one would have expected the houses to have been placed clear of the arable ground nearer the peripheral wall. The long-houses are less widely dispersed than elsewhere, and some of them extend over the tops of low hummocks, instead of down slope. At least two 'yard complexes' can be distinguished.

There are five long-houses in all (J 53, K 57, L 59, M 60 and P 66). Of these, one (J 53) lies along the side of a yard (J 54) on which abuts an outhouse (J 55). Another yard (N 61) had three outhouses around it (N 61-4; Pl. 11b). From the air photographs, one suspects the ruins of yet another complex around the yard (O 65). In all, there are some eight outhouses and two kilns, one of which is very ruinous.

THE POPULATION OF ROSAL

<i>Cluster</i>	<i>Long-houses</i>	<i>Outhouses</i>	<i>Kilns</i>	
N	6-8	12	3	(1 ruinous)
(NE)	1	—	—	
SE	3-4	6	2	(1 ruinous)
SW	5	8	2	(1 ruinous)
Total	15-18	26	7	(3 ruinous)

This tabulation would give an average of one long-house, one or two outhouses, and a half share in a kiln to each Complex. The yards are too indeterminate to apportion, but it seems reasonable to assign at least one to each Complex.

It will be recalled that Captain Henderson had given the population of Rosal in 1815 as 13 families.¹ This was only an estimate but suggests the approximate total of dwellings to be expected at Rosal. The observed number, 15-18, includes at least three which may have been either obsolete or were perhaps just large outhouses, so that no serious discrepancy occurs. One difficulty arises, however.

In estimating the total population, Henderson may not have included or allowed sufficiently

¹ Henderson, *op. cit.*, 25.

for squatters, either refugees from other evicted settlements or of the type of the notorious William Chisholm who figured so largely in the trial of Patrick Sellar and who was illegally occupying a small stretch of arable in the moor to the east of Rosal. James Loch in his *apologia* for the Evictions¹ states that just beforehand, during famine relief measures on the Sutherland Estate, there were no fewer than 2,000 of these squatters, mainly in the remote areas. The possibility exists that one or more of the barns or outhouses were being occupied as dwellings. All that can be said is that in the two which were excavated in Complex A, there was no sign of domestic occupation, and that no references to squatters at Rosal have been noted in the documentary materials so far consulted.

The three clusters of buildings at Rosal, with their noticeable peculiarities might conceivably have originated as separate islands of cultivation though no suggestion of subsequent amalgamation has been found in the documentary record. Individuality might have been preserved if, for example, three different plough teams had been in use amongst the tenants. Presumably the land was still in run-rig at the time of the evictions, but all these problems must remain unsolved until the Sutherland Estate records have been analysed in detail.

It will be shown below that further expansion of the arable area at Rosal was taking place at the time of the Clearances, presumably as a result of land hunger. Almost certainly, the buildings pattern within the ring-dyke must be regarded as in process of adjustment to new conditions – growing population with greater security within the Highlands and the introduction of the potato crop, increasing contacts with the outside world through droving and seasonal migration of labour. The amount of mass produced pottery from the south is a reflection of these changes in archaeological terms. Perhaps too, the mixture of square- and rounded-end buildings, of ‘open-’ and ‘yard-’ complexes may be another indication of breaks with the old order.

THE TOWNSHIP LANDS WITHIN THE RING-DYKE

The ring-dyke (fig. 3) now appears as no more than a row of tumbled rounded boulders which can never have been more than about 2 ft. high; as with the house walls, however, this probably represents the stone base for a higher turf wall. The dyke may be traced round most of the periphery, but in one short section in the E. there appears to be no other limit than a very shallow burn.

In places along the periphery, two dykes appear, probably where slight extensions have been made. There is one which has been already mentioned in the extreme NE. where the isolated long-house is located within a triangular area largely consisting of unimproved moor. Other small peripheral enclosures, not necessarily recent, occur in the SE., but it is in the W. on the river side of the township that most complexity occurs. The ground within these intakes, if that is what they are, is largely rough and heather grown and there is little sign of improvement; it is difficult to see why the extensions were made. Another puzzle on the W. side of the township occurs in the form of a very straight dyke running downhill from the boundary wall to the bank of the Naver; it is marked on the plan of 1811.

These enclosures on the edge of the main arable lands may represent one very late development when pressure of population was developing within Rosal, perhaps just before the Clearance.

Within the main boundary wall, three types of ground can be distinguished though it is rarely possible to delimit them on the ground precisely. They consist of (a) unimproved land, (b) the cultivation rigs and (c) improved land without rigs.

¹ Loch, James, *An Account of the Improvements on the Estates of the Marquess of Stafford* (London, 1820), 82.

The Unimproved Land

The peripheral wall included rough, rocky ground especially on the SW., W. and N. sides, which could never have offered much hope of improvement. In two areas in the centre of the settlement there were small peat mosses which had been used for fuel. It is clear that the boundary dyke had been planned to include at least some rough ground from the beginning.

The Cultivation Rigs

Extensive areas within the ring-dyke are deeply ridged (Pls. 11a and 13a) and it is possible to trace with precision the extent of the individual rigs on National Survey air photographs (fig. 3).¹ The arable land is much more restricted than the plan of 1811 would indicate; the ridged land is in fact broken up into a number of large and small patches. Unfortunately, there seems no way of deciding whether all these individual stretches were farmed together as a township unit or whether they had been divided up between the various clusters. Clearance cairns of stones collected from the arable occurred sometimes between the rigs and sometimes along the edges. Many were merely rounded heaps a few feet across but some took the form of elongated piles, in one case over 100 ft. in length (Pl. 10b).

Profiles have been constructed (fig. 8) across two rather contrasting types of ridged land; they were drawn from readings taken at one-foot interval. The most common type at Rosal appears in the upper example, on gently sloping ground where the rigs rise 8 in. to 17 in. above the intervening depression (Pl. 13a). In the second type, the slope is so steep that continuous ploughing along the contour has resulted in shallow terraces rather than ridges (Pl. 11a).

It will be recalled that much of the area within the ring-dyke consists of rounded hills and hillocks, sometimes with marshy hollows between. Almost invariably, the rigs run more or less along or slightly oblique to the contour and so it is impossible for them to follow a straight course for any considerable distance. This alignment along the slopes makes the very decided ridging difficult to explain simply as a primitive method of surface drainage before the advent of field drains. The main concern in ploughing operations must have been to steer the plough as far as possible on the same level. On the irregular ground at Rosal, the rigs often display a marked curvature when viewed in plan, but the sharpest curve represents a turning circle for the plough of never less than about 350 ft. When any particular spur or hollow would have involved a sharper turn the plough seems to have been stopped and a new alignment adopted. This, as much as anything, seems to explain why the rigs occur in series, with breaks or baulks between. The top of a hill was often unridged as the furrows along the contour became too short; the unploughed patch might be used as a receptacle for stones piled into cairns.

With what seems to have been a heavy and unwieldy plough at work on these hills at Rosal, it was rarely possible to have more than a very few rigs running parallel in any one cultivated patch, and often adjacent rigs were of different lengths. Some rigs were less than 80 ft. whereas at the opposite extreme, some in the NE. wound along a hill for as much as 400 ft. As regards width, the same rig can vary quite markedly from one end to the other, usually being broadest in the centre. Those in the series illustrated in fig. 8 ranged between 16 ft. and 26 ft., measured across the middle.

Improved Ground without Rigs

The third type of ground within the ring-dyke occurs mainly in the vicinity of the houses and sometimes between the series of rigs. It is smoother than the unreclaimed ground and is now

¹ Especially 106(G)/Scot/UK 76, Nos. 3188-9, although the other pair, CPE/UK 181, 2071-2 were much superior in the study of the ruined buildings.

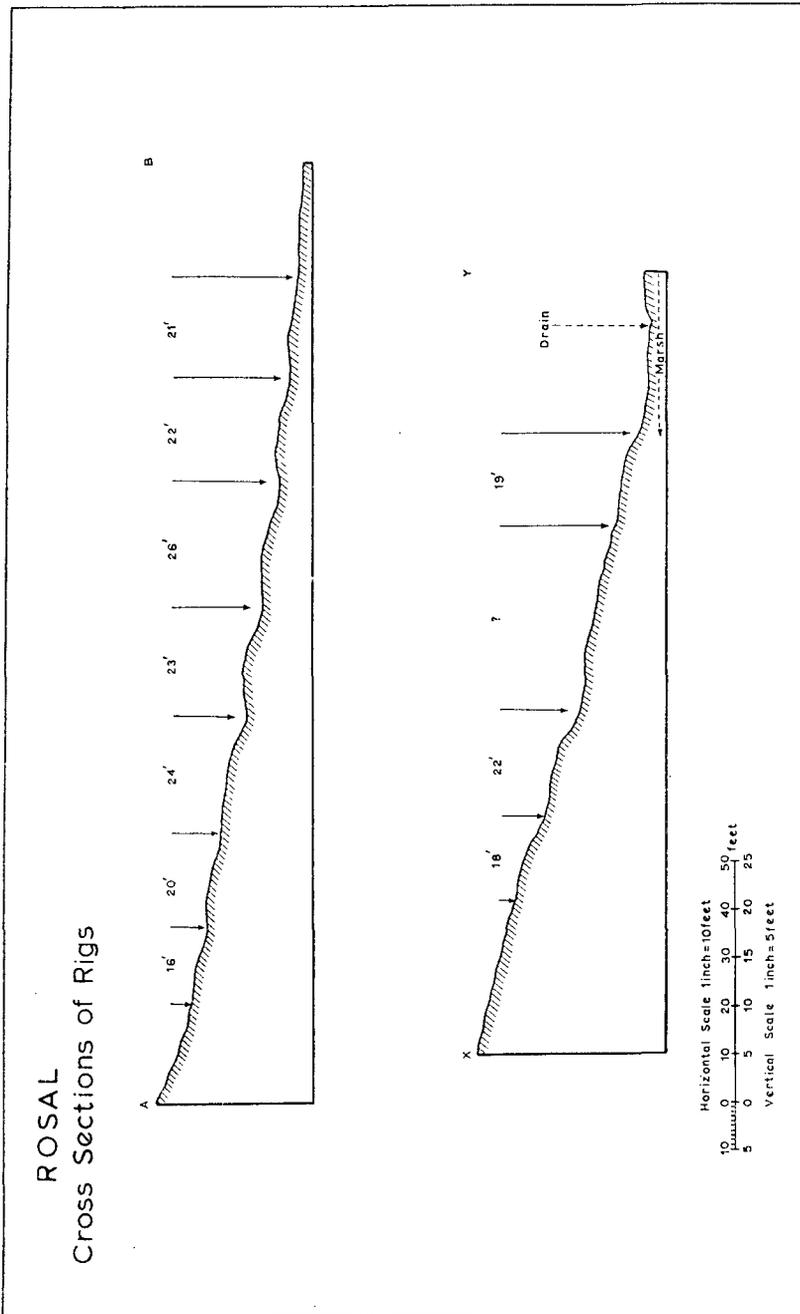


FIG. 8

mainly covered with coarse grass; it seems to have been freed largely from stones. The only suggestions of cultivation marks are very slight and discontinuous, though parts may well have been tilled with the spade or foot plough. It was noticeable that this type of ground is often traversed for considerable distances by open, shallow surface drains; they do not seem to extend into the rigs and the rough moor is not involved. They may belong to the post-Clearance period of the sheep farmers; Loch mentions the construction of such drains as though something entirely new were being introduced.¹

SOILS

During the investigation at Rosal, Mr J. C. C. Romans took soil samples for subsequent analysis at the Macaulay Institute for Soil Research, Aberdeen. We are indebted to the staff of the Institute for the detailed report which was made available, and especially to Mr Romans for his interest in our problems and the information which is presented in this summary.

He selected three representative sites for examination of the soil profile broadly corresponding to the categories of land considered in the previous section. One was on unimproved heathery moorland just outside the ring-dyke on the N., one was on a grassy terrace-like rig in the NW. central area of the settlement, and one was on a grassy hillock near the souterrain. In each, the parent material was light textured moraine derived from acid schists, granitic gneiss and some mica schist. This rather sandy Boulder Clay was freely drained and the soils were strongly leached and acid (podzols).

On the unimproved moorland outside the ring-dyke, there was up to 8 in. of peat and the surface layers were low in phosphate content. On the terrace-like rig, an unexpectedly high phosphate content was found within the upper layers which had once been cultivated. The grass cover had already indicated a richer soil than normal for upper Strath Naver in general, but Mr Romans suggested that phosphatic fertiliser had been used sometime in the past; of this we have no record. He also thought that the soil profile might indicate a change in method of cultivation at some period before the evictions.

Near the souterrain, the phosphate content was again high, this time down to a depth of 2 ft. Mr Romans thought that there had been disturbance of the soil profile in the period pre-dating the souterrain. It is possible that a hut-circle of an earlier phase of occupation had been located at the top of the hillock, but we did not succeed in locating the foundations. The phosphate content on the floor of a recess within the souterrain was very high.

How fertility was maintained on rigs under constant cultivation in the pre-Clearance period is a problem requiring investigation both from the documentary material and from further soil surveys.

THE COMMON GRAZINGS OF ROSAL AND OUTLYING ENCLOSURES

The Plan of the Heights of Strath Naver in 1811 is of great value in that it shows the extent of the common grazings of Rosal and Dalharrold, together with the location of the shielings and certain small enclosures at some distance from the main settlements (see Appendix, Table 3).

According to Meredith's survey (Appendix, Table 3) the common lands amounted to 5,000 Scots acres (or 6,250 English acres). In the W. and S. the limits follow the Naver and one of its major tributaries the Mallart, but elsewhere the course is quite unpredictable. In general it is often marked by minor lochs and burns and the conclusion seems to be that an arbitrary line had been agreed with neighbouring settlements.

¹ Loch, *op. cit.*, 145.

Several curious features are apparent (fig. 9). The lands are 'grazed jointly by the tenants of Rosehill and Dalharrold' although the latter appears to have been a very unequal partner. The arable was a third the size of Rosal, and Henderson¹ states that only four families were in occupation. The Plan shows about seven buildings set back a little from the river; Dalharrold is now the site of a sheep farm and the ground is much altered by the field dykes and farm buildings, so that it

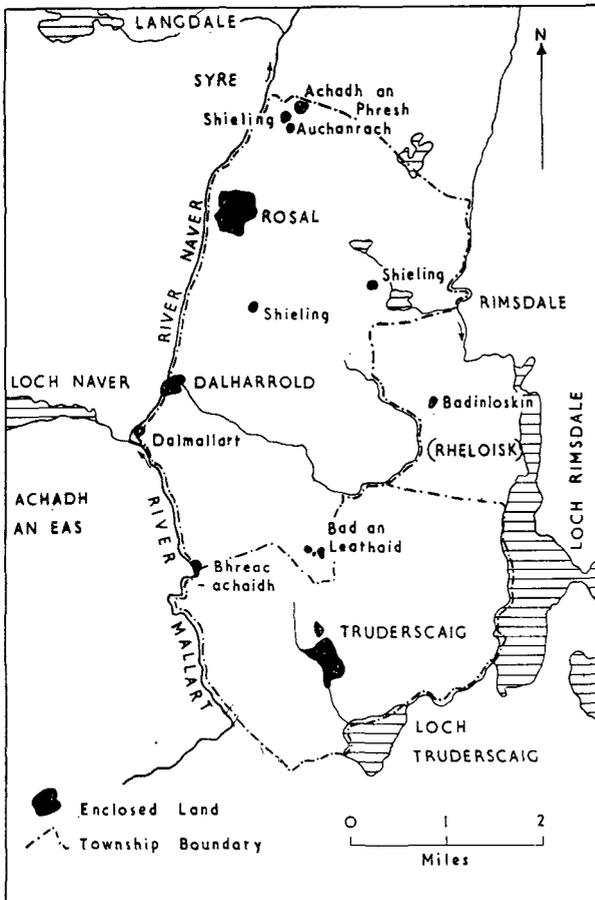


FIG. 9. The Common Grazings of Rosal

is difficult to recognise the pre-Clearance settlement (NC 680386). On the whole, it seems to have been little more than an outlying community from Rosal; it is relevant to note that the name occurs only late in the documentary record.

In the next place, the common lands approached very closely indeed to the neighbouring settlement sites of Achness and Truderscaig, both of which were as large as Rosal. Achness (Achadh an Eas on the O.S. maps, NC 668371) lies immediately across the Mallart river and appears to have been amongst the oldest of the Strath Naver settlements. The lands were largely cleared as early as 1806 and became part of a very extensive sheep farm belonging to a Mr Marshall. Numerous ruined buildings are still visible on the ground but the site has been altered by modern farm buildings and dykes. Truderscaig (NC 703342) lies far out in a lonely part of the moor and

¹ Henderson, *op. cit.*, 25.

TRUDERSCAIG

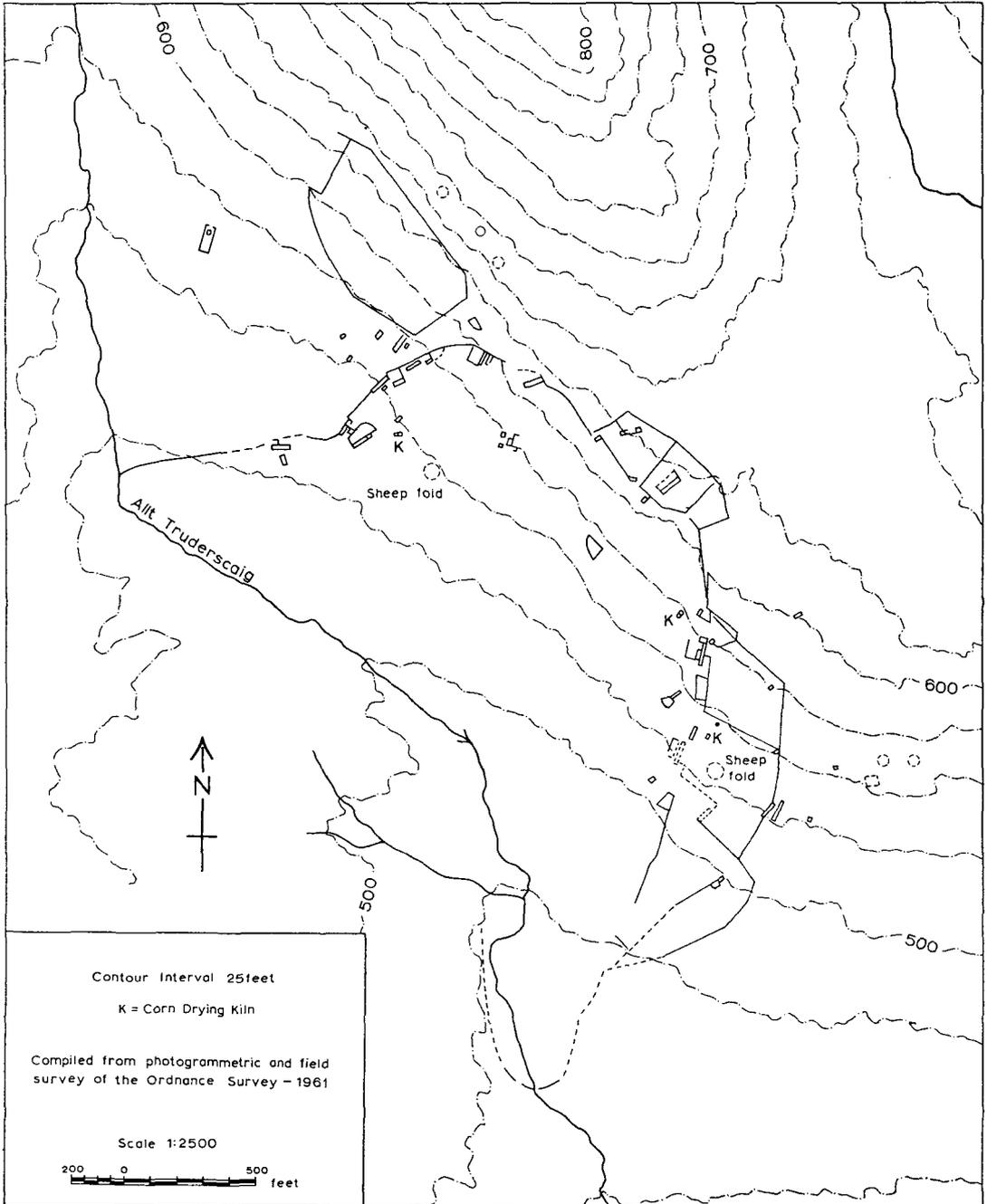


FIG. 10. Plan of Truderscaig

seems to have been untouched since it was evacuated in 1814. A plan (fig. 10) drawn from data supplied by the Ordnance Survey, shows the buildings to have been arranged somewhat peripherally as at Rosal, and the individual structures are much the same in character. Two circular sheepfolds have, however, been constructed in the middle of the settlement; they might be the handiwork of the first sheep farmers but have been maintained in good condition till recently. Incidentally, on a hillside to the W., there is an extensive group of circular enclosures and ancient clearance cairns which almost suggests an Iron Age ancestor for Truderscaig; the name itself is Norse.

Why the boundary of Rosal approached to within about half a mile of this large settlement of Truderscaig is not obvious, nor can an explanation be given for the outlying part of Rheloisk, to the east of Rosal, which could be more easily approached from either Rimsdale or Truderscaig.

Within these extensive boundaries to the common grazings, heathery moorland predominates, becoming rocky on the steeper slopes such as Beinn Rosail but turning to peaty waste on the flatter areas. On the Plan, it is variously described as 'moss pasture', 'wet boggy moss' or 'good heath pasture'. It is poor quality land but there is no doubt that more could have been cleared of stones and brought under cultivation if the need for arable land had been stronger. In fact, there is evidence to suggest that reclamation was taking place at the time of the evictions; from this point of view, the isolated enclosures mentioned earlier form a very suggestive series. (For details, see Appendix, Table 4.)

In the extreme north, the Plan shows three of these discrete units. They are indicated on the O.S. 6-in. Sheet NC 63 NE and can be recognised without difficulty on the ground, in close proximity to the modern road from Kinbrace and about half a mile from Syre Bridge. In each case substantial but ruinous dykes of stone and turf form the enclosures which vary in size between three and six acres. In the one simply termed 'Shealing' on the Plan no buildings are visible and although the ground has been to some extent cleared of stones, there is not much trace of cultivation. At 'Auchenrach', however, there appears to be a small long-house, an outhouse and a yard; permanent occupation by a single family seems involved. At 'Achuphresh' nearby, there is at least one full-scale long-house and possibly a second small example, together with a barn, a corn-drying kiln, a yard and at least one other outhouse. The enclosure in this case is complex as though it had been increased by successive intakes from the moor on two or three occasions so that eventually it comprised nearly six acres. An eventual amalgamation of these three enclosures which are separated by no more than two hundred yards, would have resulted in a unit not dissimilar in size from Dalharrold.

The shielings shown on the Plan as lying east of Beinn Rosail, about one and a half miles from Rosal itself, seem to comprise two distinct features. In the first place, there are traces of three shieling huts, vaguely rectangular in form and measuring about 10 ft. by 6 ft.; they lie at the top of a heathery knoll each in its own small patch of grass but without any enclosure (NC 712405). Two hundred yards or so to the SW., on steeply sloping and rocky ground with no trace of cultivation, there is an area of about two and a half acres surrounded by a stout dry-stone dyke (NC 711404). In the middle stands the ruin of a small square structure. In this case, the dyke must have penned in the stock and not protected growing crops from wandering beasts. The 'Shealings' between Rosal and Dalharrold just over a mile back from the Naver (NC 691400) seem to have comprised an area of much the same type.

Further upstream, just in the angle between the Mallart and the Naver, Dalmallard seems to have been another of these more or less permanently occupied patches of arable, in this case about two acres in extent and presumably supporting a single family. Up the Mallart, the Plan indicates a second unit but the name is scarcely decipherable and there is no record on the O.S. 6-in. sheet of an enclosure in this area. Bad an Leathard, however, is clearly marked as three

separate enclosures in close proximity and comprising in all about six acres. The buildings seem to indicate permanent occupation by possibly two families. This outlying community was three and a half miles distant from Rosal and two from Dalharrold, but Truderscaig is just over the hill, only a mile to the S.

A discrete area belonging to Rheloisk within the peaty waste three miles SE. of Rosal, is of special interest. It will be recalled that much of the evidence at the trial of Patrick Sellar in 1816 revolved around his treatment of a tinker William Chisholm, who was summarily ejected as a squatter on a small patch of ground called Badinloskin, in a peaty waste not far distant from Rimsdale but on Rheloisk ground. This place is indicated roughly on a map in Thomas Sellar's book on 'The Sutherland Clearances of 1814' and corresponds to an enclosure of rather less than 3 acres which is shown on the O.S. 6-in. map and is also indicated on the Plan of 1811, but not by name in either case. Here is to be seen the outline of a long-house, two stackyards, two outhouses and a corn-drying kiln. It would appear under the circumstances that Chisholm was trying to establish a permanent occupation of one of these discrete enclosures.

Looking at the problem as a whole, it is possible to think in terms of a series, commencing with the simple enclosures at the shieling grounds, developing into units of permanent occupation by a single family and subsequently increasing by intakes or amalgamation into 'townships' of the size of Dalharrold with its four families and fifteen acres of arable, but still sharing the common grazings with Rosal. It is appropriate to recall Professor Ronald Miller's suggestion¹ that the gathering of the animals for milking or for safety around the shielings would tend in time to improve the ground by manuring and treading. An area already cleared of stones in making an enclosure for a pen might in the process become cultivable and a discrete patch of arable would emerge. These small units are a very noticeable feature of Home's plan in his 'Survey of Assynt' in 1776.

Pressure of population in the late eighteenth century might well have stimulated the colonisation of these discrete units, especially when the potato was beginning to provide a useful crop for ground of this type. There is evidence to show, however, that a similar process had been at work for generations for, as already described, several of the Strath Naver townships have shieling names such as Kedsary, across from Rosal.

THE SIGNIFICANCE OF ROSAL: PRESERVATION

In the numerous deserted settlements of Sutherland, the Clearances have provided a field of study which has few parallels in Europe, and at the same time, the episode is such a bitter and lasting memory that interest in the ruins on the ground is far from limited to students of Scottish folk life and rural settlement. These sites are not yet 'ancient monuments' but at least some examples should surely be preserved. Comparative material, however, is so sparse that it is difficult to formulate ideas as to what precisely should be conserved.

Absence of disturbance and clarity of outline in the buildings themselves and the pattern of their distribution within the township must be a primary issue. The state of preservation of the old boundary dykes, of the cultivation rigs and of the limits of the old arable lands with their clearance cairns is also significant. So, too, are the character and boundaries of the old common grazings, the position and form of the shieling sites and of those discrete patches of arable which seem to have commenced as shielings. Completeness is an over-riding factor in all these matters. *Even so, evidence on the ground is far more valuable when appropriate documentary material is*

¹ Miller, Ronald, 'Land Use by Summer Shielings', *Scottish Studies*, 11 (1967), 193-221.

also available, whether in the form of references in ancient charters, old rent rolls, or old plans and descriptions. Furthermore, additional interest must surely attach to those settlements for which there is clear evidence of occupation over a very long period, perhaps from prehistoric times. Clarity, completeness and length of settlement seem to be the keynotes.

Rosal unquestionably has a strong claim for preservation, not because it is spectacular nor because it figures any more than incidentally in the story of the Clearances. It is simply an excellent representative example in accordance with the above criteria. Isolated within the ring-dyke from the moor, free from disturbance since the evictions, the traces of the buildings, rigs and clearance cairns all provide an almost ideal site. The plan of 1811 throws light on the situation, and almost inevitably the archives in Dunrobin Castle will contain material relating to such an old and relatively large settlement. Occupation of the ground is traceable from the Iron Age and perhaps even earlier.

The claims for preservation become stronger when the characteristics of the other known Strath Naver sites are considered. Of the few large settlements, Langdale (NC 698455) and Achness (NC 668371) have both been badly disturbed by later buildings. Grummore (NC 608367) is at present a scheduled site and claims special attention because it is near the road and a magnificent broch gives added distinction. Grummore itself has suffered little damage but it seems very difficult to interpret. It sprawls over a wide area, with numerous minor enclosures which sometimes contain buildings no larger than shieling huts. The arable area must have been poor and there is no series of rigs parallel to those of Rosal. Truderscaig (NC 703342) is more comparable to Rosal and has a fine series of plough rigs. Strangely little mention of it occurs in the documentary record, however, and it is difficult of access at present. Two circular sheepfolds have been the cause of stone robbing from adjacent buildings.

Most of the other settlement sites of the Clearance period in upper Strath Naver are much smaller; some are relatively inaccessible, others near the road have been damaged by stone robbing as at Grumbeg (NC 634385). A number seem to be late foundations. In lower Strath Naver below Syre Bridge, modern farms have been established during the last hundred years and much of the old has been disturbed or destroyed.

The preservation of Rosal in full is no longer possible, as extensive areas of the common grazings have been ploughed and planted up to the ring-dyke; most of the outlying arable areas are still untouched however. Since the submission of a preliminary report on our investigations, the Forestry Commission has fenced off the undisturbed settlement area and for the time being, it is to be preserved in sheepwalk; cattle would all too easily damage the loose stonework of the old buildings. Nevertheless, Rosal is no longer the complete unit it might have been, and its setting will be transformed with the growth of the new forests.

Basically, the claim for preservation at Rosal rests on the visible remains of the last phase of settlement at the time of the Clearance. Apart from the site of the ruinous souterrain and perhaps two hut-circles going back to the Iron Age, one looks almost in vain for traces of the long continued occupation from at least the later Middle Ages. The site is not littered with puzzling grassy banks and fragments of dry-stone buildings inviting further excavations. The reason seems clear. The buildings themselves were largely of turf on a dry-stone footing around an earthen floor and there were no trenches for foundations. When such structures fell into disrepair as would be inevitable after a generation or so, it would be easier to rebuild on a new site nearby, utilising the stones again, and then to run a plough over the old site to freshen up the ground. We know from the documentary record, however, that Rosal has been in constant use since at least A.D. 1269. Somewhere, traces of old occupation phases may survive, to be revealed by more extensive excavation or more sophisticated techniques than we could undertake. Preservation might allow investi-

gations in the future into a problem about which so very little is known – the origin of townships of this type.

In trying to describe Rosal, one has been very conscious of breaking new ground in this type of field study. It is to be hoped that further detailed studies elsewhere will soon help to illuminate the darker corners and perhaps even lead to a fresh evaluation of the data. The evidence in the field remains largely intact, thanks to the forbearance of the Forestry Commission. Equally valuable would be a series of comparative studies, on a regional basis, of the remains of the more recently abandoned settlements in the Highlands, and in the Lowlands too if they could be found, so that Rosal and other sites which might be selected for detailed morphological examination, could be seen in a broader setting.

APPENDIX

TABLE 1

LIST OF SMALL FINDS FROM THE EXCAVATIONS

From the small room at the upper end of the long-house, Complex A

Metal	2 fragments of a large iron hinge 2 pieces of an iron pot (? 3-legged) 9 small rusty fragments of iron 2 pieces of the half of a thin curved tube of either copper or brass $\frac{1}{2}$ in. diameter (from a whisky still?)
Potsherds – china	4 cream (? plates) 1 jug handle, cream 4 thin white 1 thin white (bowl with blue pattern) 6 white, with blue pattern 4 white 5 white with brown floral pattern 2 white with brown and yellow band (? cup)
Potsherds – earthenware	1 cream – glazed on the inside
Glass	1 clear fragment
Glass – bottle (fragments)	7 thick, green 1 olive green 1 fine, green 5 thin, clear
Flint	Worked grey flint
Bone	2 burnt fragments

Around the central hearth, long-house, Complex A

Metal	2 pieces of a shoe last 4 pieces of an iron pot (? 3-legged) 1 fragment of the end of a wooden handle and part of the blade of a sickle 1 iron hook 1 hinge fragment 1 nail 1 brass door latch
Potsherds – china	4 thick, cream 17 thin, white 10 creamy white 2 rim, small, thin, creamy white 8 plain rim, from a white ?plate

	11 scalloped rim, from a white plate
	12 cream (dish or plate)
	7 cup or small bowl, much used, with two blue bands near the rim and blue floral pattern
	3 cream with floral pattern
	3 from a bowl, cream inside, pink outside, with a brown, cream and white pattern
	2 creamy white with a blue pattern
	9 from a bowl or vase, creamy white inside, pink-brown outside, with variegated spirals of brown, white and green
	1 creamy white with double blue band
	3 thin, cream, yellow and brown band
	4 white with brown floral pattern
	1 white with red and green pattern
Earthenware	1 reddish brown fabric, brown glaze
Glass	2 fragments, ? picture glass
	3 thin clear fragments
Glass - bottle (fragments)	1 clear
	12 thick olive green
	10 thin olive green
	1 green
	13 clear
	3 thin, clear
Leather	4 very small fragments
Textile	1 small fragment of cloth
Bone	1 long bone, ? ox
	1 long sliver
Shells	2 mussel shells

From the pit to the west of Complex A

1 small fragment of white china with pink pattern, 2 ft. 3 in. below the surface

TABLE 2

INDIVIDUAL STRUCTURES ON ROSAL: DIMENSIONS

<i>Complex</i>	<i>Number</i>	<i>Description</i>	<i>Dimensions in feet</i>	<i>Characteristics</i>
<i>Northern Cluster</i>				
A	1	Outhouse	34 × 11½	Round ends, opposing doors, pit - a barn.
A	2	Long-house	85 × 12	Rectangular, partition at 17 ft. from S. end.
A	3	Yard	44 × 26	Sub-oval.
A	4	Outhouse	29 × 9½	Round ends.
A/B	5	Kiln	18½ × 9½	Fairly well preserved.
—	6	Enclosure	41 diam.	Incomplete on E., possibly used as yard but probably obsolete.
A/B	7	Outhouse	33 × 10	Round and rectangular ends with yard attached in which is a pit. A barn?
B	8	Outhouse	32 × 12	Rectangular and round ends, pit - a barn.
B	9	Long-house	108 × 12	Rectangular, partition at 18 ft. from S. end.

<i>Complex</i>	<i>Number</i>	<i>Description</i>	<i>Dimensions in feet</i>	<i>Characteristics</i>
B	10	Outhouse	14½ × 9½	Rectangular, open extension of 8½ft.
—	11	Outhouse	34 × 9½	Round ends with partition at 24 ft.
—	12	Kiln	18 × 6	In small croft adjacent to periphery wall; badly ruined and ? derelict.
?B	13	Yard	58 × 24	Rectangular, against periphery wall and possibly associated with (11).
C	14	? <i>Long-house</i>	50 × 11½	Rather vague and no obvious partition, rounded at NNE., rectangular SSW.
C	15	Outhouse	25 × 11	Round and rectangular ends with 10 ft. open extension.
—	16	Outhouse	24 × 8	Rectangular, against periphery wall, partition at 8 ft.
—	17	Yard	42 × 42	Sub-rectangular, isolated.
D	18	? <i>Long-house</i>	46 × 11	Round and rectangular ends, partition at 17 ft. from NE., possibly a barn latterly.
D	19	<i>Long-house</i>	73 × 11	Rectangular, partition at 18 ft. from NE.
D	20	Yard	37 × 37	Triangular with (19) along S. side.
D/E	21	Kiln	22 × 9	Fairly well preserved.
—	22	Yard	63 × 37	Quadrilateral, with modern lambing pen and walling in N. probably modified.
—	23	Outhouse	30 × 9	Outlying near peripheral wall, partition at 8 ft.
—	24	Outhouse	18½ × 9	Isolated, rectangular.
E	25	<i>Long-house</i>	83 × 12	Rectangular in SE., rounded at NW. end, partition at 21 ft. from SE.
E	26	Outhouse	32 × 11	Rectangular, abutting against (25). Possible partition at 9 ft. from SW.
E	27	Yard	75 × 31	Sub-rectangular.
E	28	Outhouse	29 × 10	Round ends, pit. Near (27).
—	29	Outhouse	28 × 12	Rectangular, badly ruined.
<i>Outlying North-East Cluster</i>				
F	30	<i>Long-house</i>	83 × 10	Rectangular, partition 28 ft. from SW.
F	31	Yard	41 diam.	May be an earlier enclosure modified.
<i>South-Eastern Cluster</i>				
G	32	<i>Long-house</i>	92 × 11	Rectangular, partition 14 ft. from SW.
G	33	Outhouse	16 × 8	Rectangular.
G	34	? <i>Long-house</i>	58 × 11	Rectangular, partition 15 ft. from NE. pit; N. side of (35).
G	35	Yard	75 × 65	Sub-oval.
—	36	Kiln	16 × 6½	200 yds. NE., much ruined.
—	37	Outhouse	29 × 9	Vague but probably round ends.
?H	38	Kiln	16 × 8	Well preserved.
—	39	Yard	59 × 56	Sub-rectangular, wide open on N. side.
—	40	Outhouse	19½ × 9	Rectangular and round ends, on S. side of yard (39) and resembling the combination 34-35.
H	41	<i>Long-house</i>	77 × 9½	Rectangular, partition 20 ft. from SW.
H	42	Outhouse	9 × 9	Badly ruined, rectangular, just S. of (41).
H	43	Yard	55 × 44	Rectangular on outside of and adjacent to periphery wall.
I	44	<i>Long-house</i>	78 × 9	Rectangular, partition at 23 ft. from NE. Possible extension to 95 ft.
I	45	Yard	21 × 9	Attached to N. of (44).
I	46	Outhouse	24 × 10	Rectangular and round ends, pit.
?I	47	Yard	24 × 30	Top of hill, upstanding stone at corner, sub-oval.
?I	48	Yard	55 × 66	Quadrilateral yard or croft in an intake just beyond the peripheral wall, partly overgrown.
—	49	Yard	26 × 14	Foot of hill to W., probably a pen.
—	50	Yard	68 × 72	Isolated against peripheral burn to SSW. of Complex I.
—	51	Enclosure		Overgrown with bracken. Small, rectangular, visible on air photograph.

Complex	Number	Description	Dimensions in feet	Characteristics
<i>South-West Cluster</i>				
—	52	Kiln	15 × 7½	Badly ruined, N. of (J).
J	53	Long-house	85 × 11	Rectangular in NE., round at SW., partition at 40 ft. On N. side of yard (54).
J	54	Yard	c. 100 × 60	Ill-defined oval, especially in E.
J	55	Outhouse	28 × 9	Rectangular and round ends. Abuts from W. into yard (54).
—	56	?Yard		Vague traces to S. of yard (54).
K	57	Long-house	97 × 10	Partition at 27 ft. from SW. More massively built than normal, and might have a chimney back in the cross wall. It suggests recent modification, possibly as a shepherd's bothy.
J/K/L	58	Outhouse	41 × 10	Possible extension downhill on N. side. This could be an old long-house.
L	59	Long-house	83 × 11	Rectangular, extending over a knoll (living quarters on NE.).
M	60	Long-house	73 × 11	Probably rectangular, extends over a knoll.
N	61	Yard	63 × 63	Quadrilateral, forming a complex with three other buildings.
N	62	? Outhouse	35 × 11	Rectangular, on N. side of yard (61). Might have an extension on E. side for 12 ft. with rounded end; pit in W.
N	63	Outhouse	28 × 9	Rectangular, near (63) abutting on to yard (61) from E.
N	64	Outhouse	11 × 8½	Rectangular at S. angle of yard (61).
—	65	Yard		Some 30 yds. W. of (61), there are faint traces of another yard and ?house attached.
P	66	Long-house	66 × 10½	Round ended, no obvious partition, extends over slight hillock.
P	67	Outhouse	14 × 11	Rectangular.
P	68	Outhouse	37 × 8½	Rectangular and round ends, pits at either end.
P	69	Yard	54 × 33	Sub-rectangular, against the periphery wall with 2 structures attached.
P	70	Kiln	17 × 7	N. side of yard (69) built into a hillock and very well preserved.
P	71	Outhouse	19½ × 9½	Against periphery wall on S. side of yard (69), rectangular.

For Table 3 see p. 169 opposite.

TABLE 4

ROSAL - DALHARROLD COMMON GRAZINGS

OUTLYING ENCLOSURES

Name	N.G.R.	Altitude	Yards distant from		Acres enclosed	Estimate of occupation
			Rosal	Dalharrold		
Auchenrach	698430	375	1,200		4	1 family
Shieling	697432	250	1,300		3	Seasonal
Achuphresh	699434	300	1,600		6	2 families
Shieling	711404	500	2,400		2½	Seasonal
Shieling	691940	425	1,250		5	(?) Seasonal
Dalmallard	673379	225	3,400	1,100	2	1 family
Bad an Leathaid	703360	580	5,500	3,550	6	2 or more families
Badinloskin	722375	440	(4 miles from Rheloisk)		3	1 family

TABLE 3
TABLE OF CONTENTS ON THE PLAN OF 1811

HEIGHTS OF STRATHNAVER

including Rosshill, Dalharrold and the final possessions of
Achuphresh, Auchenrach, Dalmallard, Breckachunahowen & Badilealoid
with all sheilings and hill grounds attached
in Colonel Clunes's Wadset
the Farm of Trudeskeg and part of the
Hill bounds belonging to
Rheloisk.
B.M.
1811

		CONTENTS																		
		<i>Arable land</i>			<i>Grass</i>			<i>Shealings</i>			<i>Moss pasture</i>			<i>Hill grazing</i>			<i>Total</i>			
		<i>A</i>	<i>R</i>	<i>F</i>	<i>A</i>	<i>R</i>	<i>F</i>	<i>A</i>	<i>R</i>	<i>F</i>	<i>A</i>	<i>R</i>	<i>F</i>	<i>A</i>	<i>R</i>	<i>F</i>	<i>A</i>	<i>R</i>	<i>F</i>	
Rosshill	shaded red	small tenants	46	1	35	34	3	4	6	1	36									
Achuphresh	"	"	3	7	37	4		27												
Auchenrach	"	"	2	—	27	1	2	24	2	1	9	703	3	10	4140	—	29	5005	—	3
Dalharrold	"	"	15	3	34	32	2	7	7	—	6									
Dalmallard	"	"	1	1	24	12	3	14	—	—	—									
Trudeskeg	shaded green	"	54	3	7	6	—	19	5	2	—	63	—	20	2092	1	30	3042	—	36
Part of Rheloisk	"	yellow Mr Willm Gordon	3	3	—	—	—	—	—	—	—	1051	2	30	—	—	—	1055	1	30
			128	1	4	81	2	15	21	1	11	1838	2	20	7032	1	19	9102	2	29

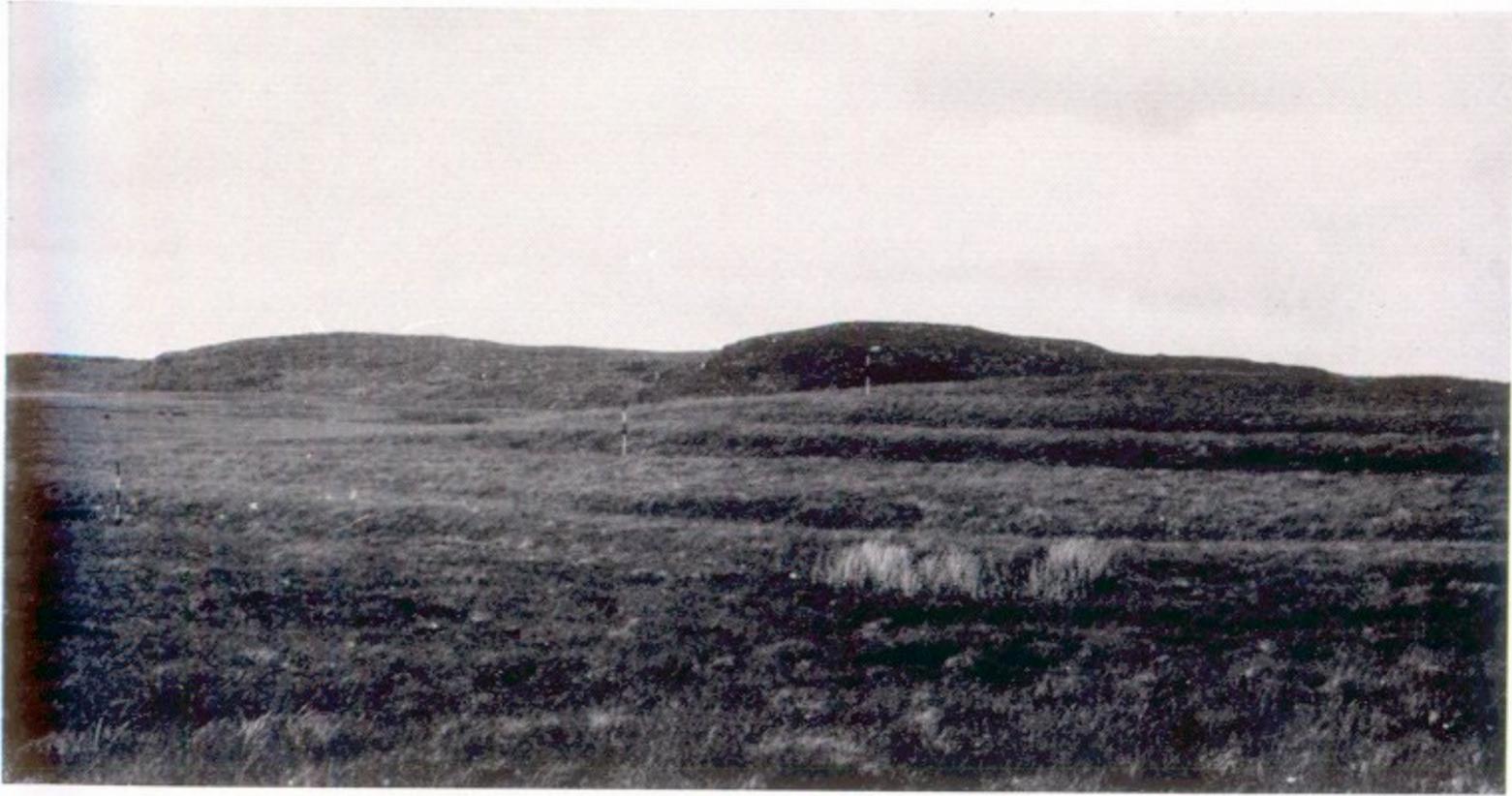
(Note: measurements are in acres, roods and falls.)



a General view of Rosal and Strath Naver



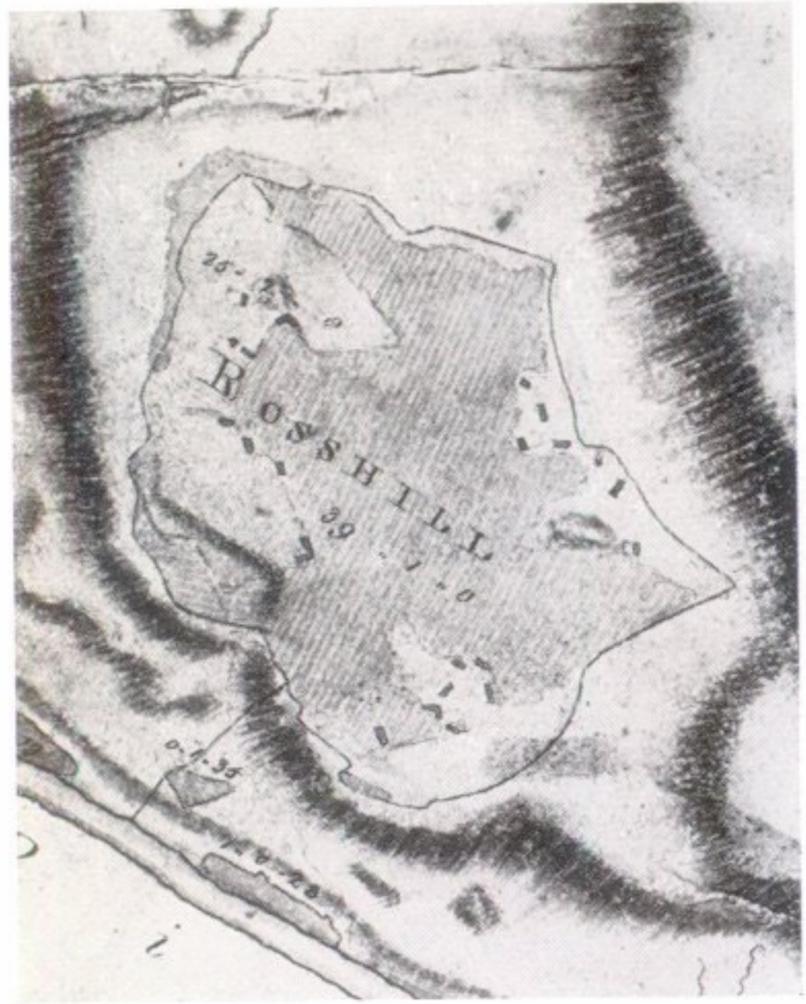
b Old arable land with cairns



a Rigs in terrace-like formation



b Old buildings grouped around a yard



a Part of the Estate Plan of 1811, showing Rosal



b General view of Long-house, Complex A, from N., showing entrance and external platform



a Upper end of the byre in Long-house, Complex A, with living-end beyond



b The central hearth in the Long-house



c Small room and fireplace in Long-house



a The barn and pit in rounded end of outhouse at Complex A



b Outhouse at Complex A traversed by foundations of an old dyke



a The circular platform resembling a hut-circle



b The flue and fireplace of corn-drying kiln



c The kiln and flue end