

Land Use by Summer Shielings

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In modern Scotland pastures distant from the farmstead tend to be either neglected or grazed by sheep. Cheviots and Blackfaces (or their crosses) predominate, for they are hardy and require little attention; the Blackfaces in particular can survive on the poorest of grazing, even on heather, and with a minimum of shepherding. Their introduction (and the concomitant clearances of human population) was a prime factor in the nineteenth century agricultural revolution in the Highlands, and sheep still dominate the economy and, indeed, the ecology of the Scottish uplands. Formerly, however, out-pastures were occupied by cattle as well as other stock during the summer months, and the grazing grounds and bothies for the herdsmen and dairymaids were known as shielings (formerly also sheals, sheils, sheildings, or sheels). In records 'to shiel' is also commonly used in a verbal sense. In the Highlands and Hebrides, where shielings are commonest, they are known as *airigh* in the west, and as *ruigh* in the centre and east.

Shieling persisted in the Outer Hebrides until the last war, and in Lewis (Plate V) many of the bothies are still used as holiday huts or as bases for peat-cutting, but occasionally poultry, whose free range is destructive to growing corn, are taken to the shielings. The practice of shieling, however, still flourishes elsewhere in Europe (Evans 1940; Davies 1941), and it is worth examination in Scotland not merely as history, but because rough pastures constitute a large proportion of the land area of Scotland and if we are to use this land wisely in the future, it cannot but help to understand its use in the past. If a time should come—and this may not be a remote possibility—when we must win more food from our own land, it would seem reasonable to suppose that those areas which once carried a higher stocking of man and beast might be the first to do so again.

Shielings may be looked for wherever climate or topography cause a seasonal variation in the value or availability of pasture, so that man and his flocks and herds must move their base at least twice in the course of the year in order to win the maximum use from the land. Nomadic pastoralism such as that of the Fulani of West Africa, who have no fixed base, or the long-distance movement of sheep in the Mediterranean, is quite another practice. Thus in the Alps, shielings are an obvious necessity if the high pastures, lush in summer but snow-bound in winter, are to be exploited to the full and if the home ground is to be reserved for crops for human consumption or for winter

fodder. In the French-speaking Alps, shiels (*alpages*) and their bothies (*châlets*) are very numerous and are often tiered one above the other, the stock and their herdsmen moving up and down the mountain in two or three stages depending on the range of altitude. The buildings at the intermediate level (*montagnettes* in Savoy, *mayen* in Valais) normally include hay-barns, but they are none the less shielings for they are occupied by herdsmen as the stock move up and down. Between the two passages of the stock, hay may be cut and either sent to the home farm or consumed *in situ* by the descending stock. An interesting parallel with Scotland is that at many of the *alpages* a quick-ripening crop is sometimes taken. Osgood Mackenzie (1921) records how he could recognise the shiels in Wester Ross from afar by the distinctive green of their potato patches, and elsewhere in Scotland evidence of cultivation in the form of 'lazybeds' is also to be found at the shiels.

Not only is shieling active in the Alps—it is being modernised. The current demand for standardised products requires milk to be delivered to the creameries. On the one hand, therefore, some inaccessible shiels have gone out of use, on the other, some quite ancient shiels in Valais have revolutionised the transport of milk by the installation of a small-bore plastic pipeline down which the milk is sent twice daily to a creamery in the valley. The writer has seen modern stainless steel dairying equipment in otherwise primitive shiels in both the Alps and Pyrenees.

In the German-speaking Alps, *alm*, or high pasture, is a very common place-name and the *almhütte* or *sennenhütte* a common sight in the mountains, as is the *voralm* at intermediate levels. The enormous economic importance of summer shielings in Ötztal in Austria has recently been brought out in a masterly fashion by Mlle Picard (1964). In Italy, especially on the grassy benches below the crags of the Dolomites, shielings or *malga* are to be found in plenty, and they recur again in the Carpathians where the local variant of the alpine *châlet* is common. In the Pyrenees, active shielings are not difficult to find, and here sheep (and cheese from their milk) are at least as important as cattle.

In Norway the accessible shielings (*saeter*) are still in use (Reinton 1955) and here, as in Scotland, they are often spaced away from, rather than above the home farm. The shielings (*fåbod*) in Sweden may be deep in the forest (Edwards 1942). The dominant factor here is the contrast between summer and winter weather at similar altitudes rather than the differences due to a range of altitude. The high latitude, with long winter nights and consequent confinement indoors, no doubt helps to account for the former prevalence of shielings and the current vogue—almost craze—for summer huts among those who no longer live by the land, but seek the freedom, sunlight, and outdoor life of the distant pastures. Saeter-going, indeed, according to Dr Lars Reinton, the distinguished Norwegian expert on shielings, is in the blood of the people of the North. The writer was inclined to be sceptical on this point until one summer he found a family in North Finland living in the dairy, across the farm-yard from their closed and shuttered farm-house. It transpired that, being in the centre of a large arable area formed

by the draining of a glacial lake, they had no outpastures and therefore chose to find their summer solace and change of scene by transhuming across the farm-yard.

Even in North Africa, temporary summer settlements are to be found in the High Atlas, well away from the cultivated land (Prothero 1964). Here the dominant factor is the highly seasonal incidence of rainfall.

Archaeological evidence suggests that for Europe, at least, the evolution of land-use has been from hunting and gathering through pastoralism to cultivation of crops. Clearly, as soon as arable agriculture was invented, stock had to be removed to a safe distance from the growing crops. Shielings, therefore, would seem to be as old as cultivation. With the spread of cultivation following an increase in human numbers, devices like stall-feeding or enclosure of fields enabled cattle to live in rotation with arable (including fodder) crops, and the shiels could become new farms. Only where terrain existed which was fit for nothing but pasture—at least for part of the year—and was quite incapable of conversion to arable cultivation, would a shieling system persist. Such conditions are found in the mountains of Europe, where altitude shortens the summer and where the high ground is too steep and the soil too thin for cultivation; in the north, where high latitude brings long, excessively cold winters; in the Mediterranean, where summer drought burns out the pastures except on the hills; in the north-west (in which region Scotland lies), where high latitude and excessive oceanic influence (now or in the past) bring cool superhumid conditions leading to acid soils and often blanket peat, especially in the hills and western isles.

Thus, in the British Isles, shielings must have become arable farms at quite an early date in the English plain. Ekwall (1924) finds in place-names like Birker and Winder echoes of *airigh* and thus evidence of former shielings. In Wales, the mountain pastures are relatively limited in extent and are mostly readily accessible from the cultivated valley bottoms. The writer has examined only the Brecon Beacons area and there shielings (*hafod* or *lluest*) are to be found in plenty (Miller 1967). Hassal (1812) writes of the movement of sheep between hills in summer and the valley bottoms in winter and Davies (1935) describes the complicated movements of sheep which persist to the present. Even in Cornwall, shielings (*hendra* or *avot*) were formerly used in summer to exploit the moorland grazings (Pounds 1942:33).

In Ireland, shielings (*buaille*, or 'booley') are well known and were in use in remote parts until quite recently. Hayward (1964) reminds us that, as early as the sixteenth century, the poet Spenser records seeing people 'in boolies, pasturing upon the mountains and waste wild places.' In the north, Graham (1954) has studied them against the European setting and reveals many points of similarity to Scotland. O'Danachair (1945:248), writing of the Galtees, records the essence of the situation from the mouth of a poor pastoral farmer, 'There was no rent on the mountain, and land on the farm was nearly all put under hay to feed the cows in the winter time. In that way, a farmer could have a lot more cattle on a small farm.' His *buaille* is still to be seen on the Galtee Hills, and dry cattle at least are still sent up there (Leister 1965). Aalen (1963 and 1964)

draws attention to shiels very close to Dublin and regards the corbelled huts of Dingle as shiels. Such corbelling is to be found in the Western Isles of Scotland, in Rhum and Lewis at least.

Scottish literature and folk-lore abound in references to shielings: in the nineteenth century, unfortunately, much of this is romantic and derivative. Whitaker (1959) has carefully examined the written sources but, apart from Gaffney, MacSween and Gailey, little study has been devoted in the field to the shielings themselves, the remains of their bothies, or the character of the ground. Gaffney (1959, 1960, 1967) has not only studied the Gordon papers in detail, but also the lands to which they refer. His profound knowledge in this field has contributed much to our understanding of the place of shielings in the system of land-tenure and in the rural economy of the central Highlands in the eighteenth century. MacSween (1959) and Gailey (1961) have mapped shielings and their parent settlements in North Skye and have excavated a site in Trotternish.

A little-known but first-hand description of a Scottish shieling in occupation is that of Hugh Miller (1847:81-83) writing of a visit to one under the great eastern escarpment of the island of Eigg:

The shieling, a rude low-roofed erection of turf and stone, with a door in the centre some five feet in height or so, but with no window, rose on the grassy slope immediately in front of the vast continuous rampart. A slim pillar of smoke ascends from the roof, in the calm, faint and blue within the shadow of the precipice. . . . Save the lonely shieling, not a human dwelling was in sight. An island girl of eighteen, more than merely good-looking, though much embrowned by the sun, had come to the door to see who the unwonted visitors might be. . . . And as she set herself to prepare for us a rich bowl of mingled milk and cream, John and I entered the shieling. There was a turf fire at the one end, at which there sat two little girls, engaged in keeping up the blaze under a large pot, but sadly diverted from their work by our entrance; while the other end was occupied by a bed of dry straw, spread on the floor from wall to wall, and fenced off at the foot by a line of stones. The middle space was occupied by the utensils and produce of the dairy,—flat wooden vessels of milk, a butter-churn, and a tub half-filled with curd; while a few cheeses, soft from the press, lay on a shelf above. The little girls were but occasional visitors, who had come out of a juvenile frolic, to pass the night in the place; but I was informed by John that the shieling had two other inmates, young women, like the one so hospitably engaged in our behalf, who were out at the milking, and that they lived here all alone for several months every year, when the pasturage was at its best, employed in making butter and cheese for their master, worthy Mr McDonald of Keill.

Regional Surveys in Scotland

Mainland : Assynt

The writer had long been aware of the existence of ruined—often only vestigial—bothies in the hills of many parts of Scotland, but it was rarely possible to be sure that they were

shielings and, if so, to recognise their parent settlement. The position was transformed, however, by Adam's publication of John Home's eighteenth-century survey of Assynt (Adam 1960). This, with access to the original maps by courtesy of Mr Scott of the Sutherland Estates Office, made it possible to pin-point the Assynt shielings of 1774 and, with the aid of Mr William Rollinson, to identify and examine on the ground some 200 of the 246 shiels listed by Home.

The terrain is characterised by poverty of both soils and vegetation. The greater part of Assynt is formed of Lewisian rocks, which include not only typical gneisses but also some schists and both are traversed from north-west to south-east by a multitude of igneous dykes which give grain to the country. The topography is complex in the extreme. The original dissection of a low plateau, sloping gently westwards, has been profoundly modified by glaciation, so that there is now a fine confusion of rocky hillocks as much as 700–800 ft. high in the east, declining to some 200–300 ft. in the west. The valleys between have had scooped out of them countless lochans and one major depression, Loch Assynt. Sometimes the valleys are fairly steep and the streams tumble over rocky beds, in others, they form wet morasses. In detail, the hills are characterised by frequent small cliff-like features, presumably controlled by jointing, faulting and intrusions. Small as these cliffs are, they greatly impede circulation, for a small rock wall of even a few feet is obstacle enough to man and beast. Accessibility, therefore, is not to be measured in miles but in hours. Overlying the Lewisian in parts is the Torridonian sandstone. In the Stoer Peninsula, it forms smooth rolling forms boldly truncated by cliffs. Remnant buttes in the east centre form the magnificent inselbergs of Quinag (2,653 ft.), Canisp (2,779 ft.) and Suilven (2,399 ft.), the latter two so steeply-conical as to be virtually devoid of soil or vegetation.

The eastern margin of the parish has its own special character. A broad and deep north-south valley has been excavated along the rim of the Moine thrust and is dominated to the east by the massif which culminates in Ben More Assynt, a complex involving Lewisian gneiss, Cambrian limestone and quartzite. The gneiss gives rise to the type of country already described; the limestone, as always, shows solution forms, caves, swallow holes, underground streams and resurgences and because of its alkaline reaction, sweetens the soil and yields excellent pastures. The quartzite is supremely hard and usually forms bare rocky slopes which are virtually sterile. Glaciation has swept away the original soils of Assynt and left deposits in only a few small areas. Mineral soils, therefore, are mostly thin or non-existent, for the durability of the rocks is such that except for some of the schists and intrusions, little disintegration and therefore soil formation has taken place since the glaciation. This is particularly serious in that the area lacks raised beaches, those gently-sloping soil-covered benches which save the situation on so many of the shores of the West Highlands and Inner Hebrides. On the other hand, the deep bays of Assynt formerly yielded abundant herring and include, in Lochinver, one of the few reasonably good natural harbours of the North-West Highlands.

Climatically, the area belongs to that north-west province of Scotland where oceanic influence is excessive. High humidity, cloudiness and cool temperatures, now and even more so in the past Atlantic phases of climate when such conditions were accentuated, have clad the slopes in peat and the flats with blanket bog. Even in the few areas where mineral soil occurs, peat is prevalent. Vegetation generally is of wet moorland type characterised by rushes, sedges, mosses and molinia. Only the small area of limestone offers conditions where man is not heavily handicapped by nature in his attempt to win a living from the land. Thus while the laird's castle was at Ardvreck in the east centre, commanding both the major north-west valley and the limestones, most of the rest of the settlement was on the coasts, in the bays where glacial deposits, some blown sand, a modicum of shelter and above all the harvest of the sea, in fish, seaweed and shell-fish made life possible in this inhospitable environment. The Inver River by which Loch Assynt discharges to the sea was also flanked by settlement.

The population was quite considerable; the rentals (also published in Adams 1960) record 339 households with a total of 1,718 persons. Of these, 68 per cent lived in the coastal settlements, the rest inland, mainly in the great eastern valley. It is not surprising that farms were subdivided—practically all of them were conjoint holdings. No doubt there were many squatters who did not appear on the rent-roll and these may account for the much higher population figure given in the Old Statistical Account. Whatever the exact figure, even this high population was later to be exceeded, for the census of 1861 records no less than 3,174 people.

With such numbers it is not surprising that there was on the one hand emigration and on the other intense pressure on the land, and thus the maximum possible development of the shieling system. The 42 joint farms had between them 246 shieling grounds (Fig. 1), and whereas the home farms occupy the sites referred to above, the shielings are scattered deeply into the interior of the parish in spite of the poor soils and vegetation and difficult access.

Examination of the shielings on the ground suggests that the principal factor in siting them was shelter. Repeatedly they are found on south-facing slopes with some shelter from the west if possible. Good drainage, as on a knoll or slope, is sought, but if considerations of shelter require it, shiels may be in surprisingly wet situations.

In the majority of cases, they can be recognised from a distance by the bright green grassy splash they make in the otherwise dun-coloured moorland. Often they are heavily infested with bracken, for this pest always seeks the best soils. The higher fertility on the shiel is not necessarily due to any great original superiority of the soil, but rather to the improvement induced by the treading and dunging of the shieling stock, especially when folded at night. Modern hill farming research has shown it to be profitable to apply artificial fertilisers intensively to parts of a hill pasture rather than evenly over all. Once the fertility of an area is raised above a certain threshold, worms and a micro-fauna and flora flourish to such an extent as to perpetuate the improvement, attract further treading and dunging and so maintain the cycle. Since the change from intensive

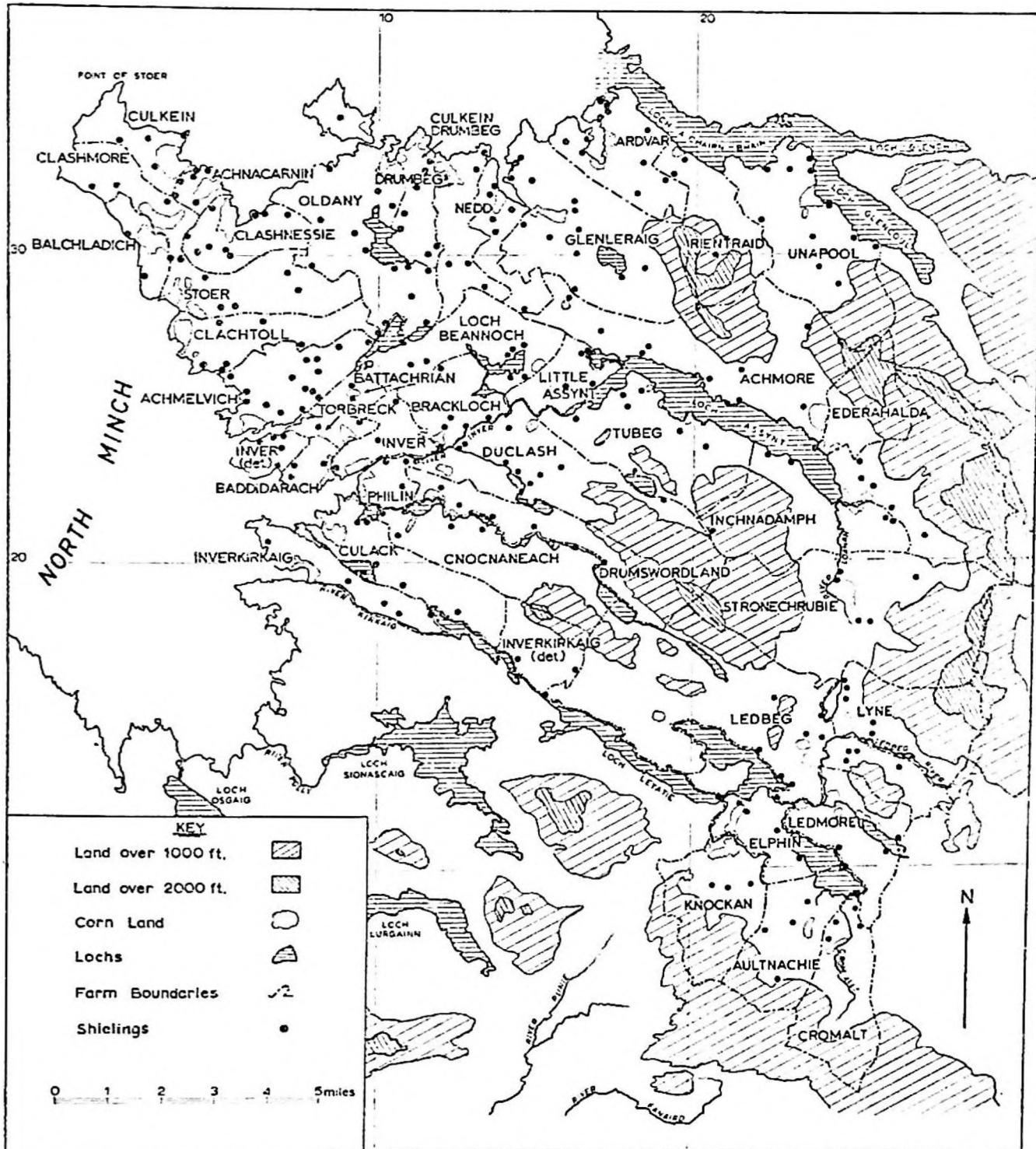


FIG. 1 Parish of Assynt: Farms and shielings of 1774. 10 Kilometre National Grid lines.

shieling to extensive sheep grazing after the Clearances, the sheep continue to concentrate on the better grass of the shielings and thus to maintain something of the fertility originally created centuries ago. The writer has been able to recognise shielings in the Pyrenees at over a mile's distance by the patches of trodden brown earth which mark the overnight folds for the sheep.

Quite often the Assynt shieling grounds are walled, either in stone or (more usually) turf on stone foundations. This we may suppose was partly to restrain the stock at night for security and for convenience of milking and partly so that their dung might be concentrated on the shieling. Enclosure would also be necessary if a crop of corn or potatoes was taken when fertility had been built up sufficiently: we know from Home's notes that such cropping took place.

Home distinguishes four types of land: infield, 'sheelings' (*sic*), natural woods, and 'hill, moss and rocky muirish pasture', and gives location and acreage for each category for each farm. The natural woods were open scrubby stands of birch, oak, hazel, and alder, which afforded good sheltered pasture, enhanced the value of a shieling and in one case (the farm of Torbreck) was able to carry the parson's cattle even in winter. Only remnants of the 2,902 acres of this woodland of 1774 exist today; presumably grazing by sheep since the Clearances has prevented regeneration.

Not only does Home differentiate shielings from rough pastures, but he gives acreages for them and, in some 20 cases, notes that they were 'in corn'. In one case (Clashnessie), he says that one-half to one-third of the shielings (there were nine of them) were annually in corn. It is astounding that a shieling should yield corn every other or every third year. In the case of Stoer, he remarks that the shielings are rich but are seldom in corn because they are too far from the houses. Stoer shielings lie one or two miles from the farm-houses, but six of the 20 shiels he mentions as being in corn elsewhere are at this kind of distance and two are $2\frac{1}{2}$ miles from the house. Examination of the ground shows that 64 of the shielings visited had traces of walling round them, and that at least 32 had later become croft land. In the case of three large shielings, the area was not only walled but sub-divided. In Clachtoll shieling (national grid reference 064278), of 30 acres, there were three divisions; Culkein shieling (NB 029338), of 13 acres, two divisions; and Ledbeg shieling (254136), of 10 acres, three divisions. The shieling boundary walls are indicated at present by lines of rough stones only 1 or 2 feet high, but often with an overlying turf bank, no doubt the remnant of a once much higher wall. It may be that many more of the shiels examined—perhaps all—had walls entirely of peat divots. Such walls, 4 ft. high, very neat and effectively enclosing cattle may still be seen in use in the Hebrides, for example at Claddach Carinish in North Uist.

We must conclude, therefore, that many of the Assynt shielings were virtually outfield, and that this is why an area with so little land rated as infield carried such a high population. There were only 2,202 acres of infield for the farm population of 1,718. Clearly the 1,506 acres of shieling, even if only some of them were in corn only one year in 3, 4 or 5, would be of vital importance. We must also remember that the word shieling, as used by Home, means only the relatively fertile patch round the bothies. In the writer's experience of the ground elsewhere in Scotland it is normal to include all the rough pasture grazed from a bothy, or group of bothies, in the term 'shieling ground', and that while this may be indicated by a stone and/or turf wall, the more fertile patch round the bothies is not enclosed. In Assynt, therefore, we have an example

of what we may suppose to have been the general evolution of shieling in early times—from rough pasture to infield as, on the one hand, pressure on the land grew and, on the other, the fertility of the shieling built up under treading, dunging and periodic cultivation. As has been mentioned, this evolution had brought 32 of the shiels of Home's time into the infield class, although the Clearances deliberately reversed this process, throwing the people out of their shielings back on to the coast, and giving rise to the present Assynt folklore of fertile farms up in the hills and in the interior, farms which, in the sense of houses and steadings cannot in this writer's experience be found on the ground. The evidence of the ground, moreover, suggests that we should not overestimate the extent of cultivation at the shielings. Home tells us the *cas-chrom* was in use in his time—indeed he illustrates it on one of his maps. This tool goes with the practice of lazybed making, which leaves on the ground a characteristic ridge-and-furrow pattern. Such evidence of lazybeds is to be seen everywhere on the coastal settlements, but on only 12 shieling grounds could it be observed, though on a few other shiels bracken may conceal the evidence. At 16 shiels (including eight of those with ridge-and-furrow) clearance cairns can be seen.

In this matter of fertility, we cannot but be struck by the frequent praise by Home of the quality of the ground, in all four of its categories. Thus, Achmore pastures 'yield all the variety of sweet grasses to perfection'; the shieling of Tumore 'yields fine grass'; Ardvar shielings 'abound with grass'; in Aultnachie 'nothing can exceed the fine rich meadow grass'; the infield of Baddidaroch is 'remarkably fertile, yielding excellent corn and bere'; Clashnessie infield is 'exceedingly fertile'; in the shielings of Culkein 'the pasture is generally rich and good'; the shielings of Drumbeg have 'a very rich soil'; the hill at Elphin 'yields excellent sweet grassy pasture'; and 'nothing can excell the richness of the pasture upon the whole of this farm'; at Lochinver there is 'choice grassy pasture'; Loch Beanoch shielings yield corn which is 'remarkably rich and luxuriant'; speaking of Oldernay, Home asserts: 'Nothing can exceed the richness and luxuriance of both corn and bere which this and all the coastal farms upon the estate produce, *both growing to the height of an ordinary man*, particularly bere, which is the principal crop, yielding no less for common than sixty pecks from sowing one.'

Either Home was exaggerating the quality of the estate in order to please his patron or conditions have deteriorated sadly since his time, for it would be difficult to find justification in Assynt at present for the superlatives used by Home and frequently one wonders where the fine corn or choice grass could possibly have been. Elsewhere in the Highlands and Islands, of course, we have similar evidence of retrogression of the quality of the land. It is common, for example, to see lazybeds, clear evidence of former cultivation, under deep heather.

Only in the east of Assynt are the shielings on *hill* pastures: there they occur as high as 1,000 ft. on Quinag and one of them (NB 275205), in the sheltered limestone valley of Gleann Dubh, was 'mostly arable, yielding fine grass' at an altitude of 600 ft. The coastal and River Inver farms had shielings little or no higher than themselves. Their shielings

thus were on *out* pastures, and movement to them involved no vertical displacement, as in the Alps, but rather a horizontal displacement as is often found in Norway. This is another reason why such shielings, once their fertility has been developed, could be brought under cultivation. Had they been at some altitude, this would have been unlikely. Some 400 ft. seems to be the extreme upper limit of cultivation in oceanic Scotland.

No less than one-quarter of the 246 shielings are under half-a-mile from the parent settlement. A further one-third are between a half and one mile away, and a further quarter are less than 2 miles off. One-eighth are in the 2-or-3-mile bracket, and only eight shielings in all are up to $5\frac{1}{2}$ miles away, and these are cases where the settlement has detached pastures or has an extremely elongated shape. This general proximity of the shiels to the homestead in Assynt is a function of the crowding of the area, of its topography and layout, and is yet another reason why cultivation was possible on the shiels.

The size and form of the shieling bothies in Assynt is rather variable, but compared to those which the writer is familiar with elsewhere, they are small and primitive, meriting the customary description of them in English by the Gaelic-speaking local people as 'hovels'. Some are so small as to provoke the thought that Home was not exaggerating when he said the corn was as tall as an ordinary man.

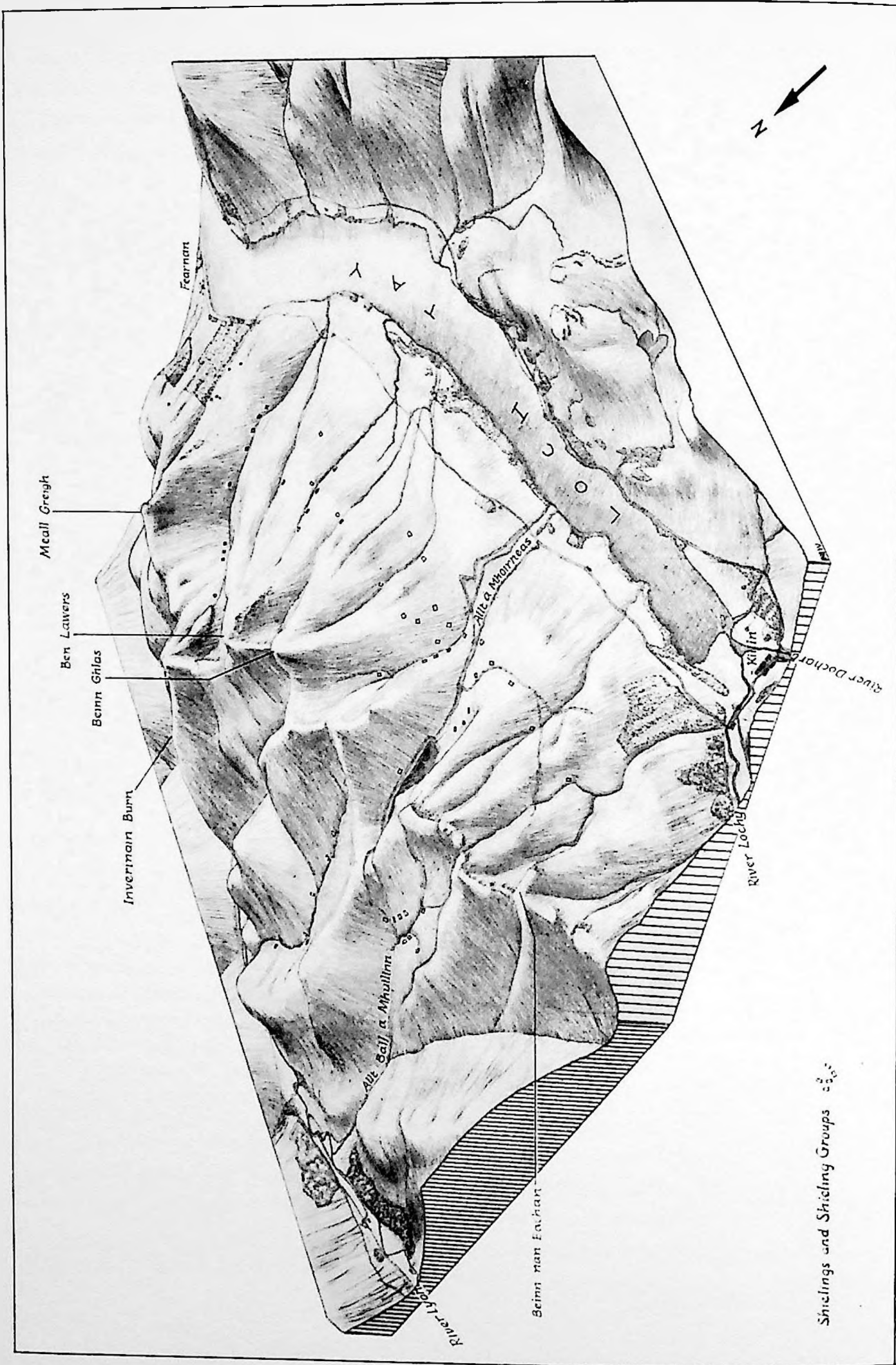
The majority of the bothy ruins are roughly rectangular, ranging from 6 by 4 ft. or even less, up to 15 by 5 ft. with one door in the centre of a long wall.* Some have very rounded corners, some are oval and a few are circular with a diameter of about 6 ft. Occasionally, stone walls up to 3 ft. high remain, suggesting that the original bothy was carefully built, but usually the number and arrangement of the stones suggests that they were merely the foundations for turf walls or were the inner wall only to a turf outer, a form of construction still to be seen in occupied shielings in Lewis. When the local turf has a mineral soil, the shieling is often on a green knoll formed by the ruins of its predecessors. Such knoll-shielings are common in Skye and elsewhere, where there is mineral soil, but the general absence of this feature in Assynt is no doubt related to the high peat content of the soil. The debris of peaty turf does not readily carry vegetation and is thus more easily washed away. In the numerous cases when the shieling ground can be positively identified but no trace of a bothy can be found, we may conclude that they were originally built entirely of peat turf. The writer has seen such a bothy of peat blocks recently built in Benbecula (NF 866502).

Some shielings have only one bothy; two or three is common and occasionally there are several more. Clachtoll (NB 062278) for example has seven and Culkein (NB 021338) has no less than 12. Naturally, the number of bothies is as a rule related to the size and quality of the shieling ground. The excellent 30-acre shiel Clachtoll for example, has two rectangular bothies 5 by 4 ft. and two $4\frac{1}{2}$ by $3\frac{1}{2}$ ft., a 4 ft. circular bothy, and two

* Throughout this article, the inside measurement is given.



PLATE V. Traditional type of shieling hut NB 388436, 500 yards west of A857, 7 miles from Stornoway. This and two similar but roofless bothies stand on grassy slopes of a burn incised into calluna moorland on deep peat. Inside dimensions 6 ft. by 10½ ft. walls c. 5 ft. thick and 5 ft. high inside, slightly higher and stone-built on outside at the door. Otherwise the outside walls banked up by peaty turf. Roof of drift wood covered with tarred felt and some corrugated iron sheets and overlaid by thin inverted grassy turfs. A square foot of glass in roof for skylight. To the right of door on entering, a wooden bench c. 6 ft. long and on opposite wall a wire spring bed c. 6 ft. by 3½ ft. supported on stones and with a mattress of heather bushes. Very well-built interior walls with two inset 'cupboards' 1½ ft. by 1½ ft. and several layers of wallpaper on walls. Open fireplace in end wall on left of door with old bottomless enamelled cooking pot (visible on left peak of roof ridge) as chimney. Wooden cupboard with cups, oil lamp, etc. on back wall by fireplace; a brander for oatcakes. (Photographed in August 1966). (See page 193.)



Shielings and Shieling Groups

PLATE VI. Deshoir: block diagram by Michael Wood, Assistant in Department of Geography, University of Glasgow. (See page 205.)

ovals 4 by 3 ft., and one oval 6 by 5 ft. all sheltering under the south side of a little scarp.

The bothy, however, is not necessarily the only building on a shieling. Very commonly a small circular structure, some 3 ft. or even less in diameter, is found, frequently in a damp cool spot and often showing signs of having had a corbelled roof. This is probably the dairy, or butter and cheese store, a necessity where the bothies are very small and desirable in any case to prevent tainting of the milk, butter, or cheese.

The third type of structure is a pen or fold and this is very variable in size, ranging from small (8 by 10 ft.) to quite large enclosures (25 by 25 ft.) which could conceivably have been stackyards. There is a risk of confusion between large bothies and small pens and the writer would not claim infallibility in differentiating the two. The same primitive mode of construction is used for both, but when the smaller dimension exceeds 6 ft., one may reasonably suppose it was not roofed, for none of the certain bothies are as wide as this. Stone-built pens, too, generally have higher walls than bothies, and the masonry is very open. Bothies, on the other hand, were solidly built and windproof.

Pens would be imperative when calves were being reared, otherwise there would be no surplus milk for the dairy. They would not be necessary for yeld cows or stirks, but no doubt some people would be anxious to safeguard their few stock at night. If ewes and goats were being milked, it would be convenient to pen them between the night and morning milking, to save the trouble of gathering them again. The position of pens is further complicated by the fact that the shieling-ground itself may be walled and, therefore, can be used as a pen for most purposes and one must assume that a shiel would not necessarily always carry the same type of stock.

When the stone-built bothies are badly collapsed, they have almost invariably fallen inwards. This could be because they were corbelled, but the writer has no certain evidence of this. What appears more probable is that the bothies were deliberately destroyed—presumably at the Clearances—to prevent their occupation. The obvious way to destroy a small roofed building is to push it in, not out. It is probably significant that the best-preserved stone bothies are among the most remote, *e.g.* Glenlerraig (NB 188290) where there are two 8 by 6 ft. and one 6 ft. diameter huts high (1,000 ft.) up on the west side of Quinag.

Confusion is possible, again, between certain rectangular pens and dwelling-houses. Since such dwelling-houses would have been black-houses, without gables or windows, there is no certain way of distinguishing them from pens merely by size. When *two* doors are found, however, a house may be assumed: there would seem to be no point in having two doors to a pen. Such houses out at the shieling grounds no doubt represent attempts to create a farm, but we know from local tradition—and indeed from Home—that pasture was so precious that often someone, a 'grass-keeper' was stationed at the shielings to ensure that there was no trespassing by neighbours before they were occupied by their rightful owners. Oldany shieling and house at NB 093307 could be an example. The house (and byre) walls at Culkein, Drumbeg, shieling (107309) may be evidence of

Home's 'vast number of people residing upon this farm who are daily adding to the corn ground by potato improvements'.

On Baddidaroch, at NB 074225, there are several bothies on the shore below the 073228 shieling. These may well be huts of the fishers to whom Home refers (p. 10): 'there are sundry others residing upon this farm whose chief employment is at the fishings'. On the other hand, Culkein shieling (041339), clearly indicated by Home, has its two bothies on the stone beach in the lee of Dunain Head.

Though one of the most beautiful parishes in the Highlands, Assynt today is also one of the most depressed. Home's joint farms are now mostlycrofting townships, but the individual crofts are too small to support a family at current standards. Those which are sheep farms are sharing in the 'robber economy' which is slowly and steadily running down the soils and vegetation of the Highlands. Far from attempting any improvement, the landlord's policy seems to be directed towards creating a deer forest. This may be economical in terms of rent to the owner and rates to the County Council, but in terms of human occupation and the national food and timber production, can only be justified if we esteem this less than deer stalking. For a flourishing indigenous population, the farms of Home's time would require to be single holdings and in many cases amalgamations would be necessary to make them viable at a level which could support cars, telephones and other amenities to compensate for and reduce the isolation which natural conditions would impose on the families concerned. The inbye land of the farms would not be enough by itself: the rough pastures would have to be utilised to the full by every type of suitable stock, including red deer, on a ranching basis and the cowboy shepherds would again have to devote attention to the shieling grounds, building up their fertility with lime and artificial manures, and possibly erecting open shelters there for the stock. Whatever the method, the shielings would certainly be the foci of exploitation of the rough pastures.

North Lochtayside

In 1769, the third Earl of Breadalbane caused his Lochtayside estates to be surveyed as a prelude to their improvement. The resultant maps and descriptions are in Register House, Edinburgh, but Miss McArthur (1936) has published two specimens of the maps, the descriptions in full and a valuable discussion of them. This material gives a general indication of the shielings in that it shows the divisions of the hill pastures and names eight shieling grounds, but it in no way defines them nor relates them to individual farms as does Home's survey. The area, however, offers interesting contrasts to Assynt and the North Tayside portion of it, therefore, mapped by John Farquarson, was examined in detail on the ground by the writer. Some 65 shieling grounds with a total of about 450 bothy ruins were identified and a study of air photographs suggests that there are more, but as it has not yet been possible to confirm them on the ground they are not included here (Fig. 2). The region is only about one-third of the area of Assynt and the terrain is very different.

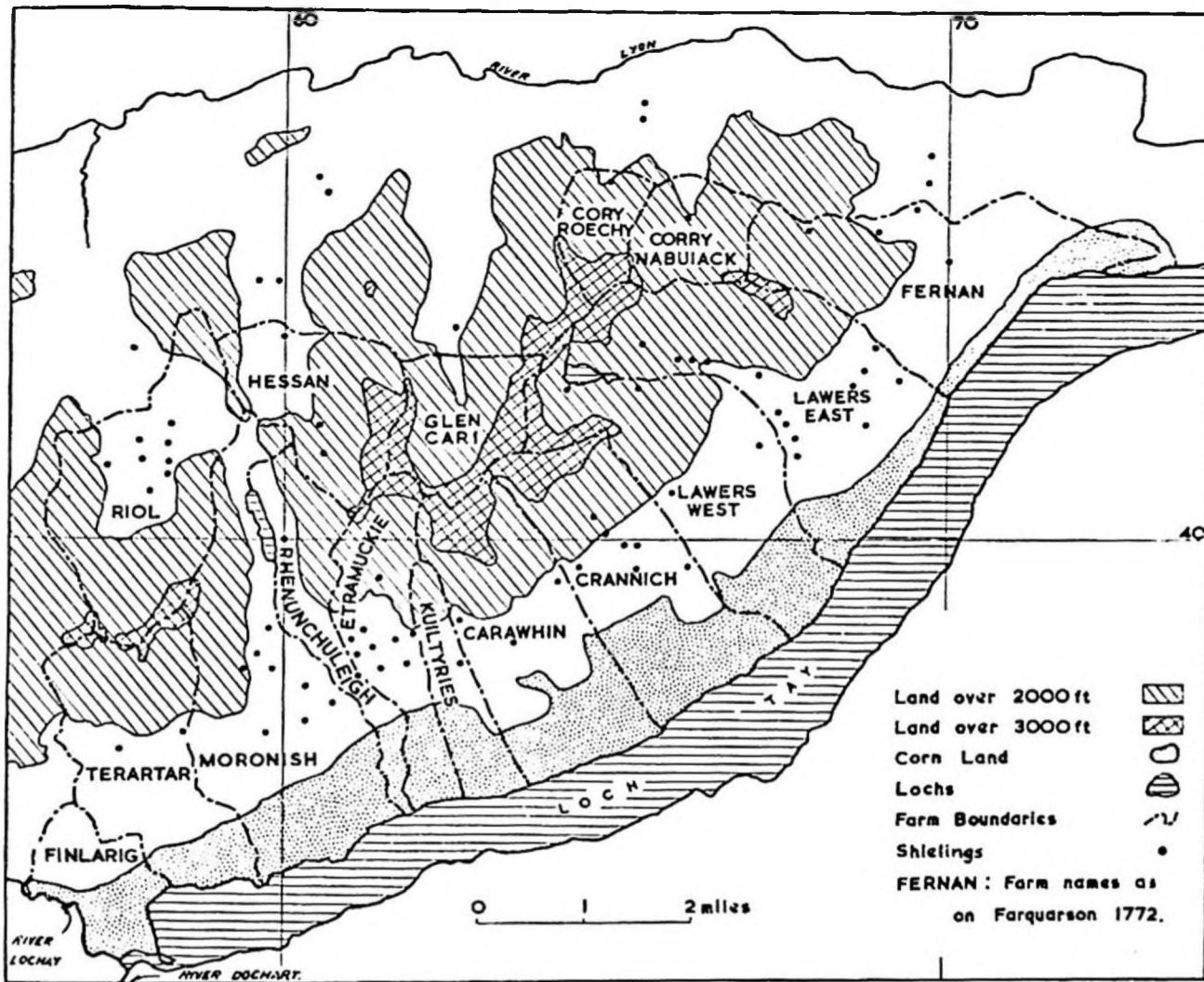


FIG. 2 North Lochtsayside (Deshoir) with farm boundaries and farm and shieling names from Farquarson's map dated 1772. Shieling sites located by fieldwork.

The Central Highlands are for the most part obviously a dissected plateau, but the valleys of Loch Tay and Glen Lyon are so close together and so deep that their tributaries have cut vigorously into the intervening block of high ground and reduced its original plateau form to a sinuous watershed ridge, from Beinn nan Eachan in the south-west to Meall Creigh eight miles to the north-east (Plate VI). This ridge is well over 3,000 ft. high throughout and rises to almost 4,000 ft. in Ben Lawers. A major break occurs in the west where the Allt a' Mhoirneas and Allt Bail' a' Mhuilinn head back on each side of the ridge and produce between them a col at about 1,800 ft. Two similar but higher cols occur; in the centre at just over 3,000 ft. on the north-west side of Beinn Ghlas, and in the east at just under, 2,750 ft. between a tributary of the Lawers Burn and the Inverinain Burn. All three of these cols, especially the first, are important in that they give access to the high pastures. The three-mile-wide strip of country between the summit ridge and Loch Tay slopes steeply from the summit and then flattens out a

little to give something of a bench at around 1,800–2,000 ft. This may be structural but may recall the pre-glacial valley and if so is genetically an 'alp'. It certainly carries most of the shielings on this side of the main ridge. Below this bench, the slope steepens and then flattens out again between about 900 ft. and Loch Tay (350 ft.). This last zone constitutes the farmland, which almost exactly coincides with it.

On the north side of the summit ridge, the streams are more deeply incised than on the south and in contrast to the relatively smooth braes descending to Loch Tay, the interfluves of the River Lyon tributaries form a series of spurs of high ground running north from the main summit ridge.

There has, of course, been glacial modification. The main summit ridge has suffered severe erosion and is flanked by corries, often with cliffed walls: that on the north-east side of Ben Lawers being particularly fine, but the head of each of the north-flowing streams has been opened out by corry action into an amphitheatre which affords obvious sites for shiels. The slopes below some 2,500 ft. are mantled in drift, often of considerable depth, as can be seen where the streams are incised into it. At worst, where this drift is clayey and on a gentle slope, it may be impervious, and above 2,000 ft. sometimes carries peat-bog. At best, when it is under slope and south-facing as on Loch Tayside, it carries excellent pasture. The inbye land along Loch Tay is, unfortunately, fragmented by wet spots in the drift and, in places, by morainic boulders and *roches moutonnées* created by the main Loch Tay glacier derived from Glen Dochart and points west.

Assynt may be taken to exemplify the poorest conditions in the Highlands; North Tayside some of the best. Pennant (1774) states that in the 15 miles from Finlarig to Lyon, there were 1,780 souls and that the 'abundance of inhabitants on this side surpasses that of any place in Scotland of equal extent'. The 1,780 souls would represent some 400 families, a figure which accords well with the 450 bothies mentioned above.

The topography has been shown to be favourable, the structure is no less. The massif is formed of a complex of schists, metamorphosed sediments whose break-up under normal processes of rock decay yields relatively abundant plant nutrients. In the high, steep zone where such decay is most active, are found the richest pockets of arctic-alpine vegetation in Scotland. Being almost in the geometrical centre of Scotland, oceanic influence is minimal. Rainfall is not excessive for a mountainous area; cloud is much less than in the west and south-facing slopes enjoy a fair modicum of sunshine. Farquarson indeed titles his map 'Deshoir', apparently from Gaelic *Deisear*, 'looking south'. Winter conditions are relatively hard, but this means that much of the precipitation is in the form of snow, below which the sub-soil drains as usual. Snow-melt disposes of the precipitation quickly, in contrast to conditions on the west coast where the ground is continuously sodden for long periods. On the other hand, the liability to snow is so great that stock must be withdrawn to the lower pastures in winter.

The appearance of Deshoir in summer, however, is of grassy braes which it would be difficult to match anywhere in the Highlands, and we may suppose that it is this richness of upland pastures which attracted vigorous shieling activity, at least as great as in

Assynt where sheer poverty must have driven the farmers to exploit every possible pocket of pasture. The other contrast is in altitude: all the Deshoir land is from 350 ft. to 2,000 ft., with the majority of the shiels at this upper level. In Assynt, by far the greater part of the land-use was below 500 ft.

Farquarson's classification of farmland is (1) infield; (2) outfield; (3) meadow; and (4) grass. The infield is mostly below the road (A827), the outfield above it and below the hill-dyke. 'Meadow' refers to the grass in the wet spots and 'Grass' is the remainder of the ground below the hill-dyke, including fallow infield and outfield.

Outside the hill-dyke, Farquarson classifies the land into two groups, 'Muir' and 'Sheallings'. 'Muir' is the area 'from the hill-dyke to the skie of the hill betwixt Glen Lyon and Loch Tayside', *i.e.* to the watershed. This is divided on his map into ten strips, each forming a common for a 'township' group of the 48 farms and running from loch-side to watershed. The writer has found some 50 shieling grounds and 300 ruins of bothies in these commons. Under 'sheallings', Farquarson lists Riol, Hessian, Glen Car, Corryrockie and Corrynabuiack, his phonetic rendering of the Gaelic names of the corries on the north side of the watershed. Riol (O.S. Riadhailt), he says, belonged to Deshoir and was common to all the farms there, which would account for the no less than 84 bothies in about one mile of glen. The other four glens belonged to Glen Lyon but were open to Deshoir people for six weeks' shieling.

Farquarson's survey, like his spelling of place-names, is less than perfect and his mapping of the hill section of Deshoir is, as might be expected, less complete than that of the farmland. North of the watershed, he seems to have worked by hearsay. Only three shieling-bothies can be found in the part of 'Glen Cari' (O.S. Allt a' Chobhair) that he marks on his map as available to Deshoir, but there are 15 bothies in two groups just north of his line which presumably, therefore, should be displaced to include them, especially as this would make it coincide with a boundary fence on the ground.

'Corryrockie' (text), 'Cory Roechy' (map) (O.S. Coire Thaochaidh), is the upper 'hanging' section of another Glen Lyon tributary. It contains, at 2,000 ft., at the lower lip of the corry (NN 648457) a swarm of some 20 Deshoir-type bothy ruins on a wet boulder-clay slope. All of these are well banked-up, indicating turf construction and a need for drainage. Less than a mile to the north, but 500 ft. lower, are the ruins of the Glen Lyon bothies, of a different pattern.

'Corrynabuiack' (O.S. Coire na Buidheag) is the next Lyon tributary, with a wide, almost flat-floored, upper section at 661451 and here, again at 2,000 ft., are the Deshoir bothies, some 30 of them in characteristic Deshoir style, but very ruined, as if they had been abandoned at an early date. The upper Fernan bothies again are at 2,000 ft. and here there is the unusual feature that the Tayside/Glen Lyon boundary is along, not across, the burn. Not surprisingly, Farquarson notes that there was 'disputable' ground here, for the burn is easily crossed.

We have seen that the Deshoir shieling grounds are common, not particular, as in Assynt. It is not surprising, therefore,—especially in view of their 2,000 ft. altitude—

that no evidence can be found of farm cultivation or enclosure, nor can an example be found of a shieling bothy which has become a farm dwelling, now or in the past. This is all the more striking in that just outside the area there are two examples of this development: at NN 545393, Airigh Dalach (1,650 ft.) has become a clachan of five houses, subsequently abandoned; and at 572435 Allt Bail' a' Mhuilinn (1,250 ft.) there is a substantial abandoned clachan. At 555403 Allt Fionn Gleann (1,850 ft.) there is an excellent shieling ground with several ruins, three of which could have been farmhouses.

On most of the shieling grounds, vestiges can be seen of what is presumably an early bothy type, now only a low circular dimple in the turf some 5 ft. in diameter (Plate VII). The majority of the Deshoir bothies, however, are in stone and conform surprisingly closely in size and pattern. They are usually rectangular, some 18 by 6 ft., with the door in the centre of a long side. The walls are well built, taking advantage of the flaggy nature of some of the schists. Wall recesses (Plate VIII) are a feature of almost all bothies. These 'cupboards' are some 12-18 in. wide, 9-12 in. high, and 9-12 in. deep. There are usually two in the end walls, but sometimes they appear on the side walls, and occasionally there is a double row of them. The highest walls standing are just over 3 ft. high and this would seem to have been their maximum height. One Riol bothy, at 580407, still has the lintel on the door at this height and in several other instances a fallen lintel appeared to have come from a similar situation. Such a door is, of course, more suited to a sheep or goat than a human being, but it seems unlikely that the best buildings should be for sheep and moreover we know from travellers' comments in the eighteenth and nineteenth centuries that even the doors on the home farms were low by any standards.

While the inside wall of the shieling huts is nearly vertical, or was so originally, the outside wall is generally banked up in turf, and such have from outside the appearance of a green mound. There are, however, numerous cases where the outside banking is absent and the hut is free-standing. This seems to be the case where exposure to wind is less. Many Deshoir shiels are scarcely ruined at all, *e.g.* at Hessian (NN 605418) many could be roofed now without repair. This is no doubt partly because of the serviceability of the building stone, but as there was no Clearance in the Sutherland sense, there would be no deliberate destruction.

The little 'dairy' of only some one or two square yards is common, sometimes as a separate structure in stone, sometimes an older, circular, turf hut seems to have served. In certain cases, notably the Hessian huts, the inner end of the hut seems to have been corbelled, presumably to serve as a dairy.

Small pens or folds are often found, sometimes irregular in shape, taking advantage of natural features, sometimes free-standing and sometimes built on to the bothy, the long dimension of the bothy being the short dimension of the fold. In a few cases, *e.g.* NN 608374, the 18 by 6 ft. bothy has a small annexe 5 ft. square, which could be a dairy or a space for two or three calves.

Within the Deshoir area, there is a conspicuous divergence from the 'standard' 18 by

6 ft. shiel in the curious group of 40 ruins along the Lawers Burn, from NN676412 to 67419. Here the bothies are simple in the extreme, being only one or two stones high, presumably as a foundation for turf walls. They are up to 27 ft. long, but 6 ft. or less in width and have an open end on the uphill side. Most are aligned with their long axis down the slope, which is in places rather steep for a bothy. The only other bothies of this type are at 610382, where there are six bothies strung across the edge of the bank above the stream. There is no obvious explanation for this wide divergence from the usual pattern.*

As might be expected, there is a distinct tendency for all the bothies of a group to be similar, not only in size but, for example, in the provision of cupboards. The Hessian shiels (at 605418) are distinctive in that they include several pairs which are semi-detached, a feature which does not occur in other groups.

The favourite site for the bothies is along the edge of a stream which is cut into drift. Thus good soils and pasture are combined with free drainage and a convenient water supply. The bothy sites on the south-east side of Ben Lawers, at 663428 on the Lawers Burn, at 658408 on the Cuiltrannich Burn, at 661396 on the Chireinich Burn, at 644396 and 642394 on the Allt an Tuim Bhric, at 626388 on the Allt Coire at Chonnaid, and from 611379 to 611385 on the Burn of Edramucky, are all of this character. They are inconspicuous in that the bothy-mounds match the natural topography and are often within the incised valley. Concealed shielings are the Mahuaim bothies, at 653431, which take advantage of ground which is 'dead' from below. The Hessian huts, at 605418, and the main Edramucky group of 17 shiels, at 614394, get shelter from weather and sight behind the highest stadial moraine of their valley. Many other huts, being on little benches, such as those at Ardvoile, at 587369, or at the Miltown of Finlarig, at 576367, are invisible from below. In bold contrast are certain shiels which, surprisingly, are out on convex slopes, away from water. Such are the string of 29 Kiltyrie bothies which, from 620380 to 620385, line the zig-zag track climbing up to the peat-grounds on Leacan Ghlas. Three boldly conspicuous shiels at 594379 are also near a peat-track. In the upper Allt Bail' a' Mhuilinn the 84 Riol huts, from 580407 to 583418, occupy virtually every possible site, and all are within hailing distance of their neighbours.

The above considerations no doubt have some relation to the troubled days of cattle-lifting and clan warfare. The Deshoir area is vulnerable in being on two main through valleys, and being itself crossed (by way of the western col, which now contains the hydro-electric power reservoir) by a major drove route. The writer has often noted that while the main group of huts is sited so as to be inconspicuous, one of the bothies is sited so as to be visible from the home farm, no doubt partly that the latter might easily be reassured by signal that all was well at the shieling, but also so that an urgent call for help in trouble could be signalled down from the shiel. The writer suspects that some

* At NN 653431 there is a unique structure 15 by 27 ft. with a 15 by 6 ft. enclosure at one end, piled up with large flattish stones as if a 15 by 6 ft. *corbelled* shiel had been attached to a 15 by 21 ft. pen. The other two bothies of the group are of the conventional Deshoir type.

bothies were deliberately sited to act as signal stations, where the contours prevent the home farm and shieling ground from being mutually visible. For example, there is a bothy at 672426, on a small shelf, from which both Lawers Farm and Lawers shielings can be seen, though the convexity of the slope makes them mutually invisible. The solitary shiel at 608374 may well serve a similar function in communicating news of movements in the pass to the farms on the lochside.

While Deshoir is, by Highland standards, good agricultural land, it is not conspicuously prosperous at present and in particular the high pastures are perhaps not so intensively exploited as they might be. The original 1,774 farms were small, having on average only some 26 acres of infield and 20 of outfield, and they were not only held jointly by two or three tenants, but carried an indeterminate number of 'crofters' as well. In the late nineteenth century, they were converted to single holdings and most of the farmhouses date from this period, but even these farms were small by current standards. The hill pastures, moreover, were still run in common, with the farmers in each township clubbing together to employ a joint shepherd. The last war saw the final break-up of the estate and currently a further process of enlargement of holding is taking place by the amalgamation of farms. Some, indeed, like Shenlarich and Carie have become as big as the old townships. With owner-occupancy and increased capitalisation, one may expect improvements to occur on the land. Unfortunately, individual tenure extends only to the hill-dyke: the high pastures are still run in common, and commons are notoriously nobody's responsibility when it comes to improvements. It is particularly galling that this should be so on Deshoir for the high hydro-electric service roads would allow access to motorised transport carrying lime or fertilisers, and for the extra surveillance should cattle be run on the hills. There would seem to be no prospects of change, for the interest of this area in plants and other natural phenomena is such that it has been taken over by the National Trust, who do not allow pasturing by cattle and who presumably would not wish a deliberate change in the pastures even if it were an up-grading.

Inner Hebrides : Rum

Poverty-stricken conditions in an island (and therefore isolated situation) are well exemplified by the Isle of Rum. It is of compact shape, some 8 miles by 8. The northern half, from Guirdil to Kilmory and a narrow coastal strip round to the south-end, is a lumpy hill mass of resistant Torridonian sandstone whose surface is sometimes smooth and naked as the result of the passage of ice, sometimes cragged where the bedding outcrops. The remainder of the island has been carved from a Tertiary intrusive complex and the rugged topography is much influenced by structure and lithology. The main high ground is in the south-east, culminating in Askival at 2,663 ft. but there is a subsidiary granite block in the west, crowned by Orval at 1,872 ft. Drainage, roughly speaking, is radial to these two blocks, but the Kinloch and Kilmory rivers combine to

create a low-level through valley, the Kilmory valley being fault-guided. Slopes are everywhere steep and rough and it is only in the larger valley, at Kinloch, that any low-gradient terrain worthwhile for agriculture presents itself. At Kilmory, valley soils are supplemented by blown sand, but at Guirdil and Harris cultivation was in patches here and there on the lower valley slopes where opportunities presented themselves. Raised

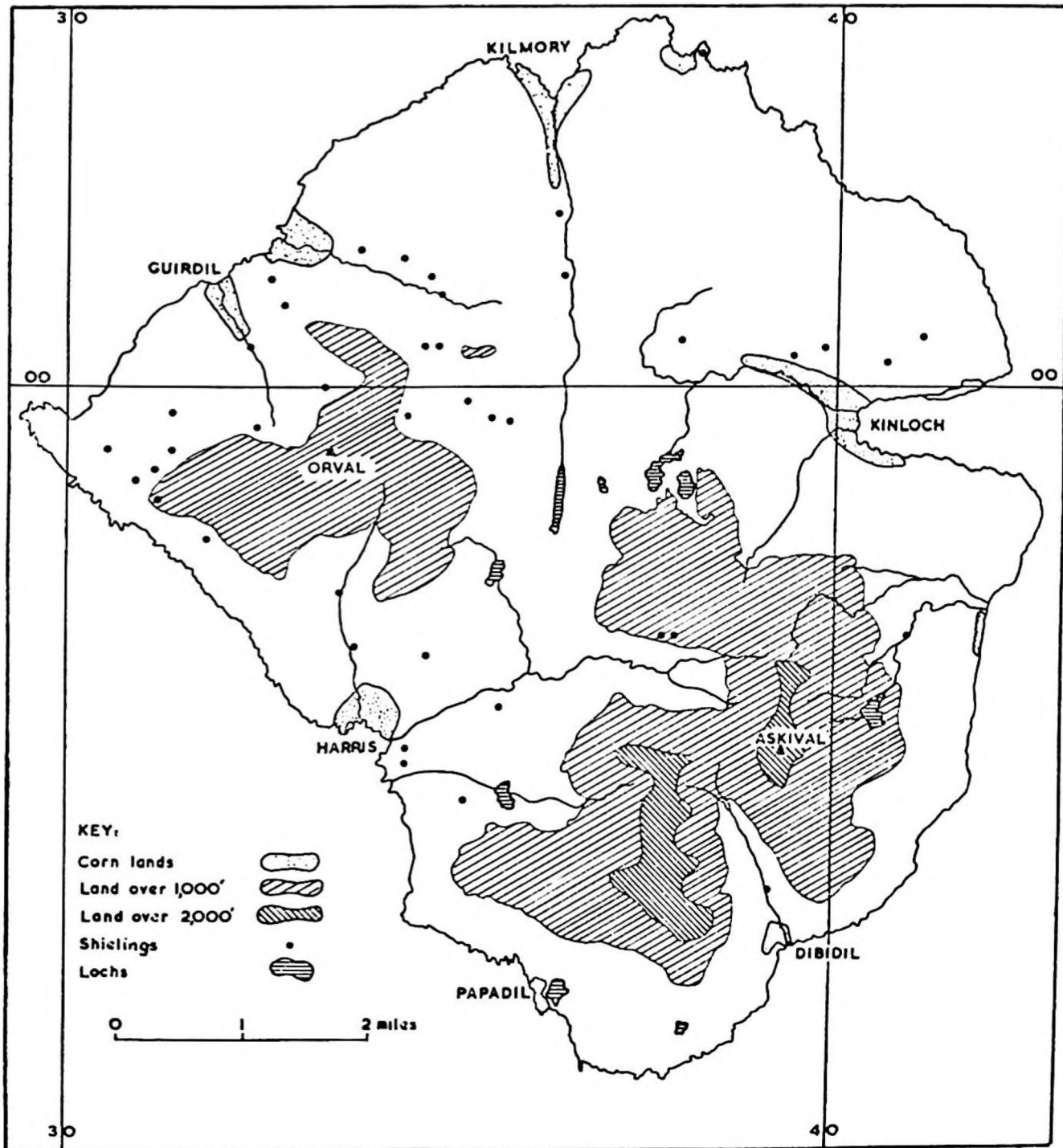


FIG. 3 Isle of Rum. Shieling huts identified by fieldwork, mainly in association with Mr J. McCully. There are from 1 to 12 bothies on each site. (See p. 212.)

beaches occur in places, but are mostly rock-cut and for the most part the coast is steep. Rhum thus lacks the coastal flats which are often favoured ground in the inner Hebrides. Pressure of population, however, forced the cultivation of even the poor areas, such as Dibidil, and some lazybeds are found in small patches elsewhere. Pennant (1774) speaks of nine farms, but at its maximum (1795) the population reached 445, an almost incredible total, and even allowing for abundant herring and other fish, pressure on subsistence must have been acute. The numbers and distribution of shieling sites bear this out (Fig. 3). The writer has examined some 140 bothy structures in the island, and Mr J. McCully has plotted several more.

Only a few of the shielings are of a quality to compare with even the poorer ones of Tayside, and these are in the pitifully few relatively-sheltered valleys, at NG 363023, 364015, NM 392934, 335973, 305992 and NG 323005. At all these sites the ruins betoken carefully-built bothies, convenient to a stream and with pasture adjacent. Little pockets of better, sheltered ground are occupied at 347005, and, astonishingly, at 1,000 ft. on Barkeval where a landslip terrace forms a shelf (379967). Elsewhere, the shieling grounds are extremely poor and the bothies roughly built. If the 445 population be taken to represent 100 families (probably less) then there would seem to have been almost two shiels per family. This is, no doubt, because the pasture at any one site would quickly be exhausted and the stock would have to move at least twice in one season. The evacuation of the island in 1827, by mass emigration to Nova Scotia, means there has been a long period of neglect of the bothies and it is not surprising, therefore, that these are generally more ruinous than where they were occupied up to a much later date. Probably the least ruined shiel on the island is the high one at NM 379967 and, no doubt, conditions there required a soundly-constructed bothy. At NG 408004 a small corbelled beehive cell is still intact, probably because it takes advantage of a solid outcrop. A feature of the bothies of Rhum is their great variety of form. In plan, however, a great many of them share the characteristic of consisting of a small rectangular pen, averaging some 9 by 6 ft. with, opening off its inner end, a circular bothy only large enough to take two people in cramped conditions. This 'snowman' shape—rectangular bothy with round head—is also found in South Uist and Benbecula.

Two unique structures may be mentioned, though neither may be a shieling hut. At NG 382044 down on the beach, there are three contiguous circles some 6 ft. in diameter and $4\frac{1}{2}$ ft. high (of a pattern found in Skye) which may represent fisherman's bothies (Plate IX).*

* At NM 312985, on top of a 1,000 ft. cliff and set in a stony block-field totally devoid of pasture, is a half-moon wall with the cliff for its straight side, some 200 yards across, and in the wall at intervals are seven oval cells 5 by 10 ft. with walls 6 ft. high, corbelled but not closed at the top and half-sunk in the ground. In the centre of the enclosure is a pen 18 by 15 ft. with very open-built walls. It is scarcely possible that this could be a shieling, but it may be an installation from which to stampede deer over the cliff. The ground rises steeply inland from it and at the present time deer keep close to it when moving round this side of the island. The cliff has a bench of raised beach at its foot and a nearby gully gives access to it, both convenient for the recovery of dead deer.

Canna

The neighbouring island of Canna stands in considerable contrast to Rhum. It forms a minor hill mass, reaching only 690 ft. at its highest point and the almost horizontal lava-flows of which it is built form gently-sloping terraces separated by steep outcrops, especially in the eastern part of the island. The lavas, moreover, weather readily, so that the lower terraces carry a fair depth of reasonable soil. It is not surprising, therefore, that although it is only a fraction of the size of Rhum, it carried a population of about 300 at its maximum. The site of the ancient settlement, in a low sheltered hollow, is still marked by a Celtic cross, at NG 268056, and on the terraces immediately to the north-west, and 300–400 ft., above it, a series of ruined bothies can be seen, each with an enclosure of about 2 acres of deep brown sandy soil. No doubt these represent early shielings which later became virtually outfield, rather as in Assynt. Near the head of the burn at 265057, in a typical sheltered shieling situation are a further three bothy ruins, and again at 277059 and 278058 nearby are two groups on excellent pasture watered by Allt Thaligaridh, 'the burn beyond the shieling'. All of this is so compactly situated as to be now in one farm, worked from a single steading.

Outer Hebrides: South Uist and Benbecula

It is interesting to turn to the Outer Hebrides as an example of both a different environment and one in which remoteness has encouraged the persistence of old ways. The bed-rock is Lewisian gneiss as in Assynt, stripped bare by glaciation and offering mineral soils only in the small areas where glacial deposits occur. Elsewhere the gneiss is bare or covered by blanket peat and wet heather moor.

South Uist and to a less extent Benbecula has a north-south zoning of different environments. The eastern coastal strip is rocky and hilly and the coast steep-to, with no raised beaches. The centre is a low rocky plain, with glacially-excavated hollows and irregularly-dumped glacial till. The west coast is an almost uninterrupted line of dunes, separated from the low rocky plain by either shallow lagoons or machair plains which represent the infilling by blown sand of such lagoons. In places the sand has been blown on to the rocky central area and this admixture of calcareous shell and peaty mineral soil offers the best arable land and here the main settlements are to be found. The nearby machairs to the west afford further arable or pasture; the black land to the east is the rough pasture and here the shielings are to be found. The modern north-south road runs to the east of the farmland and thus is not far from the shieling grounds. Many ruined bothies can, indeed, be seen from it, such as at NF 784337, 776330 and 749276. The latter may indeed be the shieling where Flora Macdonald concealed Prince Charles: it is little over half-a-mile from her birthplace and must have been known to her. This series of huts, and others further from the road, *e.g.* the fine group of seven huts at NF 801352 and of four huts at 802215, are aligned at the foot of the hills clear of the bogs on the flat ground. Other groups of shiels are to be found in the two through east-west

valleys, at NF 779294, 803296 and 800287, though the latter, Arinambane later become a croft, now abandoned. In the valley to Loch Skiport are the two fine bothies of Airigh nan Achlais, the shieling of the hollow.

In the Uists and Benbecula, blanket bog is so prevalent and peat so deep, that often stone is not easily available for the construction of bothies. As a result, two very special sites are sometimes used. One is in the debris of a frost-shattered glacial erratic, where these fragments, fallen apart in a rough circle, are used as the base for a bothy. The other, even more remarkable sites, are in prehistoric structures. Thus at NF 779362 and 813526 prehistoric chambered-cairns have been re-worked to form shieling bothies, and at 816525, Airigh na h-Aon Oidhche, the 'Shieling of the One Night', the macabre character of a bed-room in a Bronze-Age tomb is reflected in the folk-tale of the two young shepherds who, unlike their dog, which had the wit to flee, stayed One Night there with the fairy maidens and were seen no more.

Because of the necessity to build in peat divots most bothies would be highly impermanent and often only vestiges are to be seen today, as at NF 792448, 798449, 802445 and 805440 on the Loch Carnan road and at 792348 where there is one turf bothy and several mounds in the peat.

Although there is better arable there, the writer has found fewer shielings in Benbecula. Presumably the poor crofts, now abandoned, in the rocky eastside were once shielings like those still visible in this area at 838517.

North Uist

In North Uist, there is blown sand on the west and north-west coast, but the north-south zoning of South Uist is absent. The main croftland is on the sandy coasts, but there is sporadic settlement elsewhere. Shielings again tend to be on the lower slopes of the gneiss hills, the names of which often have the suffix '-ary' indicating shielings, but there are notable exceptions, *e.g.* at NF 767730 where the shieling makes a bare splash of green half-way up the brown heathery hill of Ben Risary. At 794704, there are two fine groups of bothies at 350 ft., the upper five huts possibly being formed from a prehistoric structure. At 747714 and nearby at 750713, Bronze Age tombs have been converted to shieling huts. The Park report (Caird N.D.:39) refers to no less than 26 buildings at Airigh na Gaoithe, 828677, but the writer has not had an opportunity to visit this site. North Uist has some notable examples of shielings at sea level and not surprisingly these have been at one time croftland. At 897714 there are three bothies crowning conspicuous knolls formed by the debris of their predecessors. Two crofts have been formed on the improved ground. At Airigh an Obain, 873598, the 'shieling on the bay', the ruins of both shieling bothies and the houses of the clachan that superseded them are to be seen. At 767744, 'MacRory's shieling' is occupied by the vestiges of a clachan of no less than 12 longhouses and seven barns, some with kilns and one, at 763750, with an almost perfect specimen of the little low Hebridean corn-kilns.



PLATE VII. One of several shielings at NN 583416 in Allt Bail' a' Mhullinn $3\frac{1}{4}$ miles west of Ben Lawers. Simple banked-up type, either older pattern bothy or a cheese-store. (See page 208.)



PLATE VIII. Ruined shieling hut in Lewis at NB 388436 (*cf.* Fig. 1) with wall 'cupboards' similar to those of North Lochtrayside. (See page 208.)



PLATE IX. Isle of Rum NG 382044. Unusual intersecting-circle type of bothy. On (?raised) beach and therefore probably fisherman's bothy. A type characteristic of Skye: *cf.* Skye squatters' clachans on both sides of Loch Scresort. (See page 212.)



PLATE X. Airigh a' Bhealaich, Lewis. One of a dozen occupied traditional shieling huts in Abhainn Dhubh, 5 miles south-south-east of the Butt of Lewis where there are ruins of a further dozen and as many modern 'airighs'. Occupied as holiday huts from May-September. (Photographed in August 1966.) (See page 216.)

Harris

The writer has not searched the hills in the interior of South Harris, but in the lower ground, shiels are rare. There is one at NG 108965 for example, which has become a croft and then abandoned, and there are two seashore bothies at 085977 which were probably fishers' or kelp-burners' huts, not shiels. The reason for the dearth of shiels is to be found in the circumstance that population was cleared off the good sandy land in the west and forced to settle in the east on what they could find in that remarkably barren wilderness of bare gneiss. Thus, we may suppose, shielings would become crofts (Caird 1951). As soon as one enters North Harris, however, where the story of land-holding is different, shielings appear. On the road north of Tarbet, they are to be seen in classic situations at NB 145044 (three bothies with one 'dairy' roofed by a single slab, menhir-like); 152051 (four bothies); and 167049, two very ruined huts in the col, possibly originally a refuge for travellers. At NB 109046, to the west, a ruined bothy is surrounded by lazybeds and there is evidence of an abandoned clachan by the shore.

Lewis

If shieling huts are few in Harris, they positively abound in Lewis; Airigh place-names are common, and bothies of all kinds can be seen everywhere, from ruins of early types, through traditional forms still maintained, to wooden, corrugated iron and tarred felt huts of all degrees of trimness and squalor. In 1964, when the County Assessor placed a valuation of £2 on them, the local M.P. was able to convince the Secretary of State that 'Lewis crofters traditionally used the shielings for a short period each summer for keeping watch on cattle grazing on the moors while the village pastures were rested' (*Glasgow Herald*, 18 Sept. 1964).

It is impossible to deal adequately with the Lewis shiels here; suffice it to say that they are exceedingly numerous, mostly very well built and were in many cases still in active use for cattle until 25 years ago (Moisley 1962). Lewis is almost entirely of gneiss, which forms barren rocky hills in the south, a low rolling plateau covered with blanket bog in the north. Settlement is overwhelmingly coastal, and arable land scarce. Presumably, therefore, as in Assynt and Rhum, the great development of shieling arises from the necessity to exploit every possible scrap of pasture. Possibly there is a cultural factor: Lewis was dominated by the Norse as the place-names still testify, and among these '-shader' frequently occurs, being the Gaelic form of *saetr*. We may note that shieling practice is here of considerable antiquity for the Norse speech died out during the Middle Ages.

Because shieling huts are to be found in all stages of collapse, it is possible to envisage what form ruins elsewhere may originally have had. In Lewis, some are built of a double stone wall with peat infilling, as are many of the old 'black houses'. In decay, the stones fall away and leave a characteristic turf ridge. On the other hand, a bothy at NB 109299, still roofed and in use as a henhouse, is collapsing because neglect of the roof is allowing

the peat to be eroded out from between the stone walls. The currently maintained, traditional-type shiels have an inside stone wall so well built that it can be and now usually is wall-papered. This inner wall-face is supported on the outside by a peat or earthen bank at least 6 feet thick at the base, and often more. These well-built huts often have a fireplace against the gable and all stages of evolution from simply a fireback, through supports for pots, to an actual flue-recess in the gable with a chimney above, are to be found. The only external sign of sophistication on most of the maintained traditional huts is a modern fire-clay chimney-pot, and this introduction enables the fireplace to be moved to the side wall, which is more convenient than its former position, at the end, between two corner doors. The fine dry-stone work, also, allows a proliferation of wall cupboards, but in neglect, these often contribute to the downfall of a wall.

Typically, the old shiels are some 12 by 6 ft. with more or less rounded corners, and with the long axis down the slope. There are opposite doors at the downhill end of the sides and a good gable, partly because it is free-standing, unlike the other end which is often let into the ground, and partly, as stated above, because it must act as a fire-back.

But the most interesting site in Lewis—probably in Scotland—from the point of view of shielings, is the little mile-long valley of the Abhainn Dhubh some 5 miles south-south-east of the Butt of Lewis. It contains some 12 traditional bothies, still occupied, with a few modern huts, and so well does it represent the blend of Norse and Celtic influence in Lewis that the seaward end of the valley is Cuiashader—probably from Norse ‘shieling of the fold’—and the inner end, in something of a col between two low hills, is Airigh a’ Bhealaich, the Gaelic ‘shiel of the pass’. The traditional huts conform very closely to type (Plate X), although one of them was built as recently as 1958. The single door is about one-third of the way along a long wall and formerly the cow(s) occupied the smaller portion, the people the larger. The shiel is thus a miniature of the traditional ‘black house’. The cattle portion is now generally a neat kitchenette, often with calor gas, but in spite of this and the odd armchair or iron bedstead, the whole effect is of a simplicity second to none in Europe.

Orkney

Norse influence in Lewis has been mentioned as related to shieling customs: we may therefore examine the situation in Orkney, the metropolitan area of Norse power in Scotland. Here the farm name Seatter occurs singly several times, and compounds such as Massater, Gransetter are fairly common. The late Dr Hugh Marwick, the authority on Orkney place-names, was uncertain whether the old Norse root involved is ‘seter’, a hut, dwelling, or ‘saetr’ a shieling (Marwick 1931:9). Certainly, the writer can find nothing resembling a Highland shieling anywhere in the mainland of Orkney except at the Styes of Aikerness. Marwick considers that ‘the Norwegian saeter system would be unnecessary over here where the “hill” is never very far away’. This is very

reasonable, and the oral evidence of the old people at the present day is that cattle were taken daily to the hill pastures and brought back at night. On the other hand, as is so well exemplified in Assynt, shiels may be very close to the farmstead. In Fair Isle, there are what would appear to be shiels at HZ 217726, less than a mile from the uppermost farm, which is, as it happens, called Vaasetter. In the Isle of Man, another small island with Norse influence, Davies (1956:111) recognises indications of former shielings in close proximity to the main farmsteads, and the writer has seen shielings in Fjaerland, Norway, only half-a-mile from the farmstead.

Marwick (*ibid.*) goes on to point out that the sixteenth-century rentals of Orkney include 25 'setter' farm-names, and that their taxation status proves that they were then secondary settlements. It would seem, therefore, that as in Lewis, shielings were in use in early Norse times about a thousand years ago. Orkney has very much better land than any Highland region and, as population increased, it would not be difficult to push arable cultivation outwards from the original settlements and within five centuries to have established permanent settlements on what were originally shielings. This colonisation of the hill pastures left such a small area of rough pasture that presumably it was not worth persisting with a shieling system. In the Highlands, of course, the great majority of the shieling grounds are far too poor for conversion to arable farms.

Marwick (1922:23) also considers that Gaelic *Airigh* appears in Orkney, e.g. Airafea, the 'shieling on the hill'. If this represents a survival from pre-Norse days, it gives great antiquity to the custom of shieling in Scotland, though it would seem to be possible that such a Gaelic word could reach Orkney during the period of Norse dominance of the Hebrides (pre-1266).

The Styes of Aikerness, HY 366228, referred to above are in the upper reach of the Burn of Woodwick in a very typical shieling situation. The farm of Aikerness is $2\frac{1}{2}$ miles away as the crow flies and is one of the original settlements, on a favoured site close by the sea. There are two mounds at the Styes, one turfed over, the other, the 'Styes' proper, consisting of a mass of large stones very roughly dispersed in a 9 ft. square. One corner has been rebuilt into a small bothy and roughly roofed with flags, now tumbled in. It has every appearance of antiquity but, through the good offices of Mr E. W. Marwick, it was possible to interview Mrs Scott of Goldro, the nearest farm, who in her youth, some 70 years ago, herded cattle at the Styes and claims to have built the little bothy in the corner of the Styes 'for shelter in which to knit and make tea'. She resisted any suggestion that she or anyone else ever spent the night at the Styes: the cattle were taken up in the morning and back at night. To the suggestion that this long daily trek would have an adverse effect on their milk yield, and that she would have been better to milk them at the Styes and carry the milk home, she riposted 'They all had four legs and could bring the milk home easier than I could'. One cannot, therefore, be certain that the features at the Styes represent a former shieling bothy; the stones are very large rounded freestone boulders and could be the product of the break-up of a large glacial erratic. There is such an erratic a few hundred yards away,

the 'Cubbie Roo's Stone' which is shattered, but not in pieces like the Styes. The bed-rock of the neighbouring burn is flagstone.

Mr Marwick recalled seeing herd-boys build little shelters near the Styes in his youth and the ruins of some of these were seen, but they were all very much smaller than a Highland shieling hut. Mrs Scott stated that there had been a 'goose stye' further up the valley where the birds were penned every night and let out in the morning. She further stated that Aikerness farm formerly sent some 60 pigs to the Styes, but could not say what they would find to eat there. It is doubtful, therefore, whether this should be regarded as a shieling. The Ordnance map shows the Styes of Aikerness in Gothic type, suggesting they are antiquities, but the Inventory of Ancient Monuments of Orkney does not include the site.

Mr Marwick kindly produced a manuscript document relating to the division of the commons in this area in 1842 in which there is reference to a 'shieling' (*sic*) in the 'Meadows of Lushan'. The word shieling is not a familiar one in Orkney and Mr Marwick suspects it may have been introduced to the document by the Clerk, who was from Scotland. The upper part of the Burn of Lushan HY 346237, close to the area in dispute, has from the road every appearance of a typical shieling site, but on closer examination it proved extremely boggy and devoid of any obvious sign of a bothy.

Styes were also stated in the document to occur at Kit Huntlands burn and there on the ground there is much of interest. At HY 340218, on a grassy brae facing south, a likely situation for shiels, there are six small shallow pits which could be relics of very simple dug-out shelters. A little to the west is a small 6 by 3 ft. arrangement of stones which could be the foundations for a turf-walled bothy and 250 yards north of this, on top of the bank of the deeply incised burn, is another similar 6 by 3 ft. structure with an erect stone at one end giving the whole thing the appearance of a human grave. Running down the bank into the burn from it, is what could be a rough stairway or the foundations of a wall. This could be symbolic of the boundary between the commons of the two parishes referred to in the manuscript. (Mrs Scott knew of the Styes of Kithuntland.) There are at least two other 'Stye' place-names in Orkney. One is at HY 410295, the Stye of Stanyiron in Rousay, but the writer has not been able to visit it. It is up in the hill pastures, and the last two syllables might derive from *Airigh*. The other is the Point of the Stye, a small headland in Sanday.

The word 'stye' presupposes pigs, but it is rather surprising that these animals should be taken to the hills and that they should give their name to the bothies. Pigs were, of course, of great importance in Norse life as contrasted to their place in the Highlands, where they tended to be regarded as unclean, at least in recent centuries. Hayward (1948) refers to pigs being taken to the shiels in Norway to consume the whey and other dairy by-products, but the writer knows of no association in the Highlands between pigs and shielings. The Orkney pigs of former days were much more athletic than those of to-day. Buckley and Harvie-Brown (1891) record evidence that 'In Orkney, more especially in Hoy, large herds of swine were kept on the hills some fifty years or more

ago, and this was probably a custom of very ancient date. They were kept out all spring and summer, being killed off in the autumn for winter use. . . . For shelter there were houses built of turf, and at the entrance two stones for the pigs to go between and rub themselves.' Perhaps, the 'headstone' at Kithuntlands burn is such a rubbing stone. Low (1813:10) says of Orkney pigs, 'They commonly go through the hills, feeding on the roots of plants, earthworms, or what else they can pick up'.

Orkney, therefore, would seem to be a distinct province as far as land-use in the hills is concerned.

Conclusion

Much still remains to be studied in the hill pastures of Scotland. Market conditions at present are such that sheep are so profitable that almost everywhere over-stocking is practised, and yet the only treatment of the pastures is a periodic burning which, though it temporarily provides better grazing, must in the long run contribute further to the deterioration of the hills. This robber economy has prevailed on the hill pastures for upwards of two centuries and may well be the reason why what Home describes as 'a bonny shieling' is now a wet, boggy, grassless tract and why the 'sweet mountain grasses' of tradition are now *nardus* and *molinia*. The same deterioration, following lack of intensive use, can be seen on what was the arable of the now abandoned clachans and crofts. Since the post 1914-18 development of owner-occupancy in Orkney and the dissemination of knowledge of methods of reclamation, thousands of acres of rough pasture have been converted to sown grasses. Recently, similar re-seeding methods have been devised to deal with the much poorer, wet peaty soils of the Hebrides and in Lewis and Harris, for example, re-seeded pastures can be seen in summer of a lushness which is more than the sheep can utilise, and which require cattle for their full exploitation. Cattle, however, have lost their place in the rural economy there in competition with the more easily-managed sheep. Often the remaining population have neither the energy nor the inclination to look after the more demanding cattle. There would seem to be considerable hope that, if an economic threshold could be crossed—as has for example happened in Orkney—the land-use pattern in the Highlands and with it the fertility of the hills could enter an upward-spiralling phase. This, however, is unlikely to happen in the framework of either the 'sporting' estate or the traditional crofting system of land-tenure or way of life, but rather in one with a much larger endowment of skill, capital, and land, and with a different outlook on the situation.

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