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The Cairngorm Club Journal

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Illustrations

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President's badge

There was a pleasant surprise for Club members who attended the 1976 annual general meeting. At the outset, retiring president Sandy Black intimated that past president Sheila Murray had asked his permission to say something, and what she had to say was: would Sandy accept on behalf of the Club, as a token of her feelings for the Club and of appreciation for the honour the Club had bestowed on her six years previously, a *President's badge*? Unbuttoning the jacket of her costume, she revealed that she had in fact conveyed to the meeting, suspended on her own neat shoulders, the very beautiful badge which is reproduced opposite.

Sandy accepted it to the acclamation of those present. Three days later, at the beginning of the Club dinner, before the honorary president said grace, the company of 140 members and guests showed unambiguously their pleasure at Sheila's 'gesture' as she, with characteristic grace and a nicely flippant touch, transferred the badge from the custody of Sandy to what she generously called the 'broad chest' of his successor in office.

H.M.R.W.

The accompanying photograph speaks for itself. The main feature of the President's badge is, appropriately, the Club coat-of-arms, devised by the late Dr G. A. Taylor and granted to the Club by the Lord Lyon King of Arms of Scotland in 1965. The coat-of-arms was reproduced in colour, and fully described, in *Journal*, vol. 17, no. 93. For those who do not have ready access to the facts as set out there, and who may be in doubt about the significance of the various elements within the coat-of-arms, they may be summarised as follows:

The chevronel dividing the shield, by virtue of its shape suggests a mountain peak, and by virtue of its colour a covering of snow.

Below it, the red field recalls the old name of the Cairngorm range, Monadh Ruadh, and the crossed ice-axes indicate the activity of the Club.

Above the dividing chevronel, the blue field indicates the sky and the devices thereon are extracts from the arms of the two families whose estates enclosed the Cairngorms: the gold cross-crosslet from the ancient arms of the Earl of Mar, the gold antique crown from the arms of Grant of Grant.

The motto is Gaelic for Shelter Stone (although this is queried by Adam Watson: *see* SMC District Guide Book *The Cairngorms*, fifth edition, p. 114; *see* also p. 233 and p. 249 of this issue of the *Journal*), suggesting the circumstances of the formation of the Club near it in 1887.

On the President's badge, the coat-of-arms is of enamel in the correct colours of blue, red, white and gold.

The other features of the President's badge to be seen in the photograph are, starting from the top:

Blue ribbon collarette

Rope-like gilt link between ribbon and badge

The hall-marked silver gilt background of the badge topped with a jagged outline suggesting mountain peaks, and bordered on left and right by hand-carved thistles

Between the two scrolls 'President' and 'The Cairngorm Club', an oval of solid silver forming a ground

(i) for the coat-of-arms and

(ii) for a polished and faceted Cairngorm stone (citrine).

Not seen in the photograph is the inscription on the reverse, which reads:

Presented
by
SHEILA MURRAY
First lady
President
1970–1973

President's badge

Did glaciers form in the Cairngorms in the 17th–19th centuries?*

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INTRODUCTION

In approximately one third of the corries in the Cairngorms there are moraines which reflect the former existence of corrie glaciers (Fig. 1). The moraines consist of boulders which are unstable and easily dislodged by a person moving over them. Sometimes, as in Coire Brochain or Coire Lochan Uaine (Macdui), the boulders are arranged in arcuate ridges 2–4 m high; sometimes as in Coire an t-Sneachda and Coire an Lochain, the boulders form a general spread but with a clear arcuate down-valley limit. In still other situations, such as the three corries on Ben Avon, the ridges are vegetated and boulders less obvious. The position of the moraines at the lip of corries, the arcuate form and the blocky material are all typical of moraines formed round existing corrie glaciers. Such glaciers, fed largely by drifted snow which collects and persists in shady lee-side sites, flow away from the cliffed headwall and carry frost-riven material from the surrounding cliffs and rock debris scoured from the glacier bed to the downvalley margin, where the material is released as a moraine (Fig. 2).

The purpose of this article is to discuss when these corrie glaciers last existed. One constraint to the age of the moraines is provided by the disappearance of the last ice sheet which took place in the Cairngorms area some 12,000 years ago. Immediately prior to this date the whole mountain massif was submerged beneath ice. Landforms associated with the decay of this ice sheet occur immediately outside the moraines and also exist in corries without moraines. This suggests that the corrie moraines were built after or during the disappearance of the last ice sheet. The problem is how recently might they have held glaciers. One view, represented by J. B. Sissons (1976) in his book entitled *Scotland*, is that the moraines were built by glaciers during a period of cold climate which existed 10,800–10,300 years ago. The marked severity of the climate during this period is known to have caused glaciers to increase in size in many parts of Europe and the equivalent advance in

* A development of the theme of Dr Sugden's pre-Club Dinner lecture, November 1976.

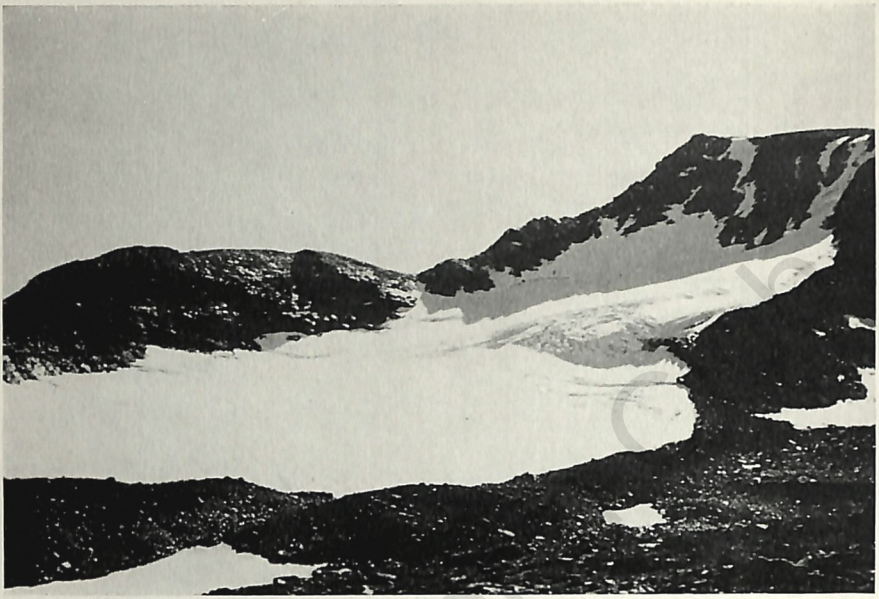

Fig. 2. A corrie glacier in northern Norway. A moraine flanks the lower margin of the glacier. The crevasses are caused by tension as the ice flows away from the foot of the cliffs.

[*photo by Gordon Brown*

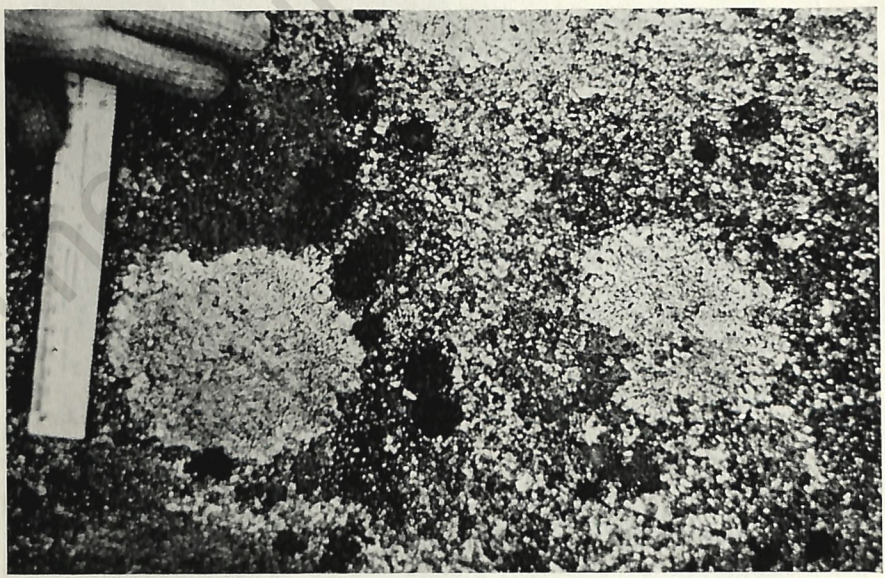

Fig. 3. Photograph of an approximately circular individual of *Rhizocarpon geographicum* (just to right of lower part of ruler). The lichen is a greenish-yellow colour and speckled with small black patches.

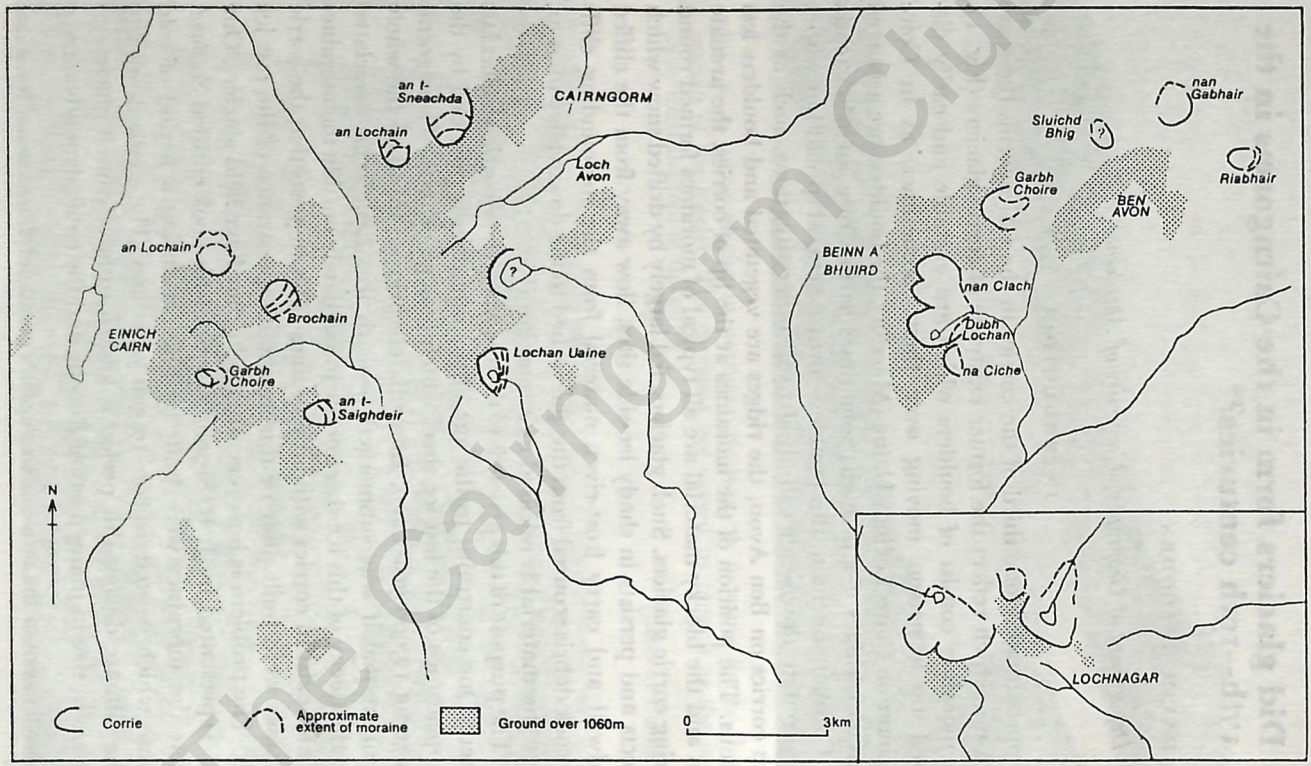

Fig. 1. The corries of the high Cairngorms which have moraines (Lochnagar inset). All ground above an altitude of 1060 m is shaded.

Scotland is thought to be the Loch Lomond Readvance, named after one dated moraine south of Loch Lomond. Whereas Sissons' view may then turn out to be largely correct, there are grounds for suggesting that at least some of the high corrie moraines in the Cairngorms were built by glaciers in the 17th–19th centuries, during the period of poor climate of the 'Little Ice Age'.

RECONSTRUCTED SNOWLINES

'The fact that snow lies all the year round in many of the gullies in the higher corries, except in exceptionally hot summers, proves that only a slight reduction in mean annual temperature . . . would result in the formation of small glaciers again in corries which are most effectively protected from the sun's rays'. This common-sense argument put forward by Cunningham Craig in 1913 is as valid today as then. One of these snow patches can be seen in summer in Garbh Choire. Since the climate is known to have been cooler in the Middle Ages than today, it seems sensible to consider the possibility of more extensive snow at that time.

With improved understanding the argument can now be tightened up a little more. The first step is the recognition that the corries with *boulder* moraines are the most suitable in the Cairngorms for the collection of snow. If for the moment one excludes the three Ben Avon corries with vegetated moraines, all basins with boulder moraines are high with basin floors (or lips) close to or above 910 m. Also the corries face broadly east or north, where they are protected from sunshine. Probably more significant is the fact that they back onto the high summit plateau where they can trap drifting snow. In the Cairngorms the cliff-top altitude is always above 1135 m. This association with high ground is vividly brought out in Figure 1 which shows all ground above 1060 m in the eastern Grampians. The Lochnagar massif is inset and serves to emphasise the same relationship in an immediately adjacent area.

It seems valid to exclude discussion of the Ben Avon corries. Not only are the moraines different in form from the boulder moraines, but in any comparison the corries are distinct, with lower altitudes representing distinctly less favourable glacial conditions. Probably they have affinities to other lower level corries with moraines in Scotland, for example in Glen Clova, and represent other glacial events. They are excluded from any further discussion here.

Corrie glaciers have predictable relationships with climate and a

reconstruction of the glacial climate necessary to produce the moraines can be compared with present day conditions to give an estimate of the amount of climatic change involved. The argument is more fully documented elsewhere (Sugden and Clapperton, 1975) but in essence it is as follows. Corrie glaciers which are restricted to cliffed basins tend to form with their downvalley margin some 340 m below the regional snow line. (The snow line is the altitude above which the winter snowfall will not be removed by summer melting.) If one takes 950 m, which is the average altitude of the downvalley margins as represented by the boulder moraines, then this points to a snow line at an altitude of about 1290 m at the time corrie glaciers existed. The present day snow line has been estimated by Manley (1949) to lie 420–450 m above semi-permanent snow patches. If this figure is applied to the Garbh Choire snow patch, then a snowline altitude of around 1450–1480 m is indicated for present day conditions. Comparison of the two calculations suggests that the snowline was 160–200 m lower than today at the time of the moraine glaciation. If this vertical difference is converted to a temperature change then it represents a mean annual temperature of the order of 1.6–2.0°C lower than today.

However tentative these calculations must remain, they do suggest that the glaciation represented only a marginal climatic deterioration. Moreover, the amplitude of climatic deterioration necessary apparently took place during the Little Ice Age when mean temperatures in Europe are generally thought to have been of the order of 1.5–2.5°C lower than today. Thus it is entirely plausible from a theoretical standpoint that glaciers may have occupied the high corries in the Little Ice Age.

HISTORICAL RECORDS

A fascinating resumé of early descriptions of the Cairngorms is given in the introduction to the Scottish Mountaineering Club Guide (Alexander, 1950). Some of these early writers are of particular interest for their references to permanent snowfields on the mountains.

One of the earliest visitors to the region was John Taylor, 'the Kings majesties water-poet', whose 'money-lesse perambulation' from London in 1618 brought him to the Cairngorms. After carefully prefacing his work with the comforting reminder 'Lastly that (which is Rare in a Travailer) all is true', he describes his impressions. 'There I saw Mount Benawne, with a furr'd mist upon his snowie head instead of a nightcap, (for you must understand, that the oldest man alive never saw but the snow was on top of divers of those hilles, both in

Summer, as well as in Winter)'. A century and a half later passed before Pennant visited Deeside in 1769 on his *Tour in Scotland* (1772). He described how '. . . naked summits of a surprising height succeed, many of them topped with perpetual snow . . .'. In 1787 the poet Robert Burns is quoted as writing to the Rev. John Skinner describing how he had travelled '. . . many miles through a wild country, among cliffs gray with eternal snows . . .' (Forsyth, 1900, p. 178). A few years later in the *Statistical Account of Scotland* (1795, vol. 12) McHardy, a local clergyman, writes: 'Upon these mountains there is snow to be found all the year round and their appearance is extremely romantic and truly Alpine'. It was some 70 years later that John Hill Burton devoted a book to the Cairngorms and actually examined the snow-fields (1864). He talks of '. . . the fields of eternal snow . . .' and, peering into a meltwater cave in an extensive snowfield on the north-eastern flank of Ben Macdui, he noted how the inside of the snowpatch 'exemplified the sole pleasing peculiarity of the glacier – the deep blue tint that it assumes in the interior of crevasses . . .'. Although apparently formed of ice, he noted that it did not appear to be flowing.

There seems no reason to doubt these more specific descriptions of the mountains which imply a more severe climate, especially since the climate is acknowledged to have been cooler at the time. If it was sufficiently severe for a permanent snow cap, then there is every possibility that large snow or ice fields existed in favourable corries, especially those that hold semi-permanent snowbeds today. If such were the case, it is not necessarily surprising that corrie glaciers were not mentioned specifically. Unlike the summits, they would have been invisible to most locals and travellers. Certainly, neither Pennant nor Taylor penetrated the mountains sufficiently to see them. Even for locals crossing the mountains via the two Lairigs, the corries would have been largely out of sight and only relatively insignificant features of the landscape. Such travellers found far more noteworthy features of the environment to describe, such as the rigorous weather. However, had corrie glaciers existed in the mid-19th century, Burton would almost certainly have mentioned them.

An intriguing historical clue may be connected with the Gaelic names of the three north-facing corries which are obvious to inhabitants and travellers in the Spey Valley: Corries Cas, an t-Sneachda and an Lochain. The Gaelic names are typically descriptive and that of Corrie an t-Sneachda means 'snowy corrie'. Today, however, when seen from the north, both Coire Cas and Coire an Lochain bear more snow which persists longer into the summer than Coire an t-Sneachda. It

seems strange that the least snowy of the three should have been picked out and given the 'snowy' name. However, conditions may have been very different in the past. Coire an t-Sneachda contains the most extensive moraines of the three. Perhaps the corrie supported more permanent snow or ice than the other corries several centuries ago at the time it received its name.

This historical evidence of Little Ice Age times in the Cairngorms is not sufficient on its own to decide whether or not corrie glaciers were in existence. It does, however, agree with the widely accepted view that the period was cooler and snowier. Moreover it would be in full agreement with any view that corrie glaciers existed at such a time.

LICHEN DATING OF THE MORAINES

During the course of my research in the Cairngorms in the early 1960s, it became clear that lichens growing in the corries could be used to tackle the problem of the age of the moraines. Flat lying lichens which resemble an approximately circular stain on a rock surface can be used as a means of dating (Fig. 3). One of the most commonly used is *Rhizocarpon geographicum* which is a greenish-yellow colour. Some lichens take many centuries to grow and thus if those on one side of a moraine are smaller than those on the other side, one can infer that those on the inside of the moraine have not yet reached their full size. One explanation for this is that the site inside the moraine was unavailable for colonisation at a sufficiently early date because it was covered by glacier ice or snow.

The Method

Lichen dating relies on three critical assumptions: (*a*) that upon deglaciation the rock surface is bare, but after a few years it becomes colonised by lichens, (*b*) that the size of the lichen (usually measured as the diameter of one circular individual) is proportional to its age and (*c*) that within any one area, a certain number of individuals will grow at the optimum rate, and provided that comparisons are restricted to these specimens (the largest), will provide a valid means of comparison. It is easy to raise objections to these assumptions and indeed they have been the focus of a rigorous academic debate since Roland Beschel first introduced the method in 1957. Nevertheless lichen dating has been remarkably successful so far and there are now over a hundred papers from many parts of the world in which lichen dating has produced meaningful results which can often be verified against other independent means of dating.

The main body of the Cairngorm results described here was obtained in 1964. At this time the debate about lichen dating was full of problems and I found it difficult to be convinced by my results. Since then I have subjected the field measurements to independent checks, and extended the work to other corries. The results still hold, and for this reason I feel they may be of interest.

The method used in the Cairngorms was to compare the size of the lichens beyond the outer corrie moraines with those clearly inside the moraines; in three corries where there was more than one ridge, counts were also made at intermediate points. Sites measuring 20 × 20 m were selected so as to include boulders of similar size in sites of similar aspect and slope. Within each zone each facet of each boulder was examined and the sixty largest readings of circular individuals were recorded. Many workers (for example, Webber and Andrews, 1973) have found that it is sufficient to compare only the maximum reading from each side. However, in view of the possibility of lichen-covered surface boulders derived from the cliffs surrounding the glacier being deposited behind the moraine, it was felt safer not to rely on a single specimen. Rather, following the Scandinavian example (Stork, 1963), the mean diameter for the five largest individuals was calculated. Since these were rarely more than a few millimetres larger than a high proportion of the sixty readings, it is likely that they represent a good indication of the maximum size attained by lichens at each site.

Results

In every case the contrast between the largest lichens inside and outside the moraines is clear (Fig. 4). The lichens inside the moraines are only 60–70 per cent the size of those outside. The contrast ranges from a minimum of 30 mm in the case of Coire an Lochain to 58 mm in Coire an t-Saighdeir. In the special case of Garbh Choire where there is an extra ridge close to the snow patch the contrast rises to 87 mm; the contrast between the lichens just outside this ridge and the area outside the outermost ridge is close to the norm and is 37 mm.

Readings on either side of the intermediate ridges agree with the overall pattern. Those immediately inside the outer ridge are fractionally smaller than those outside, but little significance can be attached to such a slender contrast. However, nearer the inner ridge in Coire an t-Sneachda there is a slightly greater difference and the lichens there are only 90 per cent the size of those beyond the outermost ridge.

The results are consistent in that there is good agreement between the corries. With the exception of Coire Lochain Uaine where both

	Lichen Diameters (mm)			
	Within main inner ridge	Intermediate ridges	Outside outer ridge	Difference between 'inner' and 'outer' sizes
C. an t-Saighdeir	124		182	58
C. Brochain	129		178	49
C. an Lochain (Braeriach)	139	178	183	44
C. an t-Sneachda	134	152 165	170	36
C. an Lochain	141	150	171	30
Garbh Choire	(91) 141		178	37 (87)
C. Lochain Uaine	116		151	35

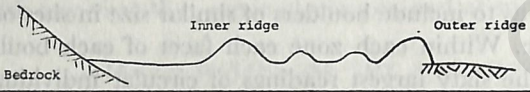

Fig. 4. The mean diameter of the five largest lichens measured at each site. The position of the sites relative to the moraine ridges is illustrated diagrammatically. The measurements in parentheses refer to the extra ridge close to the snowpatch in Garbh Choire.

sets of measurements are smaller than elsewhere, the measurements beyond the outermost moraines vary only by 13 mm and those inside the main innermost moraine by only 17 mm. These differences are small in relation to the contrasts between either side of the moraines. The anomalously low sizes of lichens in Coire Lochain Uaine are difficult to explain at present. Perhaps they relate to a difference in rock crystal structure, to the south-easterly orientation, or to some other factors.

Interpretation

It seems clear that the lichens inside the inner moraine are significantly smaller than those beyond the moraines. The lichens outside the moraines have probably reached their maximum size, a view supported by the consistency of the measurements from corrie to corrie. Because of the relationship between size and age, it can be assumed that the 'inner' lichens have not been able to reach anything approaching their maximum age.

In the Cairngorm corries it is reasonable to suggest that this relative youth of the 'inner' lichens has been caused by the persistence until fairly recent times of masses of snow or ice filling the inner reaches of the corrie basins. When one bears in mind the variations in altitude between the corrie floors, the differences in aspect, and the fact that the readings were not taken at a constant distance within the inner

ridge, the similarity of the results is remarkable. Their very consistency suggests that it is reasonable to regard the snow or ice covering as relatively widespread and uniform in each of the basins rather than reflecting a series of chance local snow patches. Indeed it would be hard to explain the existence of a local snow patch in Coire an Lochain (Braeriach) where the inner lichen site is on a south-facing slope of a 13 m morainic ridge; today this is generally windswept and bare of snow at an early stage of summer and is probably the least likely point in the corrie for a local snow patch to accumulate. If this site was covered by permanent snow it seems probable that the rest of the basin must also have been filled by snow or ice.

In Coire an t-Sneachda the gradient from the inner lichen site to the top of the backwall is sufficiently steep for the small size of the 'inner' lichens to be explained merely by the persistence of a large permanent snow patch. The inner ridge is ill formed but may have been formed by blocks sliding down on a snow slope of *c.* 30° to form what is called a pro-talus rampart. However, in other corries, unless one resorts to snowpatches of rather strange configuration, any surface gradient from the lichen site to the corrie backwall is less pronounced and characteristic of ice rather than snow in such a position. For example in Coire an t-Saighdeir the gradient from the top of the backwall to the lichen site just within the inner moraine is only *c.* 19° over a distance of 700 m, while in Coire an Lochain (Braeriach) it is 18° over a distance of 550 m. In Coire an Brochain the gradient to the top of the ice smoothed portion of the cliff is 25° over a horizontal distance of 470 m. These values are in good agreement with the surface gradients of corrie glaciers in the Jotunheimen in Norway where angles vary between 12° and 25° and the average slope is *c.* 18° (Lewis, 1949). Any snow or ice masses with these gradients filling the corrie basins must have been of the order of 60–120 m thick at the foot of the headwalls. They must surely have been glaciers.

It cannot be positively shown without a far denser network of lichen sites or other independent evidence that the innermost ridge was actually built by these recent glaciers; it could be argued that at this recent time snow and ice simply re-covered already existing ridges. However, it is notable that the innermost morainic ridges are generally small and consist of unstable blocks. They are just the type of trace one would expect from glaciers with dimensions as envisaged above. Indeed it would have been surprising if such glaciers had left no trace of their late occupation of the basin. As far as can be judged from the relatively few measurements made so far, the major contrast in lichen

size does appear to coincide with the inner ridges. It seems reasonable to suggest that the ridges were built by these recent glaciers.

How recent?

As has long been recognised the rates of growth of lichens vary considerably from place to place. For example Beschel (1961) found that in the Alps *Rhizocarpon* has a life span of 600–1300 years and in West Greenland 1000–4500 years, depending on the continentality of the climate. In view of the great degree of uncertainty and the lack of long-term growth rates in Scotland, one can do no more than take a similar area and treat the extrapolation with extreme caution. Known rates of growth of *Rhizocarpon* in different parts of the world have been summarised in table form by Webber and Andrews (1973). From this table, Southern Norway appears as the closest analogy available.

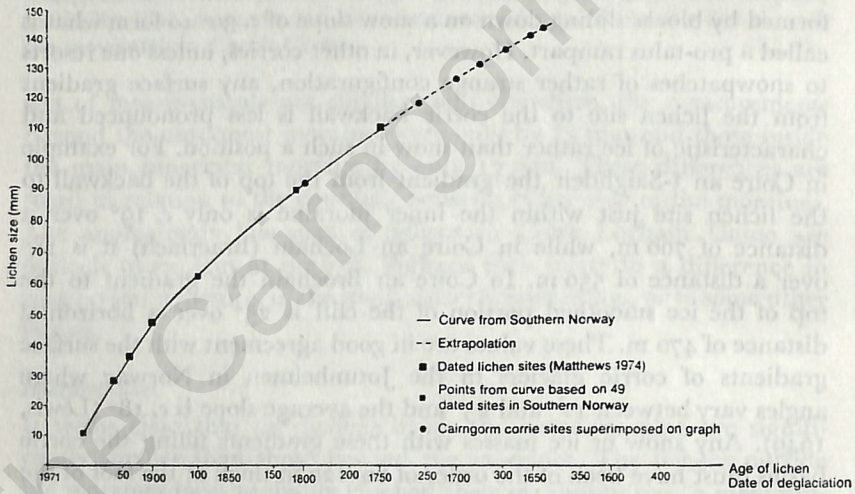

Fig. 5. Curve showing growth rate of *Rhizocarpon geographicum* in southern Norway after Matthews (1974). If lichen sizes within the main inner corrie moraine in the Cairngorms are superimposed onto the extrapolated graph, it suggests ages of A.D. 1800 for the snowpatch ridge in Garbh Choire and ages between A.D. 1644 and 1725 for the remainder.

Here Matthews (1974) has collated the results of forty-nine sets of measurements and finds that they closely approximate to a curve which shows a relatively rapid rate of growth to begin with and then a progressively declining rate of growth. Unfortunately Matthews' curve does not include lichens the size of those in the Cairngorms. For

this reason I have extrapolated the curve using Matthew's measurements and the overall trend indicated by the Norwegian results (Fig. 5). Such an extrapolation is obviously unlikely to be accurate, especially when applied to another area, and thus it is intended only as a first approximation.

Using this extrapolation, the lichens inside the main innermost ridge started growing at various times between A.D. 1644 and 1725. This would suggest that immediately prior to this period glaciers or permanent snowbeds extended as far as the innermost ridge. In Garbh Choire, the extra ridge close to the snowbed may have been forming as recently as A.D. 1800.

The dates given above must not be taken literally. The only reason for giving them is to show that they do fall into the broad period known as the Little Ice Age which reached its peak in the 17th–19th centuries. When looked at more closely the dates do appear a little early for Europe. For example, on the basis of widespread correlations, Gordon Manley concluded that, since the disappearance of the last ice sheet '. . . it appears probable that the nearest approach to glaciation in the Scottish Highlands was reached in the 1740's and again about 1809–18. . . . It is possible that the decade 1692–1701 should also be included'. Any discrepancy on this sort of timescale can be expected for a variety of reasons. Perhaps the most important is the probability that lichens in the non-glacial Cairngorm climate grow faster than those around glaciers in Norway. If such a contrast exists, then the Cairngorm dates are likely to be too old by at least several decades. Although the particular method of obtaining dates used in this paper may be criticised, it is worth emphasising that almost *any Rhizocarpon* growth rate from *any* maritime climate would date the moraines to the Middle Ages.

RADIOCARBON DATE

There exists a final and important piece of evidence relevant to the dating of the moraines. In Coire Brochain (G.R. 956996), within the innermost moraine a 20-cm layer of peat was discovered beneath a 50-cm layer of gravel washed over the peat by streams. This peat sample (I-4730) was radiocarbon dated as 1905±95 years B.P. (before present), or in other words to about A.D. 45. This peat had formed well before any possible glacier advance of the Middle Ages.

The peat presents a problem. It could be argued that any glacier advance big enough and persistent enough to build up a moraine would surely have removed the peat. In such a case the innermost

corrie moraine must have formed before the Little Ice Age. On the other hand there are numerous situations in the world where glaciers have crossed weak deposits such as peat without removing them. Thus this particular piece of evidence must remain tantalizing and inconclusive.

CONCLUSION

This article has put forward theoretical and historical arguments which point to the possibility of corrie glaciers forming in certain high Cairngorm corries in the 17th–19th centuries. At this time the climate is known to have been more favourable for glacier survival than at present. Field testing of the hypothesis in the form of lichen dating revealed a definite contrast in lichen size between those lichens inside and outside the boulder moraines. Any reasonable extrapolation of lichen growth rates suggests that those inside the corrie moraines only began to grow in the 17th–19th centuries. This evidence is most easily explained by postulating the existence of glaciers in the corries immediately beforehand. At present no evidence contradicts this hypothesis, although the radiocarbon date from Coire Brochain is puzzling.

Faced with this existing evidence and until contradictory evidence can be found, it seems reasonable to propose as a hypothesis that some glaciers existed in the Cairngorms during the Little Ice Age. This is not to suggest that all the moraines were necessarily formed at this time. The outermost moraines at least could relate to Loch Lomond times 10,800–10,300 years ago or even to another cold period thought to have occurred about 2500 years ago. It could also be that all the moraines are older and that Little Ice Age glaciers merely reoccupied the moraines which were initiated by a former glaciation.

ACKNOWLEDGEMENTS

Much of the initial lichometry was carried out when the writer was generously supported by a D.S.I.R. research studentship (back in 1964). The Carnegie Trust for the Universities of Scotland kindly paid for the radiocarbon date. I am most grateful for this support. Also I am indebted to several groups of students whose interest in the problem and cheerful scepticism provided the stimulus to repeat and test many of the field measurements.

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Random recollections

ROBERT BAIN

Snow was falling gently out of a grey January sky, and I could not help reflecting on the many occasions when similar conditions prevailed on Cairngorm Club and other expeditions. I remembered however that frequently there were incidents and excitements which made the prevailing conditions bearable, and which provided evidence which supported the assertion often made by the late Hugh Welsh that 'there was never a bad day on the hills!' There certainly were days when the weather at least was bad. In my own early days with the Club we had five snow climbing excursions to Lochnagar, and the annual weather patterns were similar. There would be one absolutely beautiful day, one moderately good one, and three deplorable ones! If the magnificent day was the first of the five, then the clever thing to do was miss the remainder, but since hope springs eternal, in practice one went on them all anyhow! I started off with three bad ones and never really saw the summit rocks until my fourth visit, although that one was sensational and made up for the rest.

Most climbers go to the hills with a variety of interests in mind, sometimes even, although perhaps this should be mentioned discreetly, almost exclusively for the acquisition of Munros. I am old enough to be able to speak my mind regarding this latter aim, which I suggest can be regarded as nothing more than a self-imposed exercise designed to keep one going to the hills against one's natural desire and better judgment. The acquisition of a Munro is not a measure of climbing ability or skill, and frequently may be nothing more than an indication of a grim determination to cover miles of uninteresting country to reach an uninteresting top which only acquires significance because someone has made it out to be at least 3000 feet high. I feel that one's motive for climbing should be different from this, the more especially since certain aspects of the Munro classification are open to challenge. It is easy to justify this, for one has only to go to the Cairnwell where a handful of Munros on either side of the road can easily be picked up, the total climbing involved in each handful being around 2500 feet. On the other side of the picture, there are half a dozen non-Munros in Arran alone, the ascent of each of which will involve more than that 2500 feet of climbing. More specifically, there is about 400 feet more climbing on Goatfell than on our own Lochnagar. So where lies the merit in a Munro?

As memories come flooding back, I thought it might be interesting to report some of the incidents which contrived to turn bad weather days into good days. Unforgettable was the occasion when we tackled Macdui in thick cloud, finally to rise above the heavy layer which covered much of Scotland. Sticking out of the cloud layer resplendent in glistening snow was every top above 3500 feet from Lawers in the south to Nevis and Skye in the west and Wyvis in the north.

It is perhaps natural that I should remember my first serious snow climb, a shallow gully to the east of Central Buttress on Lochnagar, but there were other features of that particular day which are perhaps more notable. The whole atmosphere was one of freezing fog, and every blade of grass, every twig of heather was enclosed in a covering of transparent ice. As we walked up to the Foxes' Well, there was a high pitched tinkling as of thousands of little bells, which I have never again heard on many subsequent visits.

For a number of years, a few of us made the pilgrimage to Lochnagar around New Year time. Only once did road conditions let us get as far as the Spittal of Muick, and so one foggy day Angus, his brother and I set off. Shortly after passing through the wood around Allt na Giubhsaich, the New Year began to catch up on Angus, and he decided to rest a while. In due course, my companion and I reached the foot of the long slog up to the Foxes' Well. Having always been interested in the conservation of energy, I decided that in view of the conditions further progress in that direction was pointless, so we contoured round the base of Meikle Pap and got into the corrie that way. I remember that the mist contrived to make the precipice seem forbiddingly impressive. Moving round, we found the Red Spout full of hard packed snow. On considering the possibility of ascending that way, we realised that Angus had the rope, but the proposition seemed reasonable enough, and, the vote in favour being unanimous, off we set. About a third of the way up, we were suddenly caught in a violent gust of wind which nearly tore us off the snow slope. About the same time, there was a crack like that made by a 25 pounder anti-aircraft gun. When we heard this again, we decided to leave the smooth snow for the rocks along the side of the gully. The rocks were icy, and, as I didn't fancy that route, I moved back into the gully, whereas young Thomson preferred and was happier on the rocks. Back on the snow, I dug in and took stock of the situation. It was then that I saw huge chunks of cornice being broken off and thrown high in the air. This was followed by the crack and then the gust of wind, so I was able to establish a pattern of movement. Immediately after the blast, I cut

two or three steps until I heard the crack and then dug in. After the blast, I moved up and dug in again. Further progress on these lines was uneventful, and I stepped out on to the plateau about half a step behind my companion who had kept to the rocks all the way, providing clear evidence that one man's meat is another man's poison! In due course, we met up with a recovered Angus.

On another occasion, a gale was blowing across the plateau and most people sought the shelter of the gullies. In due course, Angus, Tony and myself arrived at the Crumbling Cranny. With us, but not of us, was Tom Train who was pursuing an individual theory that a stout walking stick was a reasonable alternative to an ice axe and rope. His method was to shove in the stick and then use it as a support for his foot as he moved up. He proved the point to his own satisfaction, but there was a lot of fresh, loosely packed snow in the Cranny that day, and by the time Tom had got as far as he could go, there was very little stability in what he left behind. I remember that, as I moved to step up, the step I was standing on gave way, so I kept going further back. After several attempts to make progress, I solved the problem by sticking my elbows into the sides of the gully and lifting both feet at once. The top of the gully was snowed over, but after some hard work in an awkward position, Angus cleared a hole through which we all emerged like Arctic seals! I had to bring up Tony, and finding the plateau bitterly cold, asked Tom to pass me my leather jerkin which was fixed to my pack. As he did this, it was caught in the wind and disappeared high over the Left Hand Branch! A dozen or more other climbers were following our route, and in due course I was glad to get back my jerkin. Sauntering down in a reasonably satisfied and comfortable state, I was suddenly shaken out of my lethargy when Angus who had been setting a course in the direction of Cuidhe Crom announced 'I think we will go down here', sat down, and shoved off! I watched to see how he fared among the rocks at the foot, decided that the exercise seemed reasonable enough, and set off after Train, who was well down by the time, and travelling fast. I suspect that he had taken a bump or two before finally stopping, so slowed down and was almost stopped when the rocks were reached.

Ornithological highlights were perhaps fewer, but one experience could have occurred only on a bad day of poor visibility. This incident, previously recorded (see *C.C.J.* vol. 16, no. 87), happened one foggy day on Ben Avon. We had followed a burn until it disappeared down a steep slope, and were sitting in a sheltered little saucer having some food when out of the mist and perhaps about 15–20 yards away

appeared a red deer hind and a yearling. One golden eagle was flying on the landward side of the hind at about shoulder height, and another brought up the rear, keeping the yearling close behind its dam. Disturbed by our presence, the deer were able to clear off into the mist, but the eagles, no doubt wondering what this collection on the ground was, circled us for quite a while and investigated us from a height of about 10–12 feet before moving off. No doubt they were a bit peeved, for the deer must have been brought up from the valley about 1800 feet below, and I suspect had almost reached the planned climax of the exercise.

While working and playing at Muir in its early days, frequently at dawn or dusk in spring and autumn we heard flocks of migrating birds passing over, after coming or going through the Cairngorm passes. On one of my last outings with the Club, I reached the general area of the South Top of Ben a' Bhuird and decided that the main party's intention to proceed to the North Top was over ambitious. In any case, I wished to return via the Clais Fhearnaig, so Tom and I set off back. Down in the remnants of the old Caledonian Forest in the Dubh Glen, I sat down with my back to a tree for rest and refreshment. Quite suddenly, the air was full of fluttering and twittering coal tits. They ran over the ground, up tree trunks, and indeed over me! There must have been thousands of them. Then, suddenly, they were gone!

Returning by the track from the Shelter Stone one dull day, I was last in a group of twenty or so. Wearing bifocal glasses, I always have to look more directly at the ground, and nearing Loch Etchachan I thought there was something odd about a stone lying in the middle of a group of four. Closer examination showed it to be a hen ptarmigan which had sat tight as the entire party had unwittingly walked over it! It sat still as I photographed it from around two feet. I had no means of discovering whether it was covering eggs or fledglings, but its courage was such that it deserved to be left undisturbed.

In lighter vein, I recall descending An Socach and coming upon a flat pool in the upper Baddoch which contained a fair number of trout, some quite big. I spotted one particularly prize specimen lying in front of a flat stone, and somewhat facetiously enquired of my companions if they would like to see it come out. Unbelieving, they said yes, and were astounded when I duly picked out a fine two pound trout! I must confess to being a bit surprised myself, for though I knew how the job should be done, I had never tried it before! Not needing trout at the time, I put it back.

On the moor near Muir there was a spot where, on any sunny afternoon, adders could be seen, and I watched them frequently. Once, I saw one swim the burn and take a frog on the other bank.

Another incident which has no association with bad weather other than that the recollection of it sustained and helped me through otherwise dreary spells, concerns the early days of Muir. Two elderly gentlemen went there, amongst other things, to replace a broken pane of glass. You may wonder why two were needed for such a job, but the fact is that neither liked to cut glass, and either would only make the attempt when bullied or cajoled by the other. My own analysis of the situation was that individually they were much too careful and precise in their actions, and could never reach the fascinating gay abandon of Putty Donald's glass-cutter. They were determined and persistent men however, and in due course the last remaining pane of glass was cut, fitted and puttied. Feeling well satisfied, they sallied forth to visit friends. Returning in a happy state of mind, they discovered with horror that they had locked themselves out, and that the only way to get in was . . . to break a window!

My final recollection again concerns Lochnagar. It was a cold grey day when we set of from the Danzig Shiel Bridge. Intent on trying out my first faltering steps on the wide expanses beyond Ballochbuie, I had taken my skis with me. Everywhere there was hard, bare ice with which I could not have coped, but, after much searching, I found a large area of frozen snow lying at a gentle angle. I recall that I was in the basin around the lower reaches of the Allt Lochan nan Eun. Gliding gently along, my increasing confidence and balance were suddenly shattered when one ski ground to a halt. Close examination showed a small point of stone sticking just clear of the snow surface. It seemed possible that the point was man made, so I excavated what turned out to be a memorial to a man who had collapsed and died here while out shooting. His name and the date have long since been forgotten, but the stone carried the following quotation, which at the time seemed particularly relevant:

Take heed lest ye fall,
For ye never know the time.

Animal, fish and fowl

PATRICK W. SCOTT

Several years ago, I climbed Druim Shionnach [Sep Mt 158] on the south side of Glen Cluanie. My companion on the climb was Donald Hawksworth. As we rounded a craggy outcrop, Donald said 'What does this name 'Druim Shionnach' mean?' I replied that it meant 'the foxes' ridge,' and hardly had the words been uttered when we came face to face with a fox! We stared at it and it gazed at us. The highland foxes aren't red like their lowland cousins. They are light brown in colour and somewhat larger. This one was certainly a large, long-limbed specimen, and we observed it closely from a distance of 6 feet for what seemed a long time but was in reality only seconds. Suddenly the spell broke and it streaked away uphill soon to be lost from sight. Certainly Druim Shionnach had proved itself worthy of its name! And yet, should we have felt surprise at seeing a fox on that mountain? After all the Gaels must have had good reason for choosing the name they did.

This incident set me thinking about animals which have loaned their names to mountains. Some of the animals have become extinct. It is at least a thousand years since the elk, the largest of the deer family, roamed through the Highlands. Nevertheless one of our Perthshire Munros is named after this animal. I refer to Beinn Oss [Sep Mt 99]. The wild boar has also vanished from these shores but is still remembered in such mountains as Càrn an Tuirc [Sep Mt 109], the Boar's Cairn.

Another extinct animal commemorated by mountain names is the wolf. It has been extinct in Scotland for approximately 250 years. Sgùrr a' Mhadaidh [Sep Mt 270] is the 'Peak of the Wolf'. If all tales are true, the wolf was, at one time, the scourge of Scotland. For example, we are told that King Malcolm II was saved from a wolf in the Stocket forest near Aberdeen by the presence of mind of a young son of the Lord of the Isles, and for this timely intervention he was rewarded with a grant of land at Skene. Tales are told of wolves which terrorised whole villages, of wolves which savaged and killed children, and of wolves which desecrated the graves of the dead.

A few years ago I visited Handa Island off the North West coast. Walking round the island towards the hut owned by the R.S.P.B., I noticed several gravestones, all sadly neglected nowadays. Later that day, a local crofter at Fanagmore on the mainland opposite the island

told me that in days long past, wolves were so troublesome that local people were forced to bury their dead on Handa lest packs of ravaging wolves dug up the corpses.

The former prevalence of the wolf in the Highlands is recalled in such names as Lochmaddy (the wolf's loch). A brindled wolf has its name enshrined in the name Lochan a' Mhadaidh Riabhaich. Probably a wolf had its den at Toulvaddie [Toll a' Mhadaidh – the wolf's lair] while another used to slake its thirst at Allt-Mhadaidh [wolf-burn].

The Scottish government continually encouraged the people to hunt and kill the wolf. In the reign of King Alexander in the eleventh century, the wolf could be hunted by anyone, whereas there were strict rules regulating and prohibiting the hunting of most other large animals. Many towns even employed professional hunters to keep their environs free of the predator. By the sixteenth century, hospices and spittals were erected on lonely forest tracks to give refuge to travellers benighted on the wolf-plagued countryside. The Spittal of Glenshee was one such sanctuary. Nevertheless, the stories of the wolf's ferocity are probably exaggerated. In North America and in Russia wolves do not attack human beings. Of course, rabid specimens will attack and this may account for the wolf's universal evil reputation as a savage, indiscriminate killer.

A very strange sounding name is Creag an Leth-choin [Top 143]. Literally it means 'The Crag of the Half-Dog'. However, 'half-dog' would be better translated as 'lurcher' – a dog of mixed wolf-dog parentage.

Nor is the dog omitted from our list of name-loaners. It is to be found, for example, in Sutherland in Meall nan Con (Hill of the Dogs) and in Perthshire in Stob a' Choin (The Dog's Peak). The Gaelic for 'a dog' is Cu, pronounced Coo, which sounds rather strange to our ears. But not so the word for 'a cat'. In fact the Gaelic word is also 'cat'. None of our Munros are named after the cat (almost certainly the wild-cat of course). However many smaller hills assume this animal's name. We have Creag a' Chait.

Away in the West where wild-cats thrive and where wolves roamed long after they had been eradicated from the more accessible parts of the country, is a mountain with the strange name 'The Peak of the Hides'. In Gaelic it is Bidean nam Bian, the highest mountain in Argyllshire. At one time far more cattle used to be kept in the Highlands than nowadays. These were the ancestors of the present day Highland cattle. They were semi-wild, shaggy, hardy animals, ideally

suited to the privations of the Scottish climate. Of all the cattle in the British Isles, they most closely resembled the Celtic Shorthorn, the semi-domesticated cattle of the early Celts. Bishop Leslie in a book published in 1598 remarks upon their existence among the mountains of Argyll-shire. He says

> In the mountanis of Aargyl ar fed Ky, nocht tame, as in ithiris partes, bot lyke wylde hartes wandiring out of ardour and quhilkes, throuch a certane wyldnes of natur, flie the cumpanie or syght of men.

Though no doubt sure-footed animals, many are said to have fallen to their deaths over the dangerous crags of Bidean and their hides would be found strewn amongst the rocks below. And yet, considering how well adapted to the mountains these cattle were, it does seem strange that so many should perish by falling over the precipices of this mountain. Perhaps our Highland forefathers found that driving or stampeding these cattle over a cliff was one sure way of slaughtering them. Certainly some Red Indian tribes used this method of slaughtering herds of buffalo!

Domesticated animals, such as the horse, sheep and goat, find a place in our mountain lore. I wonder if it was the practice of the early Celts to herd their horses into corries so that they could more easily be prevented from wandering away. There are certainly a great many corries named after the horse ('Each' in Gaelic). For example, we have Coir' Each (Horse Corrie) on Beinn Bhàn and Coire nan Each (Corrie of the Horses) in Glen Affric and another of the same name near Loch Carron. There is one Munro named after the horse – Sgurr nan Each [Sep Mt 262] of the Fannich group.

'Caora' (sheep) gives the name Beinn Chaorach (S.W. of Meall Glas) and Beinn na Caorach (near Ben Sgriol), while 'uan' (lamb) is to be found in Cnoc nan Uan (The Hill of the Lambs) near Loch Carron and in Skye. 'Gobhar' (goat) is extremely common, and I need but refer readers to an article in a recent *Journal* (*C.C.J.* vol. 18, no. 95, p. 76).

Now let us consider the name of another mountain which I have always regarded as somewhat unusual. I refer to Beinn Dòrain (Otter Mountain). That a mountain should be named after an otter seems strange. Otters are not renowned as mountaineers; they are creatures of the river and loch. However, it may well be that the waters in the vicinity of Beinn Dòrain did abound in otters at one time. There is certainly no doubt that this mountain, rising above Bridge of Orchy, has inspired many a Gaelic bard to extol its beauty in song and verse.

Duncan Ban Macintyre (1724–1812) in particular held it in great esteem. It overlooked his birthplace and in his wonderful nature poem 'Moladh Beinn Dòbhrain' (Praise of Beinn Dòrain) he names with affection its corries and crags, its streams and springs, but above all he knows its deer. He describes their appearance, sounds, movements and resting places. Surely Beinn Dòrain could more aptly be called 'The Mountain of Deer'. Nowhere in his long poem does he mention the otter. So we must conclude that by his time otters were no more prevalent in the vicinity of Beinn Dòrain than elsewhere in the Highlands. Smaller hills are also named after the otter. For example, rising above the River Avon is Cnap an Dòbhrain, the Hillock of the Otter.

Though few mountains are named after the otter, many are named after the deer. Nevertheless the deer was not always confined to our bare moorlands and mountain tops. Down to the eighth century at least, they were common throughout Scotland's extensive forests. It was a forest-loving animal, but, as the destruction of the forests progressed, so was it relegated to the more inhospitable moors and mountains. The red deer of today are considerably smaller than their forebears due to the poorer pasturage of the upland regions and the relative severity of the climate there. We deduce from skeletons found in clay and peat that the forest deer was one third as large again as its modern counterpart. In 1870, seven red deer from Lord Dalhousie's estate in Forfarshire were shipped to New Zealand. Not only have the deer multiplied but they have reverted in size to that which was common in Scotland before the destruction of the forests.

However, some deer have left their names imprinted upon our mountains. No doubt the yellow stag whose lair or bed is commemorated on Ben Avon was a remarkable specimen. I refer, of course, to Leàbaidh an Dàimh Bhuidhe, the highest point of the mountain. 'Dàmh' is the Gaelic for 'stag' and the number of place-names incorporating 'dàmh' is very large. We have Creag nan Dàmh [Sep Mt 271], the Crag of the Deer, and many lesser heights such as Beinn Dàmh, Càrn Daimh, Leacann an Daimh, and so on. Not to be outdone, the female of the species gives us Sgurr Eilde Mòr [Sep Mt 132] and Sgurr Eilde Beag [Top 368], the Great and Small Peaks of the Hind.

The general word for deer is fiadh (plural feidh), and so we have Càrn an Fheidh (the Cairn of the Deer) which is south-east of Ben Klibreck, and Creag nan Fiadh (The Crag of the Deer) which overlooks the River Brora.

Not only animals but birds lend their names to our mountains.

The Gaelic for eagle is 'Iolair' and many mountains, cliffs, and crags are named after this prince among birds. Sròn Coire na h-Iolaire [Top 382], the Ridge of the Eagle's Corrie, is in the remote Ben Alder district where eagles nest still. Without a doubt these majestic birds have nested in the fastnesses of Mullach Coire nan Nead [Top 505], the Summit of the Corrie of the Nests. If you wish to know where eagles have nested in the past, you need only consult a map to see the large number of places called 'Creag na h-Iolaire' which are to be found. 'Creag na h-Iolare' means the Eagle's Crag. For example you will find such a place 3 miles south of Ben Klibreck, another 2 miles east of Loch Coire, another on Beinn Dàmh, and yet another just south of the River Eishaig.

Gaelic speakers often refer to the eagle as An-t Eun, *the* bird. Meall nan Eun [Sep Mt 254] is the Round Hill of the Birds, and it may well be that the birds referred to are Golden Eagles.

Although the eagle was known as *the* bird, this did not prevent it from being ruthlessly destroyed at one time. Between 1819–26, 295 eagles were destroyed on two estates alone in Sutherland. The Duchess of Sutherland of the time gave a reward of a guinea for each bird killed on her estate. Two hundred and fifty years ago, it nested as far south as Derbyshire, but has now been banished to the remoter parts of our country. Many places in Scotland, named after the eagle, see no sign of the bird nowadays, but nevertheless they give witness to its former abundance. For example, Golden Eagles are not seen winging their way over Crathie, and yet Sgòr na h-Iolaire, the Eagle's Peak, rises nearby.

Several other species of birds loan their names. We are not surprised that the ptarmigan – that bird of the barren summits – has a Munro named after it. This is Meall nan Tarmachan [Sep Mt 86], the Rounded Hill of the Ptarmigans. Creag an Tarmachain, one of the Cromdales, also derives its name from this bird.

Càrn a' Gheoidh [Sep Mt 175] is the Goose's Cairn. I have noticed that the pronunciation of 'gheoidh' seems to present some difficulty. The 'gh' has a 'y' sound, while 'idh' is like 'ee' in the word 'reed' and so 'gheoidh' is approximately pronounced 'yō-ee'.

The raven, the largest of the crow family, is sometimes seen performing astounding feats of aerial acrobatics amongst the crags of our mountains. Several hills are called 'Creag an Fhithich', the Raven's Crag [e.g. Top 156].

The grouse has several names in Gaelic, the commonest being 'cearc-fhraoich' or 'heather-hen'. Another is 'eun-dearg' or 'red-bird',

which is found in the name 'Bidean an Eòin Deirg' [Top 154], the Peak of the Grouse. Nor is the killing of grouse forgotten, for Beinn Eunaich [Sep Mt 149] is the Mountain of Fowling.

The young of a bird is 'isean' and so Sròn an Isean [Top 346] is 'The Fledgling's Ridge', though the fledgling of which species of bird I know not!

So much for birds. I know of no mountain named after a fish, unless Sgùrr a' Mhaoraich [Sep Mt 102] qualifies. 'Maorach' generally means 'shell-fish', but in certain parts of the Highlands it can mean a mussel or a limpet.

Finally let me mention the hills Càrn na Nathrach and Cnapan Nathraichean which are named after neither animal, fish nor fowl. I would counsel care when climbing them for the Gaelic word 'nathair' means 'a serpent', so their names mean the 'Serpents' Cairn' and 'The Knolls of the Serpents'!

Innocents abroad

NEIL CROMAR

August 1965 saw Bill Mackie and me entrained in the Milan Express awaiting its departure with eager anticipation, for when it eventually steamed off into the night it meant that our first Alpine climbing holiday had really begun. As we sped on, our youthful imaginations turned to the world of espionage and crime, whose activities, we are told, frequently centre on such international trains. The swarthy character sharing our compartment had a Sicilian appearance about him, and, as the night drew on, fears began to arise in my mind for our safety. We drifted into an uneasy sleep, but next morning awoke to find ourselves still alive and our fears of becoming Mafia victims proved groundless! Our companion, it transpired, was an itinerant Italian workman with a large repertoire of operatic arias and Neapolitan serenades, and in his company the time passed pleasantly enough until we reached our destination, Zermatt. On a previous hitch-hiking visit, Bill and I had been very impressed by the cirque of 4000 metre peaks surrounding the village. However, on this occasion, after a lapse of three years, we were presumably three years wiser, and far from being impressed, were absolutely terror stricken! As our morale sank lower and lower, we went into a café to take appropriate corrective measures. Some time later when we emerged, the mountains seemed to have lessened somewhat to almost Sputan Dearg proportions, so before the effects wore off, we departed for the Monte Rosa hut, which, designed to accommodate eighty persons, held one hundred and thirty, so the two o'clock start next morning was no hardship.

Monte Rosa, we discovered, was quite a big hill and, as hour succeeded hour, the summit seemed little nearer. We were forced to the conclusion that our training for the Alps had been insufficient. Both of us had had holiday jobs since the end of term – Bill had been digging trenches and creeping around in sewers, while I had been bus conducting. The only climbing I had done for two months was up the stairs of a Corporation bus, and Bill, despite several valiant attempts to reach the Cairngorms, had failed to get past the pleasures of Mar Lodge. Nevertheless, eight hours after leaving the hut we crawled, gasping for breath, on to the top of Europe's second highest mountain and our first Alpine summit. Then tragedy struck! We had read in some ancient mountaineering classic that cold tea was very refreshing

on glaciers and high peaks, so we had filled our flasks to the brim. Imagine then our rage and frustration when we opened them to be absolutely nauseated by the taste, so much so that we had to pour the whole lot out. Having already suffered the effects of altitude sickness, we really did feel that to have to endure the taste of this vile, semi-frozen liquid (complete with tea-bergs) was too much to bear! Nor did we derive any pleasure from the view, for mist was starting to sweep in from Italy and envelope the hill. Totally disillusioned by the Alps in general, and by Monte Rosa in particular, we hastened back to the hut where we cured our dehydration and the following day climbed the Riffelhorn, a 9000 feet rock peak, on the way back to Zermatt.

We next went up to the Rothorn hut intending to climb the Zinal Rothorn. However, during the night there was a fairly bad storm so we thought it wiser to change our objective. As it turned out, twelve people who set off for the Rothorn were defeated near the summit while we made it to the top of the Wellenkuppe, an enjoyable peak, almost 13,000 feet high and consisting of delightful mixed rock, snow and ice climbing. The view from the summit was magnificent. Our eyes were drawn to the Matterhorn standing alone in splendid isolation, and while the nearby Weisshorn was hidden in cloud, the row of giants – Monte Rosa, Lyskamm, Castor, Pollux and Breithorn which guard the Italian Frontier – was clear, while 8000 feet below, the roofs of Zermatt glinted in the morning sun. After this pleasant climb we had to admit that maybe the Alps had something to offer after all! We then returned to the village, where outside the post-office, we found a rucksack to which were attached a disreputable rope and tent which could only have been Cairngorm in origin, but of their owner there was no sign. Somewhat surprisingly, two Italians were casting covetous glances in the direction of the rucksack, so we took up guard duty, and were soon joined by John Inglis, the third member of our party.

The weather continued settled so we went up to the Täsch hut from which several peaks can be climbed, including the Dom, Alphubel and Allalinhorn, but we settled for the Rimpfischhorn – 13,776 feet high and rarely climbed from this particular hut.

Next morning there was the usual débâcle as we picked our way through the glacial moraines, and it was a great relief to see dawn breaking, which meant that we could dispense with the torches. A plod along the glacier brought us under the west face of the mountain where a large, noisy German party were dislodging stones from the ridge. This would have been good fun to watch from a distance, but being in the immediate vicinity of the resultant avalanche of rock, ice

and snow, we shouted up in schoolboy, but nevertheless effective German, exactly what we thought of them. The bombardment stopped abruptly, and we were able to continue on our way unmolested. Traversing upwards under the face, we emerged on to a snow saddle where a steep snow-ice gully led us to rocks which we followed to the summit ridge – an array of very exposed pinnacles resembling Stac Polly, but separated by narrow snow arêtes. The summit was ours and we returned to the hut well contented after a great mountaineering day. That night, there was a bad storm so we remained in our beds, but several people including some guides set off for the Alphubel which we had also wanted to climb. A few hours later they staggered back to the hut, soaked to the skin, with epic tales of waist-deep fresh snow. We nodded, smug and complacent, but did not interrupt our cards.

The bad weather continued for three days more before settling again. We waited a little longer to allow the Matterhorn to get into condition (although in actual fact we could have waited the whole summer without getting it in proper condition), and then set off for the Hörnli hut. When we reached the base of the mountain, we discovered that the Hörnli hut had been demolished to make way for a new hut so the only other place to sleep was the adjacent Hotel Belvedere. It charged the most extortionate prices, such as 3s. 6d. for a bottle of water and 17s. for a bunk. This didn't appeal to our Aberdonian instincts at all, so we decided to bivouac in a small howff we discovered. It wasn't in the least up to Cairngorm standards, and snow blew in through gaping holes in the 'roof'. So, setting our faces into what we thought were looks of grim, Teutonic determination, we awaited the arrival of the dawn.

Our guide book stated that there was no advantage in starting before first light, unless to get an early place in the queue and a good seat at the top, so we were in no hurry to stir. However, about 3 o'clock, the first climbers started to pass by, looked at our lodgings in amazement, and, barely managing to stutter a polite 'Guten Morgen', carried on, shaking their heads and muttering about mad Englanders. At 5.15 we eventually got going and by now there was only one party above in sight. Having regard to our own inexperience, we decided to follow them, for the Hörnli Ridge, while not technically difficult in proper condition, is a little complicated in detail and our much harangued guide book was rather vague on the subject. Unfortunately, the party we chose to follow lost the route from the very start, and not long afterwards turned back. We kept on climbing, meandering up the flank of the east face which, frankly, is just one vast heap of sand

and rubble. At last we struck the proper route and some quite good rock where the Zermatt Cleansing Department had obviously been busy, and eventually reached the Solvay hut, a tiny refuge perched on a ledge at over 4000 metres. We continued beyond the hut after a bite to eat, when in the space of a few minutes the weather changed dramatically. It began to snow and a cold wind blew up, while mist and cloud enveloped the hill. A guide thought a bad storm was in the offing, so we scuttled back to the security of the Solvay. From there, we passed the time watching another guide lowering down his corpulent American client, and the dialogue (or, more accurately, monologue) was something like this – 'No! No! No! No! Zat eez not right! You must not make your own directions – zat eez bad! Move towards zee hut – there will you handholds find! You must leesten to zee Guide! He is 'ere to 'elp you! You are not leestening . . . Sir!'

The weather deteriorated even further so we gave up our attempt and retreated back to the howff and then returned to the village.

Three Austrians camping next to us returned at the same time after having climbed the Matterhorn North Face, getting to the top after two bivouacs. They just made it, for in the three remaining days which we spent in Zermatt, the peak was totally obscured by cloud, while fresh snow lay right down to 1000 feet above the village. It looked like the end of the season in Zermatt, a fact which was confirmed by a local, who declared it had been the worst for a hundred years.

So, cashing our trading stamps and getting the deposits back on a variety of bottles, we left Switzerland and set off for home.

The train journey through France was tedious and I have no doubt that if it had lasted a day longer, the Auld Alliance would have been smashed for good. In Paris we ran the gauntlet of the Metro (with full packs) during the evening rush hour and then got caught in a thunderstorm. At Folkestone the customs were unnecessarily suspicious and awkward, while in London we were menaced by a huge twenty stone lady with tattooed arms, in a bar outside King's Cross Station, and it wasn't until we were ensconced in the train that we began to feel safe.

Needless to say, we didn't have a sleeper, and woke up with splitting headaches and parched throats: and it goes without saying that I was not at my best when I reported for duty the following morning at Aberdeen Corporation Transport Department. So far as I know, I wasn't reported by any member of the public, but I am certain I deserved to be, for my thoughts were far far away, high up in the glistening snows of Zermatt, totally removed from the stark reality of an early morning shift on the Scatterburn bus!

Via Ferrata—and battles long ago

An account of a visit to the Dolomites in July 1976

DONALD HAWKSWORTH

'So that's what a Via Ferrata looks like!' We stood, a somewhat awestruck group, nervously regarding the fixed wire snaking up the very steep first pitch of the Mesola, part of the rock ridge dividing the Sella and Marmolada ranges in the Dolomites. Bill Lyle, our genial guide from Edinburgh, introduced us to the required technique of clipping our karabiners onto the wire, swarming up the rock, unclipping at each iron peg, and then reclipping above it. 'Climb the rock – just use the wire as an aid' was his advice. Easier said than done! I think that, at the more extreme moments, most of us gave a mighty heave on the wire to launch us over an overhang!

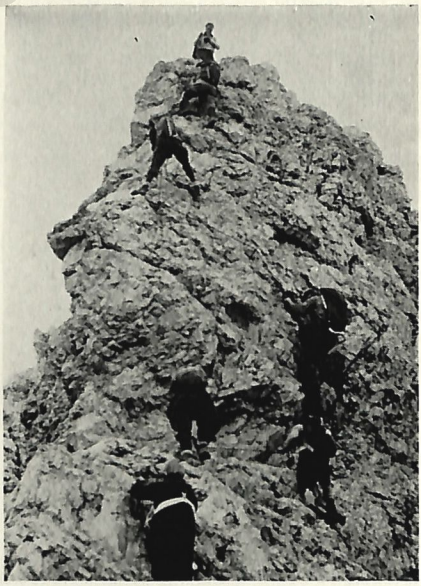
I had driven from Berne two days earlier, through Chur and Davos, and then, in the afternoon sunshine past the orchards and castles of the Alto Adige on to Merano and Bolzano. It was evening as I came up the Val Gardena and had my first breath-taking glimpse of a Dolomite peak, the Langkofel, looking splendid in the last rays of the sun. I soon reached Corvara where I was to meet up with the rest of the Austrian Alpine Club party A5012. There is a charming description of what Corvara used to be like in L. M. Davidson's book, *Things seen in the Dolomites*:

> On our arrival at Corvara, we found ourselves in the centre of what seemed to be the stage set for an opera; the houses forming the wings, and the creepers, window-boxes full of flowers, and the background of trees against the green-sward of the hillside, with the great Dolomites above, made a most spectacular show. Into the triangular courtyard our carriages swept as though intending to take the stage, pulling up at the house on the left, which we entered by a picturesque old stairway with fine stone-carved balustrade . . . The opposite house which lay back forming the second side of the court had another such entrance stair to the 'piano nobile', or first floor. Leaning over the balustrade in all sorts of attitudes, were the village lads and lasses in their Sunday best. They had been dancing as we came up, to the tune of a fiddle, but scattered as we drove in. It was the opening scene for any sylvan opera you like to think of – an open-air operetta!

My arrival was less spectacular, Corvara having lost to a large extent its old world charm since its development as a resort for winter ski-ing and summer tourism. However, I was able to hear quite

Monte Averau (2648 m) and the Fanes peaks from the Nuvolau Hut
[*photo by Donald Hawksworth*

Mesola – relics of the First World War
[*photo by Nigel Nott*



A steep section on the Via Ferrata d'Olivera
[*photo by Nigel Nott*

distinctly the strains of the village band over 1000 metres below me, as I stood on the summit of Saas Songher (2665 metres), the fine peak which towers above Corvara.

When my fellow climbers arrived after their long bus journey from Milan airport, they proved a friendly crowd, their jobs ranging from an editor of the *Yorkshire Post* to a London banker. After a long, dry spell, the weather unfortunately began to break up for our tour, which had, therefore, to be modified quite drastically.

Our intention had been to climb some of the highest Dolomite peaks by using the extensive system of Via Ferrata, most of which are of fairly recent construction, being devised and maintained by local guides. Lest the purist be horrified at the thought of mountains being festooned with fixed pegs and wires, it is worth pointing out that there is still plenty of virgin rock in the Dolomites, and the Ferratas enable the average hill walker/scrambler to tackle routes which would otherwise be far beyond his powers. The idea had developed from old military routes constructed during the First World War during the fighting between the Austrians and the Italians. Because of the mountainous nature of the terrain, this was a particularly difficult campaign, and the two armies constructed barracks and fortifications in the most inacessible places, so as to command the valleys. Some of the iron ladders and fixed wires date from this time, and we found many relics of the war. On the Mesola, described briefly in the first paragraph of this article, we passed gun emplacements, and later during our tour visited the Lagazuoi, which had been the scene of what must surely rank as one of the most spectacular battles of the campaign. Walther Schaumann had been an officer at this time, and his book about the Dolomite War makes fascinating reading:

A ledge of rock crosses the Lagazuoi half-way up the face: the Italians called this the Martini Ledge, after their commander. The ledge begins by the defile that separates the peak from the eastern summit. Both ends of the ledge widen out; the narrowest place is in the middle.

The peaks of the Great and the Little Lagazuoi had been in Austrian hands since the beginning of the war. One dark, overcast night (19 October 1915) soldiers of the Val Chisone Battalion under Martini climbed over the broken rock face. They sheltered at first as well as they could behind blocks on the ledge and behind breastworks quickly constructed out of stones. Directly above them were the Austrian pickets on the summit, directly below them the Austrian valley positions between Lagazuoi and Sasso di Stria. Holding this ledge position the Italians soon caused the Austrians in the valley positions more losses than they had suffered earlier in big attacks by whole battalions. Day and night the Italian snipers and machine-gunners were on duty. The Austrian losses increased steadily. Overhangs in the face of the Lagazuoi protected the Italians from direct attacks from the Austrians on the summit.

Energetically the Italians continued to extend their ledge position, to protect themselves better from the Austrian counter-measures which were to be expected. A tower of rock, the 'rock of mist', 30 m high and 18 m broad, held numerous caverns, arranged in galleries and mounted with machine-guns and a mountain-gun. The second focal point of the ledge position was the so-called 'tattooed rock', likewise furnished with numerous openings. Beside these further caverns and huts came into being. The patrol which had originally established itself on the face grew in the meantime into an entire company of Alpine troops.

While they were thus extending their positions, the Italians were also moving further up the face, until their foremost stations were only 40 m below the Austrian garrison on the summit. Skilfully set up Alpine climbing apparatus connected these posts with the ledge.

On 17 December 1915 the first big Austrian attack was launched against the Cengia Martini. Suddenly the Austrian artillery began firing at the ledge. Three Austrian mountain guides let themselves down by rope from the summit until they had a good view of the ledge position. In the midst of the Italian fire, they led the Austrian artillery fire as they dangled from their ropes. Meanwhile a patrol of specially chosen climbers and riflemen attacked the ridge from specified points on the face with hand grenades and rifle fire. But the Austrians in the valley had only a short respite: soon there were more heavy losses. The Italians on the ledge had taken up the fight again.

Later on the Austrians tried to blow up the mountain, by tunnelling to near the Martini Ledge, and filling the tunnel with 24,000 kg of explosive. Schaumann describes the detonation of the explosives on the 22nd May, 1917:

As soon as the enormous cloud of smoke had cleared, there was nothing but a huge new fracture in the rock to be seen in place of fortifications. The mine had destroyed the face along a length of 200 metres and to a breadth of 136 metres. The volume of rock displaced was estimated at 130,000 cubic metres.

Quite a bang! But in spite of this, and many casualties on both sides, the ledge was still held by the Italians when the campaign ended in the autumn of 1917. We were able to descend this tunnel, which starts near the summit of the Lagazuoi and descends very steeply for 93 metres to come out close to the Martini Ledge. It was a muddy dark, and strenuous experience, at the angle of the tunnel is unrelenting, and it is pitch black inside. A fixed wire gives one something to cling to, but the experience helped me to visualise the great hardship the troops had to undergo in this terrible campaign.

Another impressive reminder of the First World War is the spectacular Scala del Menighel, where 274 iron rods help one to surmount the 300 foot precipice from the Travenanzes valley to the boulder field below the Tofana di Rozes, which, at 3224 metres, was our highest peak of the tour. We came down this ladder, an alarming

experience, as there is no fixed wire, and some of the iron bars are missing, bent, or even loose. It was possible to pull some of them out of the rock and replace them! Above the ladder, we had found many battle relics ranging from quite sizeable pieces of shrapnel to rusted billy cans, bits of Army boots, etc. The fighting here had been concerned mainly with the occupation of a strategic position near where the Giussani hut is now situated – the Fontana Negra. Nearby is an older hut, the Cantore, named after General Cantore who was killed during the battle for this position. Here is what Schaumann wrote about it:

The most difficult position in the Travenanzes sector was the Fontana Negra. For the Austrians, possession of it secured the flank in the upper and middle Travenanzes valley. On 20 July 1915 a section of the German Alpine Corps arrived in the Travenanzes. On 22 July, two patrols clambered with difficulty up the Tofana: this was the highest peak conquered by German troops on the south-west front. A constant watch was then kept on the summit by three parties relieving each other: because of the climatic conditions, this duty was exceptionally hard. . . .

On 20 July, the Italians attacked the Austrian Fontana Negra position. They managed to reach the trenches, where they were defeated only after bitter close combat. General Cantore then ordered a second section to attack. Several times the General had been warned by his entourage not to go about so openly on the field of battle; but he waved all these remarks aside and remained on his observation post. Once as he was raising his binoculars he collapsed from a shot in the head.

On 1 August Italian artillery fire destroyed the quarters of the Austrian section command, the Wolf–Glanvell hut. On that day the Fontana Negra position was taken over by Prussian riflemen. They were warned by the troop which had been relieved that for several nights they had heard suspicious noises coming from the walls of the Tofana. On 2 August the Italians again attacked the Fontana position . . .

Further unsuccessful attacks followed in October. By then weather conditions were becoming much worse. Spades were the most valued possessions. Ridge posts, trenches, supply lines had to be kept clear of snow. Sentry duty and snow-shovelling determined the order of the day. The snow was 8 to 12 metres deep. Fighting was impossible. The roar of avalanches went on for hours, and in the intervals of silence both sides could hear cries for help: the White Death had struck again. One day an avalanche flung an entire Italian dug-out, with men and machine-guns, over the face of the Tofana right in front of the Austrian position . . .

We experienced extremes of weather during our 12 days tour. Our attempt on the Marmolada was thwarted because there was too little snow! Normally, this peak, the highest in the Dolomites, can be ascended by a fairly easy snow trudge. The fine weather prior to our visit had laid bare large tracts of ice, and as we had only one ice axe

and no crampons in the party (having been advised that we would not need them), all we could do was traverse the Forcella di Marmolada, in itself a tricky undertaking in places due to ice on scree. At the other extreme, we had too much snow when later we visited the Lorenzi hut, situated high on the ridge of the Cristallo. We had travelled by bus to the Tre Croci Pass, where we met some climbers who told us of the bad conditions up aloft. They, sensibly, were descending. However, we set out in the rain for the Son Forca hut, where we had to persuade the cable car operators to leave their game of cards and transport the mad British upwards into the mist and snow. I shall never forget being ejected from the cable car cabin into the midst of a scene more reminiscent of the Arctic than of the sunny Dolomites. Mist and deep snow were everywhere. However, the hut was very comfortable, and the minestrone, spaghetti, and red wine tasted even better than usual. We were able to watch 'Popeye the Sailorman' on TV, and then chat with the hut guardian, Signor Francesca, who had been a hard climber in his younger days, having put up some new routes on the Tre Cima. The following morning, the snow was still falling, and we were only able to complete a short section of the Ivano Dibona traverse. Even this was quite an adventure, as the fixed wires and rocks were all plastered with ice and snow, and the visibility was virtually nil. Eventually we abandoned ship, and descended the gully below the Forcella Grande back to the valleys.

We achieved limited success on certain of our outings, however. We bagged two 3000 metre peaks – the Tofana di Rozes (3225 metres) already mentioned, and the Cima d'Ombretta (3011 metres), from the summit of which we should have gazed upon the grandeur of the south face of the Marmolada – but mist hid this from us! We also completed the Ferrata on the Punta Anna, a fine expedition and we were lucky for weather when we visited the Nuvolau hut, remarkably situated at 2575 metres on a mountain top. From here, we had a panoramic view of the whole area, and our cameras were clicking overtime on this our 'one fine day'. Our projected ascent of the Civetta was out of the question due to thunderstorms – it is not advisable to be caught on a Via Ferrata when thunder is about, as the lightning tends to sizzle its way down the fixed wire!

Our tour ended at the Scotoni hut, situated in a lovely spot on meadows below the Fanes peaks. From there, we crossed back to Corvara. In spite of disappointing weather, I felt that I had had a memorable holiday, and I certainly want to revisit these remarkable and beautiful mountains at some time in the future.

Glissando!

RICHARD SHIRREFFS

It is right that this *Journal*, as a chronicle of trends and activities within the Club and the mountaineering fraternity at large, should record not only the conventional activities of Club members but also something of their less conventional or even deviant activities. One such activity which has become particularly prevalent on Club meets in recent winters is the sport (as its devotees refer to it) of glissading, a sport about which the literature presently available is extremely limited. The purpose of this article is to explain in as complete and scientific a manner as possible something of the history and practice of glissading, perhaps thereby reducing the tendency for it to be stigmatised as deviant.

History

Glissading is by no means a new activity. It is believed to have been discovered thousands of years ago by the penguins of Antarctica, who found that an even snow or ice slope could be descended more rapidly and with less risk of falling *à ventre* than *à pied*. To the credit of European man, it appears that he separately discovered the glissade before the first penguin came to Europe. However, being physiologically different, his development of the glissade has naturally varied from that of the Antarctic penguin – generally *à pied* or *à postérieur* rather than *à ventre*, and commonly with artificial aids such as skis, skates and toboggans, the use of which has become so common that they have come to be thought of as separate sports. However, a handful of purists continue unobtrusively to practise the glissade with simpler artificial aids, and it is with such glissading that this article concerns itself. Although it seems unlikely that man can ever glissade successfully and comfortably without any artificial aids, the most advanced techniques now practised in Scotland, made possible by the invention of materials such as polythene and nylon, show a distinct return towards the natural *à ventre* Antarctic method of glissading, the glissader lying front down, head forwards on a sheet of material with a suitably low coefficient of friction on snow or ice, known in the jargon of the sport as an AFM (anti-friction medium).

The practitioner

It is not difficult at times when there is snow on the hills to detect the obsessed practitioner or devotee of glissading, a sport which perhaps more than any other tends to become an obsession. At times when snow patches are to be found only high up, the devotee's pace will visibly quicken when the first likely patch is seen, and once the snow level is reached he will be found, particularly if he is obliged to remain with a party of non-devotees, to be looking not where he *is* going but rather where he would *like* to be going. Other walkers should never allow themselves to be led by a glissading devotee, for his routes may be the quickest ones down but are seldom the best way up.

The slope

A good standard glissade slope is one of a generally concave longitudinal profile, with a top section of sufficient gradient to provide the required initial acceleration, and a lower section either easing off to a lesser gradient a sufficient distance from any hazards or else ending in stonefree grass or short heather of reasonable stopping power. As well as affording this change of gradient between top and bottom, concavity ensures that the bottom can be seen before the glissade commences. Although the length of slope is really immaterial, different glissaders will prefer different lengths – the shorter slope is more amenable to frequent re-ascent and therefore is more easily transformed into a polished high speed run, but the longer slope is more conducive to the demonstration of other aspects of glissading technique.

The grade of snow is not too critical, but optimum hardness varies in inverse proportion with gradient. Soft powdery snow will generally be found least suitable unless a first run reveals a firmer underlayer, and soft wet snow on shallow gradients will be found to inhibit acceleration and sometimes even motion. For a slope of average gradient, medium-firm snow is perhaps best, but with a suitably robust anti-friction medium really hard snow is favoured by many devotees, the occasional transverse ridge often found on such snow adding interest to the run. A good slope should be free of stones close below or appearing through the snow surface. Few glissaders find their enjoyment enhanced by an encounter with a stone, whether transient or terminal, and such encounters may indeed result in damage to the glissader and the anti-friction medium. There are, however, a few super-skilled slalom glissaders for whom a few stony interruptions make the difference between an acceptable run and a good one.

A concealed hazard to be avoided is the subnivial cavity. This will commonly be found where drifting snow has bridged a watercourse for part of its length. As can be imagined, unintentional descent into such a cavity could be not only cold and wet but also, if the cavity were large and the watercourse swollen with meltwater, irreversible.

The first run

The selection of a suitable slope is usually followed without substantial delay by the first glissade. The choice between a glissade *à ventre* and a glissade *à postérieur* for the first run depends upon the nature and position of the slope. As a glissade *à ventre* will usually be the faster, it will in many cases be prudent to make one's first run a glissade *à postérieur*. This has the advantages (*a*) that having one's head higher one can see hazards sooner, (*b*) that travelling more slowly one can more easily stop or vary one's course, (*c*) that if one does unexpectedly find oneself travelling uncontrollably towards a medium-sized stone one can at the critical moment switch to a glissade *à deux pieds séparés* and so pass around and over it, and (*d*) that one can use an ice axe for braking. However, if the run clearly has no hidden obstacles or if the gradient or snow type make it difficult or impossible to begin a glissade *à postérieur*, it is perfectly common for a glissade *à ventre* to be adopted for the first run.

The anti-friction medium

It is of the utmost importance for a successful glissade to choose a suitable anti-friction medium, by which is meant of course the layer, corresponding to feathers in the original penguin glissade, which one introduces between oneself and the ground to minimise frictional deceleration. In ski-ing, skating and tobogganing the anti-friction medium is solid, straight and narrow, but in true glissading it is usually flexible and can be of any shape or size.

For the occasional glissade *à postérieur* on hard dry snow the seat panel of climbing breeches may be a sufficient anti-friction medium involving no waste of time in packing and unpacking, but for most snow conditions, for more concentrated use and for glissades *à ventre* something more expendable and waterproof is more suitable. Cagoules or trousers of waterproof woven fabric can be used but have their disadvantages, such as that if they are of too fine a weave they may reduce frictional deceleration below a safe limit (a difficulty which cannot be overcome by abandoning the garment *en pleine glissade*); that if they are of too coarse a weave they may cause excessive frictional

deceleration; and that persistent use may lead to lacerations or diminished waterproofing. The anti-friction medium favoured by most enthusiasts is the polythene sack, often known, one suspects with affection, as a polybag, hence the alternative name 'polybagging' for the sport.

It is believed that the first polybag to be used in this way was a survival bag, of the type which forms part of the equipment of any walker on a day when sufficient snow is present for glissading. Survival bags are still in use as anti-friction mediums, as they do have the attractions of size and brilliant colour and the merit of not being extra weight on the walker's back, but use for glissading invariably leads to deterioration in their efficiency for their primary purpose.

The form of polybag currently in most common use as an anti-friction medium is a sack of heavy grade polythene about 60 cm by 150 cm of the sort used for fertiliser, peat, manure and similar substances. Apart from the attractions of their often brilliant colours and their humble atechnologicality, these sacks have the advantages of (*a*) being easily and inexpensively come by and replaced, (*b*) having an exceptionally low coefficient of friction with snow, (*c*) being easily packed and carried, (*d*) being easy for self-jettison in case of difficulty and (*e*) not being an item of equipment the loss of which or damage to which would be a source of danger or discomfort to the walker.

For a solo glissade *à ventre* the optimum length of anti-friction medium is equal to the distance from the user's nose to his ankles. This ensures that the user has enough length for gripping the front edge just forward of his shoulders and for keeping his knees dry, but not enough to blow up in his face or to inhibit toe braking (or in the jargon of the sport 'metatarsive deceleration'). The same length is equally suitable for a glissade *à postérieur*.

The choice of technique

The range of techniques is extremely wide. The best technique for a beginner is the solo glissade *à postérieur*, this having a number of safety advantages as mentioned above in the section on the first run. However, for an experienced glissader, the choice of technique will depend very much upon personal preference, the nature of the slope and the snow, and the company. Most practitioners find the glissade *à ventre* more exhilarating than the glissade *à postérieur*, but in some circumstances the former technique may be too exhilarating, or indeed unsafe.

The solo glissade *à ventre* does not permit of many variants worthy of description here, but it is a different matter when we consider the

group glissade *à ventre*. The glissade *en groupe parallèle* involves the participants lying alongside each other on a single broad anti-friction medium. The interest of this variant lies in the possibility that, with the long and short axes of the glissading complex being more nearly equal than those of the solo glissader, the complex will develop a certain rotation because of different overall frictional deceleration on the two sides of the centre of mass. This makes it prudent in a group of three or more to have one or more of the group (symmetrically placed about the longitudinal axis) facing in the opposite direction to the others so that visual navigation and metatarsive deceleration are still possible if the complex rotates through 180°. The glissade *en paire empilé* involves one participant lying on top of the other, and of all the techniques this is possibly the one most difficult to maintain over a long distance. The other main variant of the group glissade *à ventre* is the glissade *à remorquage*, where each participant has his own anti-friction medium and each apart from the leader holds onto the feet of the one in front.

The glissade *à postérieur*, while generally slower and less exhilarating than the glissade *à ventre*, can offer good sport on a slope which by reason of irregularities or too great a gradient is unsuitable for the glissade *à ventre*. Many devotees in fact find a short fast interrupted glissade *à postérieur* every bit as exhilarating and demanding in technique as the glissade *à ventre*.

Some of the best slopes for the glissade *à postérieur* are to be found in glacial meltwater channels, particularly those, often the branches of larger meltwater channels, which do not cut fully through a ridge but have a head enclosed on three sides. Such a place often catches deep drifts of snow which remain after snow has melted elsewhere at the same altitude, and the drifting produces fascinating slopes with ridges, channels and steps which demand great skill and nerve. On a slope such as this it is virtually impossible to predict one's trajectory, and a particularly interesting phenomenon which may occur is loss of contact with the ground. This occurs at any point where there is a convex slope with radius of curvature less than $(v^2 \sec \theta)/g$ where θ is the angle between the slope and the rearward horizontal, v is the glissader's velocity and g is the gravitational constant. Since the nerve of the glissader normally imposes upper limits on the range of values that v can take on and that θ can take on over long distances, the convex radius of curvature rarely falls below $(v^2 \sec \theta)/g$ except where θ changes abruptly from a low value to a high one, this occurring at clifftops and, more usefully to the glissader, where drifting snow in a

gully or meltwater channel has left a short nearly vertical section below a slope of lesser gradient. Loss of contact with the ground may occasion difficulty if it occurs in a *glissade à ventre* by reason of the difficulty or discomfort of landing, but if it occurs in a glissade *à postérieur*, a landing *à postérieur* can be a pleasing sensation, and a landing *à deux pieds* a pleasing accomplishment.

The non-solo variants of the glissade *à postérieur* in common practice do not extend beyond seating a plurality of persons behind one another on a common anti-friction medium, and do not warrant any particular description except for it to be mentioned that five persons and a dog have on one occasion been observed glissading together on one polybag, and that, as with the group glissade *à ventre*, it is not uncommon for rotation about a vertical axis to set in.

Control and termination of the glissade

The control and termination of the glissade are matters which the prudent will have in mind before the glissade begins, the possible methods being important elements in the choice of slope, technique and anti-friction medium. The most common means of voluntary control are (1) ice axe braking, (2) toe braking (or metatarsive deceleration) and (3) heel braking. Applied for sufficiently long, these may also operate as means of terminating the glissade, but other means of termination include (1) jumping and landing on both feet ahead of the anti-friction medium, (2) rolling laterally off the anti-friction medium, (3) arrival on a slope of reduced or reverse gradient and (4) arrival on a snow-free surface with sufficient coefficient of friction with the anti-friction medium.

Ice axe braking is generally thought safe only for the solo glissade *à postérieur*. The axe is held with the glissader's stronger hand around the blade part of the head and his other hand around the lower shaft. This enables the pick part of the head to be pressed into the snow some distance behind the anti-friction medium and its angle varied by raising or lowering the hand on the shaft; use of the point alongside the glissader might induce spin as well as bringing the blade of the ice axe too close to his body for safety in the event of his rolling over. Ice axe braking is of most value on steep slopes of hard snow where no other means of control or termination would be effective. It is naturally most effective on hard snow, but can be also be used on almost any grade of snow except that which is too soft for glissading.

Toe braking is available only for the glissade *à ventre*, the toes being pressed into the snow behind the anti-friction medium. Because

climbing boots usually have relatively unpointed toes and because of the difficulty of transferring weight to one's toes when lying horizontally, toe braking is distinctly less effective than ice axe braking, and a prudent glissader will not rely too much on toe braking until he is satisfied that it will be sufficient for the run in question. Often of course available metatarsive deceleration will be enough for control purposes, with a change of gradient or snow type being relied on to permit termination.

Heel braking is a straightforward technique available on the glissade *à postérieur*, and in effectiveness comes between ice axe braking and toe braking. Its particular drawback is that in conditions of powdery snow it may throw up more snow than is consistent with facial comfort and good forward visibility.

One of the most dignified ends to a glissade *à postérieur* is the jump and landing on both feet, which leaves the glissader in a position immediately to ascend the glissade slope for a further descent. Skilfully exercised, this manoeuvre can be used to bring about termination of a moderately fast glissade in a very short distance and within very close limits of the desired stopping point, a useful technique if one wishes to maximise the potential of a run lacking natural terminal retardation. Unless for special effect, this manoeuvre must not be performed where the snow is either so firm as to result in the start of a glissade *à pied* or so soft as to permit penetration above the knees.

The lateral roll is in the nature of an emergency measure which glissaders resort to only in cases of need or as practice for such cases. It is of no value unless the glissader's clothing has a coefficient of friction with snow greater than that of the anti-friction medium, and it cannot safely be put into effect if the glissader is carrying an ice axe. When used, it necessarily puts the glissader either face down feet first, or back down head first, both positions hardly conducive to forward visibility and control of velocity.

The simplest and most natural means of termination is to arrive either on a slope of reverse gradient, or else on a slope where deceleration due to friction with and compression of the snow exceeds acceleration due to gravity. A slope where it is known that this means of termination is available naturally permits the glissader a greater choice of techniques, for he can dispense with an ice axe and can afford to adopt positions such as sitting backwards or lying backwards, in which toe and heel braking and other forms of control would not readily be possible.

Arrival on a snow-free surface is a means of termination which

experienced glissaders use only sparingly, usually as a way to maximise the length of a short run. Below a snow patch, heather may conceal stones, and grass be either uncomfortably hard (in freezing conditions) or uncomfortably wet (if, in conditions of thaw, the coefficient of friction between the grass and the anti-friction medium is greater than the coefficient of friction between the latter and the glissader). Further, if the snow-free surface proves to have a lesser coefficient of friction than is necessary to terminate the glissade, toe, heel or ice axe braking may be difficult or impossible to apply, with an emergency situation resulting.

The future

It seems probable that glissading will come to be more widely practised and recognised as a sport in the years ahead. The relatively snow-free winters of recent years have considerably limited opportunities for glissading, but in snowier winters those who have practised glissading on the hills may look for runs on lower ground, thereby fostering an interest amongst those who would not otherwise venture into the hills. It is possible too that some skiers may see that the glissade *à ski* is not the best form of descent, a fall being impossible when one is already on the ground. (A group of skiers on a regular ski slope have been observed to stop and stand in envious astonishment when half a dozen Club members glissaded with relish down a nearby slope which for the skiers would have held a number of difficulties.)

New techniques will presumably emerge, but it is difficult to anticipate what these might be. New types of anti-friction medium might make new techniques possible, particularly if a more rigid, easily carried light-weight type could be developed to permit glissading on slopes where the low gradient and softness of snow combine to make glissading impossible with a polybag as anti-friction medium.

Club members will no doubt do everything possible to ensure that it is on the Scottish hills that glissading is developed into a sport of the status that it deserves.

[*The Editor accepts no responsibility for death or injury which might result from any reader putting into practice the techniques described in this article!*]

Guides to the Cairngorms

R. L. MITCHELL

The recent appearance of a new edition of the *Scottish Mountaineering Club Guide* to the Cairngorms provides an opportunity to recall its predecessors. Before the publication, in 1928, of Henry Alexander's classic first edition, a variety of sources had to be consulted when planning to visit these hills. There was the series of eight or so monographs by our first secretary, A. I. McConnochie, which described specific areas. The first, dated 1885, was entitled 'Ben Muich Dhui and His Neighbours: A Guide to the Cairngorm Mountains'. This may well have been instrumental in arousing interest in their exploration and so led, on Queen's Golden Jubilee Day in 1887, to the casual meeting of a few enthusiasts at the Shelter Stone, where, next morning, on what was then known as the Dairymaid's Field, they spontaneously and unanimously agreed to form themselves into a Cairngorm Club.

For the early excursions, club members were fortunate in receiving a comprehensive programme that included descriptions of the topography, geology and botany of the area together with details of possible routes. That covering the excursion to Braeriach and Cairn Toul on 14 July 1890 ran to 28 pages. With the introduction of the *Cairngorm Club Journal* in 1893, numerous descriptive articles soon became available, including, by 1896, four of a guide-book type covering the eastern, central and western areas of the main group, written by the secretary, who had also taken over the editorship. These were illustrated with sketches by J. G. Murray which provided useful topographical information.

The Scottish Mountaineering Club meantime initiated a project to produce guides covering all the mountain areas of Scotland and, to expedite publication, presented them piecemeal in the *SMC Journal* from 1901 onwards. The main Cairngorm and Lochnagar sections, issued in 1903 and 1904, were written by W. A. Smith, Harold Raeburn and William Garden. These ran to around one hundred pages and provided the systematic background that has been elaborated in subsequent SMC guides.

The 1928 edition of the Cairngorms guide provided the standard by which all other SMC guides have been judged: few have approached and none have surpassed it. In its 218 pages it provided an excellently-written and well-constructed picture of the area, covering, as most

members will no doubt be aware, general topics such as geology, flora and fauna, snow-climbing and ski-ing, mounth roads, distant views, climbing centres, maps, distances and times and bibliography, before dealing systematically with reasonably self-contained groups of mountains or hill-passes. Such rock-climbs as were then recognised were described in the appropriate section. A phototype reprint was necessary in 1931 and a second edition, modified only by an addendum of new rock-climbs compiled by G. Roy Symmers appeared in 1938. Sir Henry Alexander died in 1940 and the 1950 third edition was a revision by W. A. Ewen. This ran to some 300 pages, but introduced the minimum of textual alteration, relating largely to modifications in conditions of access and other peripheral changes inevitable with the passage of years, together with some details of the flood of new rock-climbs. This edition was not superseded until 1968, having in the meantime been supplemented in 1961 and 1962 by Malcolm Smith's two-volume pocket-size *SMC Climbers' Guide to the Cairngorms Area* which brought the descriptions of rock and winter climbs up-to-date.

The fourth edition, for the revision of which Adam Watson was principally responsible, but which was still ascribed to Sir Henry Alexander, appeared as one of the SMC District Guide Books to distinguish it from the more specialised Climbers' Guide Books, and was published, for financial reasons, by the Scottish Mountaineering Trust. It retained the basic lay-out of the first edition, but by now significant textual changes had become necessary and details of rock and ice climbs could be omitted as they were available elsewhere. Although the external appearance was little altered, modified typography gave the contents an unfamiliar look. This edition proved to be no more than an interim measure and a completely revised and rewritten version has now appeared.

The Cairngorms (fifth edition) by Dr Adam Watson, 302 pages, published in 1975 by the Scottish Mountaineering Trust, Edinburgh, is subtitled 'The Cairngorms, the Mounth, Lochnagar' and at present costs £5.20. It is distributed by West Col Productions of Reading, being one of the nine Scottish Mountaineering Club District Guide Books, of which the general editor is W. B. Speirs. The layout has been considerably modified. While the earlier editions tended to describe the country from south to north and east to west, the coverage is now from north to south and west to east, and an Aberdeen bias has disappeared. The introduction includes sections on conservation, while accidents and mountain rescue are now covered by the local authority, John Duff, BEM.

To attempt to follow Sir Henry Alexander was inevitably a thankless task, but Adam Watson has done an excellent job. His objective has been to strike a balance between the needs of the serious climber (who can now consult a five-volume SMC Climbers' Guide to the area) or hill-walker and those of the newcomer whose interests may lie in such aspects as vegetation or place-names as well as in walking routes. Anyone with a broad interest in outdoor recreation as well as the dedicated hill-person will find the present work invaluable or even essential for a visit to the area.

Your reviewer found the text somewhat more difficult to read than the simple, smooth-flowing style of the original and occasional turns of phrase caused him to hesitate. There appears to be a subtle change in approach, with more emphasis on simpler forms of overnight accommodation and more plebeian means of transport, probably occasioned partly by the proliferation of locked gates that now exclude the car or small bus of thirty years ago.

On first reading, the route descriptions may appear complicated, but with the help of a 1 : 50,000 map the instructions become explicit and the alternatives obvious. Unfortunately the simple sketch-maps by James Renny which accompany most chapters, although their scale is generally near 1 : 80,000, are inadequate for route-planning, as many of the landmarks cited in the text are not included or are inconsistently named and no map reference grids are given. Much of the information they provide is in fact presented in better context in the end-paper maps, which in a later edition might include a key to the area covered by each chapter. It is to be hoped that novices are not tempted to use the sketch-maps in the field instead of the appropriate Ordnance Survey map.

The high standard of the main text is in fact not fully maintained in the ancillary sections. The index no longer contains the names of standard rock routes (brief reference to which again appears in the appropriate places), low ground features, access points, bothies, etc., as it is claimed that these can be traced from the sub-headings of the introduction or other chapters. Only these in the former are detailed in the list of contents and anyone unfamiliar with the area may not know which chapter to scan. Even the items included in the index are sometimes incompletely covered.

There has been a gradual decline in the standard of the illustrations and the reproduction of the photographs: the first and second editions contained some photogravures whose inclusion is no longer practicable but the omission of panoramas and the excellent outline

sketches of the Cairngorms as seen from Aviemore and Braemar in the third edition is to be deplored. The loss of photographic blocks by the previous printers is sadly felt. Although at first glance there has been little change in screen size or paper quality, the reproduction of the photographs is generally poor, and the modern custom of printing to the edge of the page appears to have little to commend it. The illustrations in a guide of this nature should provide an overall impression of the landscape and enable the newcomer to identify either distant summits or nearby detail. Those reproduced here seldom do this, and foreground figures are often a distraction. There are, however, some very good shots of rock and ice climbs.

Much more attention is now paid to the meaning, spelling and pronunciation of Gaelic (and dialect) names, numerous instances of mistakes that have been introduced by map makers being pointed out. There is an unexplained variation in the translation of Gorm, sometimes appearing as blue and sometimes green. Of more direct interest to the Club is the claim that the Shelter Stone is Clach Dhion rather than Clach Dhian, although the latter was used in the fourth edition and occurs here in the climbing routes section. Both versions appear to have been used for many years – Hill Burton used Dhian in 1864, and it has occurred frequently in SMC publications. Angel's Peak seems to have disappeared completely although many equally imaginative names have been coined recently for climbs in nearby Garbh Choire.

The hazards of rewriting an earlier text seldom appear – but we are no longer given the time taken for the high-top round by Butchart's party – and printer's errors are few and far between. There has been a change to metric measurements and, while foot and mile equivalents are occasionally given, only the numbers of relevant 1 : 50,000 Ordnance Survey maps are quoted.

While there are thus some minor aspects in which this guide book might be improved, it is in general an excellent piece of work that adequately replaces the obsolescent but not yet discardable early editions. Little has been said here about the treatment of the high tops and deep valleys that make up the essential features of the area: it should admirably fulfil its objective of taking the hill-walker up and down in safety and with the maximum of enjoyment in summer or winter. Perhaps the final impression is the realisation of the widespread desecration of the high places for which the Land Rover and its accomplice the bulldozer have been responsible over the last few decades.

Mountain accidents—
Grampians and Cairngorms

21.6.75 John Robins (18), Milton of Campsie, stumbled on a stone and twisted his ankle while walking near Jock's Road. Evacuated by Snowtrac.

23.7.75 A 17-year-old youth was walking on Creag an Leth Choin, above the Lairig Ghru, when he stumbled and fell on a rock, sustaining slight injury to his right ear, and concussion. Evacuated by helicopter.

26.7.75 Member of Boys' Brigade Company on Duke of Edinburgh Award journey fell on to a rock in Glenmarkie. Sustained chest injuries which interfered with his breathing. Brought off hill to ambulance by Police Team.

11.8.75 John Kirk (34), Ayrshire, slipped on a loose stone and broke his elbow while walking in Coire Raibeirt. Evacuated by helicopter.

31.8.75 Ian Esslemont (64), Bermuda, was reported missing while walking through Glen Tilt, but later turned up safe and well.

3.9.75 David Wood (17), London, became cragfast on Craigendarroch while fetching water for a camp site.

8.9.75 Young woman employed at hotel in Kinloch Rannoch went for walk on Schiehallion and became lost in mist. Found next day by Police Team uninjured.

13.9.75 Scott McFarlane (20), Maybole, pulled a thigh muscle while walking in Lairig Ghru. Evacuated by Snowtrac.

4.10.75 A man and the family *au pair* became lost in the Bridge of Gaur area whilst out walking. Found by keepers and Northern Police Team after search involving all teams in area.

17.11.75 A 26-year-old man and wife were benighted and stayed overnight at Corrour Bothy, in adverse weather. Evacuated by helicopter.

20.12.75 A 29-year-old woman slipped on ice covered rocks in Coire an Lochain and fell 300 feet. Sustained bruising to arms and legs. Carried out by Rescue Team.

28.12.75 Forty-one Belgian teenagers, some poorly clad and nearly all without sleeping gear, asked for help after walking from Glen Clova to Glas Allt Shiel, in the belief that a hostel existed there.

31.12.75 A 21-year-old man was climbing without crampons on ice covered slope in Coire an Lochain when he fell 200 feet. Sustained head and leg injuries. Evacuated by helicopter.

2.1.76 Derek Gilbert (50), and Mrs Ann Gilbert reported missing in snowstorm in Lairig Ghru. Found safe and well, having snowholed.

29.1.76 A 26-year-old man was overcome by exhaustion in Cairngorms and died. Body recovered by Mountain Rescue Team.

13.2.76 A 19-year-old man was climbing in Coire an t-Sneachda when he fell 300 feet. Evacuated by helicopter to Aberdeen, where he died on 16 February.

15.2.76 Christine Livingston (22), teacher, and Stephen Enticott (23), technician, an engaged couple, became lost in the Loch Esk area above Glen Doll whilst on a walk from Bachnagairn, Cairn Damph, and Jock's Road to Glen Doll. Search extended over a week before bodies found in plastic survival bag under snow.

21.2.76 Five schoolchildren and one adult lost on ski slopes at Cairnwell. All found safe and well, along with two Norwegian skiers (not reported lost).

2.3.76 A 19-year-old woman was descending Coire an t-Sneachda by 'Goat Track' when she fell 300 feet. Sustained back, arm and leg injuries. Evacuated by helicopter.

12.3.76 Eight students swept down in avalanche in Coire an Lochain. All sustained injury. Evacuated by helicopter. One casualty died on 12.4.76.

13.3.76 A 29-year-old man climbing in Coire an t-Sneachda when he fell about 200 feet and received fatal injuries. Body evacuated by helicopter.

13.3.76 Gordon Stephen (20), Dyce, benighted on Lochnagar in snowstorm after becoming separated from his companion. Found own way off next morning, safe and well. Helicopter in search.

14.3.76 George Paton (20), Inverness, avalanched while climbing Raeburn's Gully, Lochnagar. Broken femur. Helicopter evacuation in very marginal flying conditions.

22.3.76 Rod Grant and Brenda Nash, Ipswich, reported missing on Capel Mounth. False alarm – good intent. Helicopter called out.

6.4.76 Dick Wottan (30) and Dave Watt (20) reported missing on Lochnagar. Both turned up safe and well during the night.

28.5.76 A young man from Thames Valley parked his car near to the reservoir at Ben Lawers and evidence showed that he had consumed a large number of pills. Body found next day lying in water course on west side of Ben Lawers by Police Team and helpers.

10.6.76 Report of cries for help being heard in Fords of Avon area. Helicopter called out and searched area – no trace.

8.7.76 Leslie Simpson (20), Aberdeen, taken ill while camping at Loch nan Stuirteag. Evacuated by helicopter.

9.7.76 John Ward (28), schoolteacher, suffered from heatstroke while walking through Glen Tilt. Evacuated by Land Rover.

17.7.76 Body found under a large boulder on the south side of Loch Avon. Thought to have been there since early 1975. Later identified as being a 23-year-old Londoner reported missing in 1975.

19.7.76 Stewart Gray (16) and Graham Milne were climbing on Craigendarroch when a loose rock gave way and Milne fell, breaking his wrist and cutting his head. Gray was left cragfast.

4.8.76 A 34-year-old woman walking in Glen Banchor area, Newtonmore, when she became ill. Evacuated by helicopter.

24.8.76 David Pinder (28), soldier, suffered from heat exhaustion in Lairig Ghru. Evacuated by helicopter.

9.9.76 Three male Belgians aged 23, 26 and 29 stayed overnight at Shelter Stone and next day were caught in a snowstorm without proper equipment. Collapsed near the top of Coire Raibeirt. Weather too bad for helicopter to operate.

11.10.76 Brian Black (12), Colin Black (15) and Ian Gordon (15) became lost in mist while grouse beating near Morven. Two found at Strathdon, one found his own way back. All safe and well.

12.12.76 Miles Hillman (26), Bridge of Don, fell on Eagle's Rock while climbing new route. Broken fibula.

29.12.76 Kevin White (16) and Steven White (10), Falkirk, became lost on ski slopes at Cairnwell. Found along with another male (not reported lost).

8.1.77 A 20-year-old man was climbing in Coire an t-Sneachda when he fell about 200 feet, sustaining slight injury. Carried out by Rescue Team.

11.1.77 A Jet Ranger helicopter piloted by John Poland (32), Cawdor, crash landed at 3.10 pm on the ice on Loch Avon

while on a filming trip. The passenger, Peter Allwork (49), Walton on Thames, suffered bruises and lacerations. The two men were picked up by a rescue helicopter at 12.55 am next day in Strath Nethy. On 17 January a Naval Sea King helicopter recovered the crashed machine from the ice.

22.1.77 Andrew McKie (16), Edinburgh, while on a Duke of Edinburgh's Award Scheme Expedition, collapsed from exhaustion and exposure on An Socach. Evacuated by Snowtrac.

29.1.77 A 32-year-old man climbing in Creag Meagaidh fell about 500 feet. Slightly injured. Taken out by Rescue Team.

15.2.77 Paul Rodgers (22), Glasgow, became lost on ski slopes at Cairnwell. Found safe and well.

4.3.77 A 41-year-old man climbing in Coire an Lochain fell about 200 feet sustaining slight injury. Evacuated by helicopter.

13.3.77 A 22-year-old man climbing in Coire an Lochain fell about 200 feet sustaining back injuries. Evacuated by helicopter.

23.3.77 A 41-year-old man climbing in Coire an t-Sneachda fell about 250 feet sustaining slight injury. Evacuated by helicopter.

29.3.77 An abandoned tent near Bynack Lodge was reported to the police at Braemar. The tent and some equipment was later collected and this information was widely publicised. Eventually a Bradford man claimed ownership, saying he had been forced to leave the tent when it was almost buried by snow earlier in the year.

6.4.77 A 32-year-old man climbing in Coire an Lochain fell about 600 feet sustaining slight injury. Evacuated by helicopter.

6.4.77 Timothy Evans (27), Kinellar, fell while climbing solo on Parallel A Gully, Lochnagar. Serious head injuries. Evacuated by helicopter.

30.4.77 Party of eight boys with youth leader reported overdue from walk on Jock's Road. Party turned up as search team was being alerted.

The Editor is very grateful to John Duff, BEM for compiling the above list, and also acknowledges the help given by Grampian and Tayside Police and Northern Constabulary who all co-operated in supplying information.

Three poems

HELEN CRITCHLEY

BUCHAILLE

Before we came, across the loch from you,
there was a brown, long land beneath
the higher greys and hugeness of other hills
under raining skies that mourned bitterly.

You see us all together, low across the loch;
and our lights flock and are folded in the dark
air, between the formless gloom of sky,
of mountain and of sea – elements we do not love.

We give a brightness to the shoreline that you watch.
We cannot penetrate too high because
houses are not hill-lovers; we have
our backs turned; we prefer the level loch

to feed near. With you beyond, of course.
Why then do you guard your own in sorrow?
And why are you yet no true shepherd of our glen
but keeper of the deer-corries and of the lost valleys?

CAIRNGORM MOUNTAINS: JULY

Not only that the sky encompassed hill
on hill in cavalcade of monumental
gravity; nor that the granite limbs still
moved from northern plains in dream processional
that drew my yearning down the edge of sight;
but also that the sky's brow drowsed so deep
above the smile of corries small and tight-
lipped; that the features dwindled blandly; steep
air stooped along the quiet ridge;
immeasurable wideness showed me the day's
broad mountain-shoulders only, gave me knowledge
of valleys' open-eyed and empty gaze.

That summer weather lay there – this I mourned –
with no high secrets, no veiled solemn land.

KNOYDART

The rough bounds that march with Morar
are gentle lands to hold. That is,
if you hunt along with them, with antlered coronet
your emblem too of ancient breeding.

The fierce rivers that leap and lather
to run before themselves with sounding cries
are amiable, only if you scan their arrogant
flanks for chance of grudged befriending.

The tongued lochs that scarcely bear
fish are winsome waters in their kiss,
if you've trimmed your wings to the wind of the west
that storms and keeps their lords' hall green.

The helmeted hills that toss their banner
outline, rampant, are honourable hosts;
never climb from the terms they've kept
since the creation of their heroic sporting.

The rough bounds that march with Morar
you'd care to hold? But we cannot rise
to let you rest on the glove of Knoydart:
the falcon is both lord and captive thing.

Four poems

IAN STRACHAN

SILVER IN THE WIND

The ptarmigan cries across the corrie,
sounds fading again in the grip of icy wind
that races fast on cliff wall and lichened gully;
beloved mountain, the wind blows silver,
there is silver in the wind.

A solitary hind, watchful, scans the ridge,
then, in silence, becomes invisible, stealing away from sight
to appear again, silhouetted on the crest, then to vanish;
mist on the mountain, the wind blows silver,
there is silver in the wind.

Where the timid adder sleeps, a fox moves, gliding,
skirting scree, above the loch, the surface still and frozen,
the air fills, as flakes carry from pinnacle to corrie wall;
mountain of snow, the wind blows silver,
there is silver in the wind.

Soon the peak lies below a white mantle,
snow cornices lining ragged rims, the climber turns away,
descending to seek protection in sheltered rocks;
mountain of storms, the wind blows silver,
there is silver in the wind.

ON FINDING THE CALF OF THE RED DEER

The sleek viper glides towards the scree,
and passing, moss light underfoot, I see
the creature lying there.

It lies on bed of green, still, the domed cap high,
outlined darkly, limbs splayed widely,
a calf is born.

Beyond pines the hind watches, anxious,
all motion frozen, moving slowly towards, and cautious,
I look and leave.

Silver in the wind

Calf of the red deer

[*photos by Ian Strachan*

Four from Aberdeen, including three members of the Club, on the summit of Yum Cho, 16,650 feet, 8 miles South West of Everest, 28 October 1975: *left to right* – E. Martin, H. B. M. Lewis, W. Munnoch, A. L. Hay.

[*photo by D. A. Draper*

THE SILENT WALLS
(on Derry Lodge, now unoccupied)

The slender pine skirts walls now silent;
and gaunt, deserted, stones no longer ring
with voices we remember, of mountain days, of joys long gone.
Only the voice of the wind calls, and ghosts remain.

The lone stag grazes near the door now sealed,
where once a welcome warmed the heart and cheered
the climber returning weary, to recall moments on Cairngorm heights,
and Derry's walls lured us to rest at journey's end.

No wisp rises from glowing log, and absence
stills the young voice that sang of hill and glen.
The strike of steel on stone has gone; and as we gaze upon
the lodge, we hear only the music of the mountain.

In mind, the walls open to embrace the sounds we knew,
friends return to greet with cheery call, and faces are remembered,
and as we tread to snowy height, voices sing again,
and praise the land of silver snow frozen on mossy bed.

MOUNTAIN MAGIC

Ringed by corrie wall, dark, forbidding, sheer
the loch lies silent, still,
ice hanging heavy over frozen depth,
wreathed in snowy veil.

Hid from eye, the silver grouse sounds
a guttural cry, to rise
above the towers of Lochnagar, to cornice edge
and lichened slab in wintry guise.

Stillness reigns, as season lays its snowy mantle
over plateau yet untouched,
but soon the climber comes to walk on Byron's hill
'neath a spell of mountain solitude.

In memoriam

It is with regret that we record the deaths of the following members:

Miss Elizabeth Cruickshank
Mr Norman F. Dyer
Mr G. B. Esslemont
Mrs L. Ewen
Mr H. Q. Forbes Irvine
Mr R. E. McIntosh
Miss Mary A. C. McRonald
Mr David Stewart
Mr Edward C. Thomson
Sir Landsborough Thomson
Mr R. B. Williamson
Rev Canon C. E. Youngman

ELIZABETH CRUICKSHANK

Daisy was a well-loved member of the Club for a long time. She was unable to attend outdoor meets during the last few years because of illness, but she always had a bright smile for her friends.

New members, unless they were already aspiring 'tigers', could rely on Daisy for guidance, and she was invariably considerate and cheerful. She served very ably on the committee for several years.

In the Cairngorm area and in the North West, one could depend on Daisy to recognise a mountain from almost any angle and also to name any bird either on sight or by sound. She loved the hills and started climbing with her sister Mary, to whom we extend our warmest sympathy in her loneliness.

R. K. J.

NORMAN F. DYER

Norman Dyer joined the Club in 1933 and was a committee member and vice-president for periods totalling 18 years. Since in addition he was always willing to join work parties occupied in the rehabilitation of Muir and Derry, where he did more than his fair share of work, it must be said of him that he served the Club well in all aspects.

A large proportion of the snow-climbing excursions to Lochnagar, which he enjoyed so much, were, in the late 1930s, carried out in white-out conditions when we saw little of anyone or anything, and it was on one of these that I met him for the first time. I had become isolated in the fog down in the corrie, but in due course came on Norman and his party taking stock of the situation. He kindly invited

me to join them, and this I was glad to do. For the next five hours, our communal and individual futures were so interconnected that a close association evolved. It was inevitable, therefore, that we should gravitate together on other occasions.

At first sight he seemed quiet and reserved, but as we got to know him, the real man emerged as a fluent conversationalist and a story teller with a well-developed sense of humour. This tended to show itself in situations of extreme physical discomfort, and I never met anyone who accepted them with such equanimity. Above all he was a good companion who made friends easily.

Mountaineering, however, had latterly to compete with the responsibilities of a family man, his great love of music, and his association with the church, so that, apart from all-night excursions, which had a special attraction for him, his visits to the high hills became less frequent. To some extent, this was compensated for by holidays on Feughside or at his cottage in Glenbuchat where he could escape the pressures of the city and while away his time with trout rod and pipe. Indoor Meets and Annual Dinners provided an opportunity for maintaining and renewing friendships which had developed in more active circumstances, and he looked forward to and enjoyed such reunions.

R. B.

Proceedings of the Club

GENERAL MEETINGS

The *Eighty-seventh* Annual General Meeting of the Club was held on 19 November 1975. The Office-Bearers appointed were: *Hon. President* Col. E. Birnie Reid; *President* Dr S. A. B. Black; *Vice-Presidents* Mr H. M. R. Watt and Mr I. T. Stephen; *Secretary* Mr R. C. Shirreffs; *Treasurer* Mr W. A. H. Reid; *Editor* Mr D. Hawksworth; *Librarian* Miss J. A. Callander; *Huts Custodian* Dr D. G. Hardy; *Meets Secretary* Mr G. Ewen; and *Indoor Meets Secretary* Mr J. S. Galloway.

The *Eighty-eighth* Annual General Meeting was held on 24 November 1976. Mr H. M. R. Watt was appointed President, Mr I. T. Stephen and Mr E. F. Johnston were appointed Vice-Presidents, and the other Office-Bearers appointed the previous year were re-appointed for a further year. At the close of the meeting the retiring President Dr Black was thanked for all that he had done for the Club during his term of office.

A Special General Meeting was held on 8 December 1976 to consider a resolution put forward by the 1975–76 Committee for the alteration of the Constitution to the effect of introducing a further category of membership which would confer limited membership rights for a period of six months. The resolution met with no opposition in general principle and was passed subject to two amendments, the substitution of the term Interim Membership for the proposed term Intrant Membership and the setting at 18 instead of 16 of the lower age limit for the new category of membership. A copy of the Constitution in its fully revised form is contained within this issue of the *Journal*.

ANNUAL DINNERS

1975 'Look Back to the Hills'
Speaker: Prof. V. C. Wynne-Edwards

1976 'The Origins of the Cairngorms Scenery'
Speaker: Dr David E. Sugden.

Both dinners were held in the Northern Hotel.

INDOOR MEETS

1975	Nov.	Members' Night.
	Dec.	'The Cairngorms'—John Duff, BEM.
1976	Jan.	'Hypothermia'—Dr A. G. Nicol.
	Feb.	'Pick of the Bag'—Dr Ruth Payne.
	Mar.	'Are the Cairngorms too accessible?'—Neil G. Bayfield.
	Sept.	'Mountains of the World'—Sir Landsborough Thomson, senior member of the Club.

Nov. Members' Night.
Dec. 'A Trip to Everest'—Dr Brodie Lewis.
1977 Jan. 'Terry's Travels'—Miss Terry Wallace.
Feb. 'Forestry in Focus'—George Dey.
Mar. 'The Seeing Eye'—Ian Strachan.

The Annual Dinners, Indoor Meets and Supper Dances (held each Spring) continue to be well supported.

MEETS AND EXCURSIONS 1975–77

The excursions have continued to be well attended, although the average figure of 37 shows a slight drop from the 43 recorded for the period covered by the previous *Journal*. (The number attending is given in brackets after each excursion in the list at the end.) The best attendance was recorded at the 1976 Cairn Gorm to Linn of Dee excursion when two buses were required. The figures suggest that the bad weather of last winter discouraged some members from venturing forth. Who can blame them?

Once again it proved very difficult to find a suitable venue for the 1976 Easter Meet. Arrangements were finally made with the Netherlorn Hotel, Bridge of Awe. The weather was very disappointing with thick mist every day and rain on the Saturday and Sunday. The most galling thing was that the weather had been beautiful on the day of our arrival and cleared up by Monday just in time for our departure. Nevertheless a number of hills were climbed including Beinn a' Chochuill, Beinn Eunaich, and Beinn Sgulaird. Latterly members were looking for low level walks, such as along Loch Etive side or into Oban, and other less usual activities like an underground excursion into Ben Cruachan by courtesy of the Hydro Board.

The 1977 Easter Meet was held at the same venue, it having proved impossible to find an alternative. (Half a dozen hotels simply ignored my enquiry, whatever the reason.) The weather was much kinder than that of the previous year. Ben Cruachan seemed the major attraction although few reached the summit due to icy conditions near the top. The Loch Creran area also received special attention with several parties climbing Beinn Sgulaird and Beinn Fhionnlaidh. Various other hills were climbed as far afield as Bridge of Orchy and Tyndrum, one party even going to Inveraray to climb Beinn Bhuidhe. Another feature of the meet was the reintroduction of Scottish Country Dancing in the evening, which proved to be as popular as ever.

As so often happens, the overnight excursion, from Cluanie Inn to Shiel-bridge, was not favoured with midsummer weather. Nevertheless at least two parties climbed Ciste Dubh and others completed part of the South Cluanie Ridge. The wiser ones, having taken the shortest route to the bus, arriving about 2 am began to doubt their wisdom when they found the bus locked and the driver dead to the world!

The other excursions were attended by slightly more unpleasant weather than usual. It was extremely windy on Mount Blair and on Beinn a' Ghlo. Ben Lawers was as wet as it always is when the Club visits it. At Loch Lee in

1975 it was difficult to see from one end of the car park to the other, it was so misty.

The 1977 excursion to Lochnagar found the Glen Muick road blocked, the first time this has happened for many years. The bus proceeded to Crathie instead. It proved extremely difficult to park the bus, the driver spending a good half hour with a shovel before this was accomplished satisfactorily. It proved impossible to reach Lochnagar on this day as the snow was too soft and deep.

There were also the good days. The Crathie to Loch Muick excursion was probably the best of these. Another was the excursion to the Ochil Hills, thought to be a new venture, though this is not the case as the Club in fact visited this area in July 1898 (*C.C.J.* vol. 2, no. 11, p. 289), having travelled by rail to Alva, climbed Ben Cleugh and descended to Tillicoultry. The present trip, which was slightly more ambitious, involving a traverse from Blackford, was particularly enjoyed by the rather smaller than usual company. The view from Ben Cleugh along the Forth Valley was rather spoiled by a very strong heat haze – rather unusual for a November day. As far as I know, none of those present had attended the previous Ochils excursion!

G.E.

EXCURSIONS

1975

23 Aug. Cairn Gorm to Linn of Dee (41)
7 Sept. Ben Lawers (35)
28 Sept. Jock's Road (43)
12 Oct. Fir Mounth (41)
1 Nov. Crathie to Loch Muick (38)
15 Nov. Loch Lee (33)
7 Dec. Mount Blair (42)

1976

11 Jan. Lochnagar (37)
31 Jan. Inverey (44)
22 Feb. Morven (40)
13 Mar. Glen Clova (46)
28 Mar. Blair Atholl (36)
2 May Corgarff to Tomintoul (43)
22 May Achlean (44)
5 June Ben Wyvis (33)
19/20 June Cluanie Inn to Shiel-bridge (44)
29 Aug. Trossachs (25)
12 Sept. Cairn Gorm to Linn of Dee (56)
3 Oct. Lochnagar (26)
24 Oct. Cairnwell to Clova (37)
6 Nov. Ladder Hills (40)
20 Nov. Ochil Hills (26)
12 Dec. Cat Law (38)

1977

16 Jan. Lochnagar (34)
6 Feb. Glen Clunie (35)
26 Feb. Loch Lee (31)
19 Mar. Beinn a' Bhuird (37)
24 Apr. Ballater to Glen Esk (34)
14 May Creag Meaghaidh (39)
4 June Dalwhinnie (39)
25/26 June Achnashellach to Torridon (41)

EASTER MEETS

1976 Bridge of Awe
1977 Bridge of Awe

Notes

MUIR OF INVEREY

Muir Cottage continues to flourish, and many intending residents from other Clubs are refused a booking because earlier birds have applied (and paid) first. Our own members can usually get a booking at short notice because some beds are kept in reserve as explained in my last report. Meanwhile Derry Lodge still rots, though it could be filled many weekends with those turned away from Muir.

The penetration by rain of the west end of the building has been almost totally stopped by cladding the two west walls with interlocking weather-boarding. Being of the same width as the original logs, it is hardly noticeable. The installation was carried out during snowstorms last winter by a small squad of determined volunteers. The firm which supplied the timber extension is said to have become bankrupt.

The presence of silt and bits of heather in the water supply at the taps has been cured by fixing an inlet pipe with small holes at the burn. The snag now is that the inlet holes become blocked. Since clearing these is a moment's work, whereas with the former system the uphill cistern became full of silt after a while, the new arrangement is an improvement. Not all residents would agree after a trip up the hill in the rain, but town dwellers are spoiled with a regular water supply. Directions for finding and clearing the inlet are posted in Muir, with an injunction *not* to interfere further with the plumbing! The storage tanks in the building take time to fill with the small bore supply pipe, and patience is required. Water for emergency use is available in quantity in the Dee, but since the permanent caravans arrived at the site near the Linn it is best not to use that water for drinking. The Club hopes that the Grampian Region will take action against the unlicensed caravan site in what was a pleasant, rough campsite where no more than a few tents were ever seen.

A new fire has replaced the one installed in 1972. Although secondhand, the latter was excellent but vulnerable to the Bothy Basher. This species ignores fire doors and kicks logs into the grate, thus breaking glass or mica windows and firebricks. The new fire has no door; this was thought to be a master countermeasure, but already the removable spark guard has been bashed (and repaired). A plaintive anti-bashing notice has been put by the fire – but maybe BBs can't read? When properly fed, the device produces a grateful warmth. One visitor from the other oldest club in Scotland wrote to say that in his opinion the Muir was the best designed hut in Europe.

Surplus reading matter will still be gratefully received by the Custodian.

DENIS HARDY

EASTER 1977

My efforts at the 1977 Easter Meet were confined to a walk with Mr Proctor from Ballachulish to Loch Creran, and a lazy day pottering round the chambered cairns and stone circles near Kilmartin. I did manage the ascent of Dunadd, which, at 176 feet, might qualify as the lowest hill ever ascended on a Cairngorm Club Easter Meet!

When the meet dispersed on Easter Monday, I felt that I needed more exercise, so I drove to Mallaig where I met up with Archie and Robin Grant for a brief foray to the Island of Rhum. The boat crossing takes four hours, and, after calling at Armadale and Eigg, we transferred to the Nature Conservancy boat, the *Rhouma*, to be transported into Kinloch. Our peaceful landing soon turned into a breathless sea chase, for the *Rhouma's* boatman noticed the flashing lights of a Land Rover indicating that someone had been left behind. With siren sounding, we turned back for the open sea in pursuit of the *Loch Arkaig*, which eventually noticed us, turned back, and waited for the stranded passenger who might otherwise have had to wait on Rhum for two more days!

It was my first visit to the island and I hoped that I might take in all the six peaks of the main ridge during the two days I was to be there. Easter Tuesday dawned grey and showery, and we set out along the attractive but muddy path to Dibidil, a well kept bothy. Many of the place names on Rhum are unusual and attractive – Dibidil, Papadil, etc. – and we soon had the mountain slopes peopled with legendary creatures called Dibidilloes and Papadilloes – rivals to the wild haggis! The cloud was down on the ridge, and it was spitting with rain, but I persuaded my two companions to climb the extremely steep slopes of Sgurr nan Gillean (V S grass according to Hamish Brown!). It was wet and windy on top, and we were in thick mist as we traversed the ridge to Ainshval, the second highest peak on Rhum. We found the descent to the Bealach an Fhuarain quite tricky, as there are some steep rock steps and everything was very greasy. We had to make two quite long detours to by-pass the difficulties, and we eventually reached the Bealach – 1 hour and 20 minutes after leaving the summit! Then it was a case of traversing to the Bealach an Doire and the Bealach Barkeval back to a cheery welcome from Mrs Mackintosh whose superb hospitality we enjoyed during our stay at Kinloch.

The Wednesday was quite different weatherwise. The tops were clear most of the time, and a Force 9 gale was blowing. It was a day of very heavy but short snow showers, between which it was grand with good views. We climbed up Barkeval, then along the ridge to Allival and up the steep broken face to Askival, Rhum's highest peak. While making this last traverse, we met two climbers who asked us to take a packet of sandwiches to their companions further on the ridge. We were also asked to pick up some more sandwiches which had been left on the ridge – 'You'll find them easily', they said. We did in fact find them, and were able to fulfil our mission as we met up with the rest of their party just below the summit. Robin and I continued onto Trollval, thus completing all the six peaks – although I hope to return someday to do the whole ridge in one expedition.

Rhum is going through difficult times just now, and has felt the pinch of government cuts. Only eight families are left, and the work of the Nature Conservancy is being hindered by reduction in available funds. The upkeep of Kinloch Castle takes up a huge amount of the money available for the island, and one wonders if this might not be better spent in other ways. However, Rhum will long continue to be a mecca for those who want to find seclusion and it still attracts the ornithologist and field worker. We found it a friendly and fascinating place, and certainly want to go back again.

DONALD HAWKSWORTH

SHELTER-STONE

Following the recent controversy regarding the meaning of Clac Dian, I should like to make the following observations.

The Gaelic for a stone is 'clach'. I have never come across the word 'clac' and can find it in no dictionary.

So what does 'clac dian' mean? Now 'clac', or rather 'clach', is a noun, and thus can be qualified by an adjective or by another noun. Let us consider both possibilities.

Firstly, there is a Gaelic adjective 'dian' meaning 'violent' or 'furious'. The feminine form of 'dian' is 'dhian' (pronounced yee-an), and this is the form required to qualify the feminine noun 'clach'. Thus, 'clac dian' could be bad grammar for 'clach dhian' meaning a 'furious stone'. However, this is certainly not the meaning we require.

Secondly, there is a Gaelic noun 'dian' meaning 'a worm', and again 'clac dian' might conceivably be bad grammar for 'clach dhian' meaning 'worm-stone'.

So there is no doubt that 'dian' is not the word we require.

'Dion' is 'a shelter' in Gaelic and the compound noun shelter-stone is correctly given by 'clach dhion'.

PATRICK W. SCOTT

CAIRN GORM – 1884

Eddie Bothwell passed on to the Editor an interesting account of an excursion to Cairn Gorm in June 1884. He had received it from Mr Ian Edward, secretary of the Gordonian Association, who had in turn got it from Mr W. H. Philip who lives in Sussex, and who had been a pupil at Gordon's College at the beginning of this century. After describing the train journey to Nethybridge (via Keith and Dufftown), they engaged a guide (at 5s. and his food) to lead them up the mountain, and they set out, in better than Alpine style, at 1 am!

They rode to Ryvoan in 'our brake drawn by two pretty greys – one of them a stallion'. The horses were stabled and, 'after packing up and having a mouthful of the "cratur"', they left for the hill just before 3 am. At 3.45 am, they had their breakfast which is described thus: 'We got our cooking apparatus set to work which is heated by spirit of wine and is a very handy and useful instrument. While the water was heating we had a view of some more deer who had scented us and went off up in front of us, some of them having good heads. The scene from here was very pretty. Away down below us about two to three miles lay Loch Morlich near the corner of which is Glenmore Lodge – the point from which tourists start who do the hill from the Aviemore direction. While we surveyed the scene our water got warm and we had some nice essence of coffee to wash down our breakfast of bread and tinned salmon.' They reached the cairn at 6.45 am, where they 'struck up and sang the first verse of the hundredth psalm'. They made an abortive attempt to find some Cairngorm stones, and, unfortunately, they had no view due to mist. None the less, they voted it 'one of the most enjoyable excursions it has been our privilege to engage in'. Their expense account at the end makes interesting reading:

	£	s.	d.
2 Rail Fares Aberdeen to Nethybridge @ 12s.0½d.	1	4	1
3 Teas at Keith @ 4d.–1s.; 1 Bottle Coffee 9d.	0	1	9
3 Teas at Nethy @ 1s.9d.–5s.3d.; Sugar 4d. and 2 Loaves 6d.	0	6	1
4 Ginger Ales and 1 Porter	0	1	8
3 Plain Teas @ 2d.	0	0	6
Attendance	0	1	9
Hire of machine 12s. Driver 4s. Guide 5s.	1	1	0
Spirits of Wine for Cooking Apparatus	0	1	0
	2	17	10
Deduct proportion of Hire paid by Mr Burgess	0	4	0
	2	13	10
Deduct 2 Fares	1	4	1
	£1	9	9
Net Proportion excluding Rail Fare		10s. each	

AN ESSAY SOUTH WITH CORBETT'S RULE

Perhaps it would be of interest, before the records are lost in a superfluity of metrication, and for the sake of comparison, to have a list of the peaks in these islands outside Scotland which measure up to the exacting standard of J. Rooke Corbett (2500–3000 feet with re-ascent of 500 feet on all sides). The compiler has referred to the 1 : 25000 series (2½ inch maps) in the case of the Lake District and North Wales, and standard 1 inch maps. In the case of Ireland, reference has been make to the 1 inch map of Killarney; otherwise the ½ inch maps, showing 100 foot contours, seem to give a reasonably clear decision. In the case of the Mournes, reference has been made to the 1 inch Northern Ireland map, which is very clear. The 1 inch map showing the Galtees is a pretty map, but it does not give any contour lines. So perhaps the list can be regarded as a tentative effort, open to comment and correction.

ENGLAND

	feet		*feet*
Saddleback (Blencathra)	2847	Fairfield	2863
Grisedale Pike	2593	St Sunday Crag	2750
Grassmoor	2791	Red Screes	2541
High Stile	2643	Stony Cove Pike	2502
Pillar	2927	High Street	2718
Kirk Fell	2630	Cross Fell	2930
Great Gable	2949	Mickle Fell	2591
Coniston Old Man	2635	Cheviot	2676

With the exception of the last three tops, all these are in the Lake District. Several well-known peaks fail to qualify, of which the most surprising is

Bowfell. The lowest point on the line from Scafell is at Esk Hause, 2490 feet where it goes over to Eskdale, and Bowfell is 2960 feet. Several peaks nearly make the grade, but fail by a matter of 50 feet or so; among these are Scoatfell, Crinkle Crags, Swirl How and the Mardale Harter Fell. Nothing qualifies in the Helvellyn group, nor in the Coniston group apart from the Old Man. Incidentally, the 2½ inch map shows Wetherlam as 2499 feet, instead of the usually accepted 2502 feet.

There is no need to search in England south of Mickle Fell.

WALES

		feet
Lliwedd		2947
Pen-Llithrig-y-Wrach		2621
Moel Siabod		2860
Moel Hebog		2566
Moelwyn Mawr		2527
Arenig Fawr		2800
Moel Sych		2713
Cader Idris		2927
Craig-y-Ffynnon		2557
Aran Mawddwy		2970
Waun Fach	Black Mountains	2660
Waen Rydd	Brecknock Beacons	2504
Pen-y-Fan	Brecknock Beacons	2907
Bannau Brycheiniog	Carmarthen Van	2632

The Welsh peaks present a more clear-cut issue than those of the Lake District. Only two of them are appendages to the 3000 foot peaks, the first two in the list, and no one who has descended the west side of Pen-Llithrig-y-Wrach or gazed up at Lliwedd from Bwlch-y-Saethau will question their inclusion. The others, almost entirely, are individual mountains separated by many miles. Waen Rydd is an outlier separated from Pen-y-Fan by a col of 1961 feet and by a distance of 4/5 miles.

IRELAND

		feet
Slieve Donard	Mourne Mountains	2796
Slieve Commedagh	Mourne Mountains	2512
Croagh Patrick	Mayo	2510
Mweelrea	Mayo	2688
Nephin	Mayo	2646
Tievummera	Mayo, Sheeffry Hills	2504
Tonelagee	Wicklow	2686
Mullaghcleevaun	Wicklow	2788
Mount Leinster	Blackstairs Mountains	2610
Fauscoum	Comeragh Mountains	2597
Knockmealdown	Knockmealdown Mountains	2609
Temple Hill	Galtee Mountains	2579
Greenane (doubtful)	Galtee Mountains	2636

Purple Mountain	Killarney	2739
Mangerton	Killarney	2756
Knockduff	Iveragh	2572
Mullaghanattin	Iveragh	2539
Coomacarrea	Glenbeigh	2541
Baurtregaum	Slieve Mish Mountains	2796
Brandon Peak	Dingle	2764
Beenoskee	Dingle	2713

A useful little booklet, *Mountaineering in Ireland*, by C. W. Wall, published by the Irish Tourist Association, lists all the 2500 foot tops in Ireland, 54 of them. Of these, 11 are 3000 feet or more and, of the remainder, the above qualify.

There is a pattern in several instances of pairs of mountains in a group, where the higher one only qualifies. However, in the Mournes, the col between Slieve Donard and Slieve Commedagh drops below 2000 feet for a quarter of a mile, and in the Wicklows, Tonelagee is 4 miles from Mullaghcleevaun, with an intervening drop below 2100 feet. Temple Hill and Greenane are at the west and east ends of the Galtee range respectively. Temple Hill undoubtedly qualifies, but there is some doubt about Greenane, the contour line on the west is enclosed by the 2100 foot mark, but there is a gap of about half a mile between the opposing ends of the 2200 mark: it is included as a probable. The rest of the Galtee tops show insufficient drop from the 3018 feet of Galtymore to qualify. Brandon Peak is nearly two miles south of the 3127 foot Brandon Mountain, with an intervening dip below 2200 feet.

It is a peculiar fact about the Irish peaks that, in the whole of the 54 above referred to, there is nothing whatever in the range 2800–3000 feet.

The totals are thus: England, 16; Wales, 14; Ireland, 21. There are 219 Corbetts.

The compiler of this list cannot claim, as could Mr Corbett and Dr Donald, to have ascended all the peaks. For the record, he has ascended all but four of the English ones (exceptions Grisedale Pike, Kirk Fell, Red Screes, St Sunday Crag), all but four of the Welsh ones (exceptions Lliwedd, Craig-y-Ffynnon, Aran Mawddwy and Waen Rydd), but there are only six of the Irish ones in the bag. These are Slieve Donard, Slieve Commedagh, Nephin, Croagh Patrick, Tonelagee and Mangerton.

H. PROCTOR

GUESTS, BEWARE OF THE BULLS

About half way between statutory old age and the theologically allotted span, my wife and I were, to our great joy, admitted to membership of the Cairngorm Club. Two subscriptions later, we attended our first Club event, which took place at Taynuilt, the annual Munro-bagging jamboree known as the Easter Meet – to bag our Munros, however, only in the moral sense. We had travelled from Oxford to mind our twin grand-daughters, aged one year and one month, while their parents went off to bag their, or our, or the family Munros. A daily routine was established within a setting of feeding and cleaning times. After breakfast, *en famille*, the parents stealthily stole away to their summits; we

were alone with our charges, and our day had started: mornings, after due preliminaries, a walk for us, a perambulator ride for them; after lunch, play and rest. Parents returned for evening feeding-time, first for the twins followed by bed, then ours. After which we were free to socialise with our new found associates and fellow members.

Mornings were the testing time. Breakfast being negotiated with varying degrees of disturbance, there was the walk. Of the first, before the Meet began, a trial run with the parents, I have no recollection. On the second, to Taynuilt, we went out like lambs, sleeping; but came in like lions, roaring for overshot lunch. The third, we went off, through the woods along towards Inverawe, roaring at delay, but returning in lamb's clothing of sleep. The next day – thereby hangs our cautionary tale! We had taken a fancy to the road, or track, along which we had seen walkers from the back windows of the Netherlorn Hotel and decided to try this. Disregarding the large notice PRIVATE ROAD at the entrance, we ventured into the unknown. In the yard of the farm half a mile along we sought directions from a boy of about ten. His information about bridges and his topographical knowledge seemed confused and inexact, so we pressed on, unenlightened. After a further half mile of rough track, we were aware that, having followed us in play at the lower edge of the declivity used as a rubbish tip, he was hollering to us, evidently intent upon enlightening us about something, but he was unintelligible at the distance. So we pressed on for another half mile of rough pushing. There we met two mature and articulate adults, who had just turned back from the same walk because the continuation was impassable: they added some remarks about cattle in the field.

On the way back, we were waylaid by our young friend, who embroidered this theme of the cattle in the field. 'I was shouting to tell you that there's a bull in that field'. With the addition, expressive of his legitimate resentment at our trespass on his private road, 'It's a savage bull'! Then giving a further twist to his knife: 'Another bull jumped out last week.' How vicious the second twist was I realised only as I emerged from the farmyard, with my dutiful squaw taking a turn of pram-pushing a hundred yards ahead. There, lined up on either side of our track, separated from it by a flimsy looking fence, which, though surmounted by barbed-wire, still looked very low, were two rows of cattle. With my party of three just entering the tunnel, what could I do from a distance of a hundred yards? Only shout. I shouted: 'Keep going.' No response, but they did keep going. As the moment approached for me to run the gauntlet, I made some rapid observations. The left hand line seemed to be composed of innocuous looking youngsters, many of them female. But the line on the right was a different story, particularly the beast who seemed to be guarding the access. He had all the appearance of a bull; I sought primary evidence, but in his shaggy winter Highland coat, it was impossible to discern whether he really was still a bull, or not just that he had a very stern look. I looked for the secondary evidence: no horns, no ring, and I had no stick. As I found myself between my party and the herds, I reflected upon what I should do if I heard a pounding and snorting behind me. I recalled the story of the farm-worker I had known who had worked himself out of a farmyard by hanging on to the bull's ring with one hand, and beating it over the horns with the stout ashplant he always carried with the other, until he had worked his way

to the gate; only just in time, there was not much ashplant left. But I had no ashplant, the bull had neither ring nor horns (if indeed he really was a bull). Should I throw myself at the feet of the advancing juggernaut? Fortunately, these heroics were not called for. The moral of this story? I do some recalling.

Those formal investigations one conducted, or courts of inquiry on which one sat; there was always that item in the terms of reference: recommendations for obviating recurrence. On selecting a centre, the Club could always circularise local bull owners: but to tell them what? Is the potential ardour of bulls best quelled by cutting off the oats supply, or by increasing it? I have recently learned from early morning farming news that it is now usual for stockbreeders to grow, harvest and store wild oats; so, an ample supply of wild oats. They are so much cheaper than the genuine article. But if the Highland breeders would not co-operate?

There had been a whole column in the previous day's *Scotsman* devoted to the black-list maintained by the Department of Education. Possibly the Club could prepare its own black-list, headed by the item 'Bulls' and not only for alphabetical reasons. We could then reverse the title of this article to:

BULLS, BEWARE OF THE GUESTS . . . AND . . .

BILL (J. W.) FISHER

GOLDEN JUBILEE

Great things are done when men and mountains meet.

—BLAKE

Sunday, 1 August 1926, was a perfect summer day in the Cairngorm Mountains. On that day a small boy of 8 was taken by his father, and six other men, to climb Ben MacDhui, the highest peak. Memories of that boyhood adventure remain clear after half a century. The drive up Deeside in the early morning in the bull-nosed Morris Cowley; the sun dispersing the mists of night; the approach walk through the primeval pines of Glen Derry; the toil up Corrie Etchachan (some of the members in their Sunday suits, collars and ties, and tweed cloth caps which were never removed); the men refreshing themselves with cold burn water laced with malt whisky; incredibly, a large patch of snow at 4000 feet; the unforgettable thrill of planting one's feet on the summit with the magnificent panorama of half Scotland identifiable from the mountain indicator; and the long descent into Glen Luibeg, and the weary return through the ancient forest to the cars. That far-off day implanted in that small boy a love of the high tops and wild places of Scotland which has stood the test of time and has given him boundless pleasure.

Sunday, 1 August 1976, was a cool, overcast day in the Cairngorm Mountains. On that day a middle-aged doctor, his elder son and his sister [Sheila, the first Lady President of the Cairngorm Club—*Ed.*] climbed Ben MacDhui by the route trodden by the small boy in the year of the General Strike. Of the original climbers but two survive; the mountains remain to inspire another two generations. The little party of 1976 retraced the footsteps of 1926, and one member felt the same thrill of accomplishment on attaining the summit, despite the obscuring mist, in some ways enhanced by carrying on his back the

invisible burden of 50 years. The boy of 1926 has become the grandfather of 1976. He has achieved some success in his vocation, but he will never again quite recapture the magic of the first time he stood on the top of the mountain. These were the enchanted hills of childhood and youth. Ben MacDhui is allegedly haunted by a spectre, the Fear Liath Mór (Big Grey Man), but the doctor encountered nothing so fearsome, only from time to time the fleeting sense of the presence of the kindly and benevolent spirits of his father and his other companions of that far distant summer day when he and his world were young. The only ghost he found disturbing was that of the small 8-year-old boy—BOB MURRAY (area medical officer, Stockport).

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Book reviews

Cockleshell Journey. JOHN RIDGWAY. Hodder and Stoughton, 1974. £2.95.

John Ridgway's journeys are always unusual – rowing the Atlantic, sailing alone from Ireland to South America and following the Amazon from source to sea – and the one described in this book is no exception.

He, his wife and two companions mounted a small expedition, apparently out of their own resources and as their 'summer' holiday, to the southern tip of Chile. They navigated a section of the Magellan Straits in two ten foot rubber dinghies, crossed an unknown ice-cap and climbed the Great Northern Glacier and Monte Inaccessibile. This part of the world near Cape Horn is notorious for its atrocious weather, and they had to contend with nearly incessant rain and frequent storms. The going on land was always difficult, as the country is glaciated or densely wooded right down to the water's edge, and good camp sites were difficult to find.

The amount of climbing done by the expedition was limited and the book may not appeal to the hard mountaineers, but it is a very readable account of what can be done by a small party with initiative and determination but with limited material resources.

P.H.

Ice Fall in Norway. RANULPH TWISTLETON-WYKEHAM-FIENNES. Hodder and Stoughton, 1972. £2.50.

This is quite an exciting record of an expedition whose main objective was to survey a small portion of the Norwegian Ice Cap where detail was lacking on existing maps, the team including scientists as well as surveyors. Most of what they set out to do was accomplished in spite of terrible weather conditions. Ranulph Fiennes' party made the first recorded *descent* of the Briksdal Glacier. The fact that the Bricksdalsbre is one of Norway's tourist attractions, with the large Alexandra Hotel not far away, adds appeal to a wider public.

R.K.J.

My Life as a Mountaineer. ANDERL HECKMAIR. Gollancz, 1975. £4.50.

The autobiography of such a distinguished Alpinist as Anderl Heckmair is long overdue. The English translation by Geoffrey Sutton is smooth and readable and contains a comprehensive and invaluable index.

Heckmair will live forever in climbing history by his achievement in 1938 of the 'impossible' – the first ascent of the North Face of the Eiger. The story of this classic climb is dealt with in great and fascinating detail with Heckmair and Vörg chasing, catching and finally linking up with Kasparek and Harrer. Inevitably Heckmair's later climbs suffer by comparison and give a sense of anticlimax to the second half of the book, which degenerates finally into little more than a travelogue, with Heckmair as the semi-permanent companion of a rich German industrialist.

The transition from orphan to gardener (and weekend climber) and the years of climbing on a shoestring budget make an absorbing story and give an insight into Heckmair's character. Like many other top mountaineers he was at times a self-centred and difficult companion, combining great climbing ability with a degree of ruthlessness and lack of consideration for his companions.

I.T.S.

Encyclopaedia of Mountaineering. WALT UNSWORTH. Robert Hale and Co., 1975. £4.50.

Some twenty years ago a Dictionary of Mountaineering was published and now we have what is described as the first attempt to compile a comprehensive encyclopaedia covering the mountain scene, past and present. A monumental task, but this work does encompass people, places, history, equipment, techniques and sundry mountaineering miscellanea in breadth if not in depth, ranging from the Abominable Snowman and the Abraham Brothers to Zermatt and the Zsigmondy Brothers. The compiler, a well-known writer on mountain topics, has produced a work of reference which is also a pleasure to dip into or read from cover to cover.

There is an interesting entry on climbing clubs – the earliest in Britain was the Highland Mountain Club of Lochgoilhead (founded 1815 and long since defunct) – but Club members will note that the date of incorporation of the Cairngorm Club is given (1889), not the date of founding two years earlier, a point which may be rectified in future editions as the author welcomes corrections and additions.

E.F.J.

Long Days in the Hills. A. H. GRIFFIN. Robert Hale & Co., 1974. £3.50.

'A book worth reading is a book worth keeping', so said Ruskin. I think this applies to *Long Days in the Hills* by A. H. Griffin. Like his previous books, it cannot fail to appeal to hill lovers. Two outstanding features are the author's modesty despite his own considerable attainments and the expression of his ardent desire to share his joy in the hills with others. This is a rich collection of reminiscences of many and varied long walks and climbs written by a man well on in his sixties who has tremendous experience over more than half a century.

The first chapter, 'Mountains for all Ages', should be an inspiration to young and old alike never to lose the spirit of adventure. Never give in and never give up – no matter what your age! Although not intended as a guide book, nevertheless two chapters in particular – that on Lakeland and, by complete contrast, on the Cuillin of Skye – might well be very useful as such. The chapter on records is one of particular interest covering a considerable number of records in hill walking.

As the author has spent the greater part of his life in Lakeland, it seems inevitable that this is his first love and so he has again devoted the bulk of his book to this delectable countryside. However, in addition, he describes

with great accuracy and interest his many adventures in Skye, the Cairngorms, and the Western Highlands of Scotland.

The illustrations which are numerous are quite exquisite and amongst the best I have seen in many climbing books. This is a delightful book both to read and to keep for reference. Griffin has the gift of conveying his joy in the everlasting hills to others.

R.A.G.

Changabang. Bonington, Boysen, Hankinson, Haston, Sandhu, Scott. Heinemann, 1975. £5·75.

This book, edited by Alan Hankinson, describes the adventures of the 1974 expedition to Changabang in the Garhwal Himalayas. Changabang has been called the Matterhorn of the Himalayas. It is an out-of-the-way peak which has been seen by only a few explorers and climbers. Longstaff, who explored the area in 1905, described it as 'the most beautiful mountain I have ever seen'. The expedition team consisted of four British and four Indian climbers. The Indians were army officers who had previous experience of climbing with Bonington. Some expeditions with a mixed bag of nationalities have had an unhappy history of quarrels and disharmony; however this expedition was a happy one.

It was decided that the book was not to be 'just another bloody expedition book', so details of logistics have been largely left out. The account of their experiences has been given through six pairs of eyes, and the book has been skilfully edited so that the story unfolds in an easily understood sequence. The photographs have been spaced in the book in a sensible way which takes the reader along the route, and the armchair mountaineer can almost feel that he is experiencing some of the problems encountered. The final assault was made by a single party of six with no back-up team and no high altitude porters.

The opinions of the writers and their minor disagreements are openly discussed. The reader feels he knows something about the character of each of the climbers (and even of the expedition's cook), and one is left with a considerable admiration for the joint leader, Lieutenant-Colonel Balwent Sandhu – known to all as 'Balla'. The book is not improved by the coarse language used by some of the writers. At the end, we are given as a bonus the opinions of some of their wives on the subject of such expeditions. The writers have succeeded in producing an expedition book that is different.

S.A.B.B.

The Book of Bennachie. Ed. A. W. M. Whiteley. Bailies of Bennachie, 1976. £3.

In Inverurie Town Hall on 9 May 1973, a group of people met to consider the problems besetting the hill of Bennachie. The name 'Bailies of Bennachie' was suggested, and caught the public imagination. This is now a flourishing group with a membership of over a thousand. The fourth of its main objectives is 'To collect and preserve the bibliography of Bennachie'. The forty-six

contributions in this book cover a wide variety of subjects in an easily read and most delightful way. There are articles on the fauna, flora, geography, history and many other aspects of the hill. There are interesting and often amusing accounts of life as it used to be not all that long ago on the hill and in the surrounding parishes. We read of one grieve who performed the herculean task of filling ninety-six cart loads of muck from the midden on each of three successive days. He might also have been the same worthy who believed in making his employer's children work at an early age and sent a six year old 'awa to the gairden to scare the fleas oot amon the carrots'. In another part of the book, we learn that Bennachie was first skied on in 1888.

Then there are the verses, from the well-known song *Whaur Gadie Rins* (and its German translation) to the complete 'When Bennachie pits on its tap, the Garioch lads will get a drap'. To those of us who know the hill well, it is not surprising that it has inspired so many poems. Dipping into this book is like meeting an old friend and finding something new every time. Congratulations to the Bailies of Bennachie!

J.C.A.

The Scottish Highlands. W. H. MURRAY. Scottish Mountaineering Trust, 1976. £6.50.

In the introduction, W. H. Murray says, 'This book is primarily for those who delight in hills . . . The enjoyment of the Highlands can be enhanced by a good understanding of the way they were originally shaped by natural forces, how their wild life and plant life arrived and spread and developed, and how that natural scene has been profoundly modified by man's activities'. This statement is expanded in eleven main sections and eight appendices, all contained in just under 300 pages. The wealth of detail is clearly set out, so that, for example, even the most geologically ignorant hill-walker can gain an insight as to how and when his beloved hills were formed.

The development of mountaineering in each area of the Highlands is well documented, but, as one would expect from this author, this is anything but a mere list of explorations and climbs. Of our back door mountain he says '. . . In 1958, Marshall and Tiso (using front point crampons) plucked that icy plum of Lochnagar, the Parallel Gully B, one of the great ice climbs of the decade and the culmination of the Lochnagar campaign'. A far cry from 1893 when Douglas and Gibson attempted the Douglas Gully wearing labourers' hobnailed boots, perhaps with clinkers round the edge of the wide welt. They failed, and the gully remained unclimbed for 57 years – but they did climb the left-hand branch of the Black Spout Gully next day.

The appendices range from a list of Munros to a glossary of place-names and their meanings, via much useful information about the Mountain Code, Mountain Rescue teams and posts, etc. The place-names glossary is worth careful perusal, even if it is only to learn that 'Coire Bhrochain' means 'Corrie of the porridge' and 'Foinaven' 'Wart Mountain'. This is virtually a miniature encyclopaedia – a most welcome addition to mountaineering literature. Highly recommended.

J.C.A.

The Story of Scotland's Hills. CAMPBELL STEVEN. Robert Hale, 1975. £3.50.

The range of information covered in this very readable book is considerable. Fortunately there is no pretence to provide anything other than what must be a cursory account of the aspects in 'the story' which are to be covered.

Although the reviewer found the title of the book misleading – perhaps it is more a history of mountaineering in Scotland – the material proved to be fascinating. There are some interesting and sensible comments connected with the names of hills; the chapter on surveying of the Highlands as far back as the seventeenth century and up to present day methods provides a new dimension to the maps we now take for granted. Other chapters include information on Ben Nevis and its old met. station, the early searches for gem stones, the rise of the mountaineering clubs and one concerned particularly with the early days of ski-ing in Scotland when ski touring was the norm.

Written by a longstanding member of the S.M.C. there is inevitably frequent reference to that club and its members, but certainly not to the exclusion of others and in particular our own club. Towards the end of the book, Mr Steven expresses his own views, with which many of us would probably agree, in relation to conservation and the growing popularity of the mountains.

This book is undoubtedly well worth reading and an asset to the club library.

G.S.

Hill walking in the Grampian Region. Grampian Regional Council, 1977. 40p.

Hill walking in the Grampian Region is the title of a useful little booklet produced by the Region's Department of Leisure, Recreation, and Tourism. Thirty-four walks and hill expeditions are described and they are graded into the three categories

○ A low or short walk
□ A hill venture
△ A full scale expedition.

The introduction gives good advice about such matters as safety in the hills, access, etc. The routes range from gentle strolls like Brimmond to mountain excursions such as the ascent of Lochnagar. The Club was consulted in connection with the publication of the booklet, and the acknowledgements at the end refer to this assistance, particularly mentioning that given by Richard Shirreffs.

I have only heard one small criticism of the booklet, and this does not concern the part of it we had a share in.

With regard to the walk up the Bin of Cullen (route 29, page 18), Ian Stephen tells me that 'the farm road mentioned has been overgrown and impassable for some years. A preferable route is to leave the road at map reference 471637 almost opposite a forestry road, and to make for a clear patch up the hillside visible at a bearing of about 075°. The first part of the route is boggy in places.'

D.H.

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