

## SHELTER

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A GOOD many letters to the papers have been written concerning the loss of five walkers from Glen Callater to Glen Doll on January 1, 1959. Much of this comment has been wise, stressing once again the well-known precautions that should be taken on the Scottish hills in winter. But none of them to my knowledge has mentioned one extremely important fact. There are not two simple alternatives—should one press on or should one turn back—there is another vital decision that ought to be made—should one *stay put*. I believe that future lives can be saved if the facts concerning sheltering are more widely known.

The decision to halt and sit out a storm is not an easy one to take in Scotland. Distances to the nearest house are seldom great: the thoughts of the warmth and comfort to be found there are compared with the certain discomfort of cold, shivering hours on the hill. But the decision can be one for life or for death.

I am considering here not mountaineering accidents where an individual or members of a party are injured by a fall, but the cases of death, from exhaustion and exposure, of physically fit people. During these last thirty years there have been several such cases, and I am selecting for comment four. All of these occurred around New Year, by far the most dangerous time of the whole winter.

There is an erroneous piece of folklore that a person must not sit down in the snow and sink “into that sleep from which there is no awakening”—that such people should be forcibly walked about, deliberately kept awake. I admit to having done this myself to a soldier on a mountain march, applied the point of an ice-axe to him when he said he wanted to sit down and die—but he was *far* from exhaustion; I knew it, and *he* knew it. A fit person whose will-power has driven his body to its limit collapses very suddenly and is liable not to recover, unlike the weaker one who has collapsed because he *feels* tired. Few of us have any close idea of our physical capacity; it is a far too dangerous experiment to attempt to find out.

Those of us who are experienced in Scottish hill walking know what conditions can be like. For the younger reader one cannot stress too strongly that at times, rather rarely, wind and blowing snow or hail (or blowing gravel!) can entirely prevent the strongest



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BRAERIACH: COIRE BHROCHAIN

person from making headway against it except by crawling. Even a following wind can so retard visibility and so buffet one that one is in danger of falling over the least obstacle. And either case can make the reading of a map and compass out of the question, unless such things are strapped *outside* your clothing and instantly visible.

Meteorological statistics show that the period between Christmas and New Year is stormy forty-three years out of fifty. This is also the darkest period of the year. Typically comes a west to north-west gale of Maritime Polar air in which the temperature may fall four or even more degrees Fahrenheit per 1,000 feet of altitude and the wind speed become double or treble what it is in the valley. Here is an added danger in Scotland or other maritime areas: one can start in rain at the lower levels and be soaked before reaching frost level higher up.

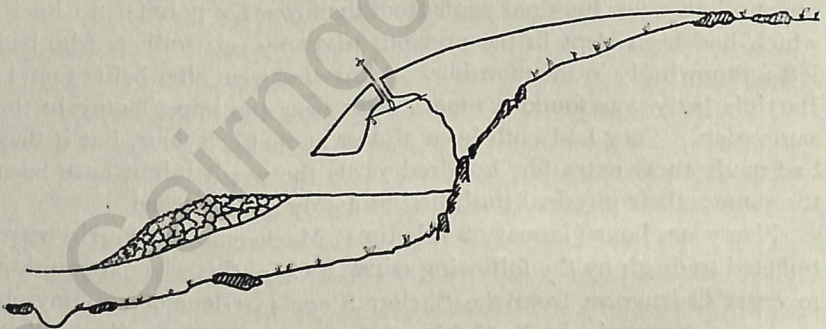
On January 1, 1928, such a blizzard was blowing in the Cairngorms when Baird and Barrie, two students of Glasgow University of particularly robust physique, set out from the Corrour bothy to cross Braeriach to Glen Einich. On January 2 Baird was found alive and unconscious a few hundred yards from the lower bothy in Glen Einich, which had been slept in the previous night by two walkers who had left unknowingly in the morning. Baird died soon after being found; Barrie's body was found a month later near the upper bothy in the same glen. They had both been almost at shelter's door, but if they had made these extra few hundred yards the result might have been the same; their physical limit had probably been reached.

Five years later (January 2 this time) Mackenzie and Ferrier were buffeted to death by the following wind in Coire Cas when attempting to cross Cairngorm from the Shelter Stone to Glenmore. I myself was on a mountain in Perthshire the same day and recall crawling downhill against the wind from the summit cairn.

On December 29, 1951, a party of five, one of them a woman, and including extremely skilful rock climbers, set out from Corrour Lodge to walk to Ben Alder on a moonless night with deep snow. Three of them became tired after two hours and bivouaced, two others pushed on but also were forced to bivouac and next morning turned back. They met the others, who had started to follow them, and then all five attempted to fight back 3 miles against the gale to Corrour Lodge. All four men died at intervals, the one girl of the party got through at 2.30; by evening the gale was spent and all five, if they had stayed in the one bivouac for 20 hours, could have made the retreat in a couple of hours.

Then we have the recent tragedy in Glen Doll, again occurring at the danger period, January 1, 1959. A final analysis of this is not yet possible and may never be so. It is known that they made a rather late start for such a short day, so were certainly still on the hill after dark; that they mistook the exit from Glen Callater and so reached the confusingly undulating high ground 1 mile to the west of the proper route; that the weather worsened rapidly during the day, so that whereas they were rained on in Glen Callater they then experienced a below-freezing blizzard on the higher ground. This party, like the other three quoted (with the exception of Mackenzie and Ferrier) was composed of strong and experienced people. One member at least, an *ex-Marine* Commando, must have received training in the art of emergency shelter in the snow.

It should be a cardinal rule that well before the limit of exhaustion is felt, a winter party, especially if uncertain of the route and/or benighted, should hole up. This can be achieved at worst by digging a shallow trench in the snow and roofing it with any material to hand—sticks, axes, groundsheets, with snow added on top.



Better still is to find a snow bank in a gully and excavate from this a narrow-mouthed cave in which all the party can congregate in reasonable comfort. The diagram shows a section of a typical snow cave. It is important to keep ventilation in such a shelter, since the door will drift up, and a suggested method is a ski stick arrangement as shown. The stick's vibration in the wind will keep the ventilator clear.

The best shelter of all is the Eskimo igloo. This, however, does require considerable skill combined with the right consistency of hard, wind-packed snow. I have built one in Scotland, however, as early as November, and myself have holed up in one on a Baffin Island ice-cap in summer when a blizzard prevented me from locating a camp.

All these types of shelter give relief from the wind, insulation from the cold by the covering layer of snow, and, most important, *rest*—rest until the blizzard blows itself out. In Scotland this seldom lasts more than twenty-four hours. Much longer periods have been survived by people in polar regions. Mawson in 1913, after one of his companions had been lost in a crevasse and another had died, pushed on alone to within 5 miles of his base when he had to hole up in a cave for a week. At Little America in 1940 a member of Byrd's Antarctic party was lost out more than forty-eight hours in a blizzard of 25 knots and 15° below zero Fahrenheit. He had repeatedly dug in and then moved when he was beginning to freeze. When the blizzard stopped he was still just able to make the 3 miles to the base, though it took him four hours to do so.

These were lone men. It is sometimes stated that there is safety in numbers on the hills. This is only true up to a point—the point, I believe, being three. A party larger than three ceases to be as efficient. In the first place, it is more of an effort to construct a shelter for larger groups. Secondly, there is the fatal possibility of confusion where a group splits, one lot deciding to stay put, another to go on. The Corroul Lodge tragedy was largely due to this splitting and a duty being felt by one group to recontact the other. Thirdly, as W. H. Murray has so clearly put it, the greatest safety requirement in the hills is to keep one's wits about one, continually and individually. A party larger than three is a mob—there is bound to be a reliance on "Joe doing the map reading." Moreover, in a bad blizzard it is difficult and delaying to the leader to try physically to see more than two other people behind him.

To sum up, I should like to urge again the essential duty of everyone on the Scottish hills in winter and particularly at New Year to realise when to quit and take cover. There is no valid reason why three fit and experienced men, prepared to take such a decision, cannot safely venture anywhere in our hills under any weather conditions. All talk of close seasons is nonsense, but as long as unwise people go out there will be disasters.