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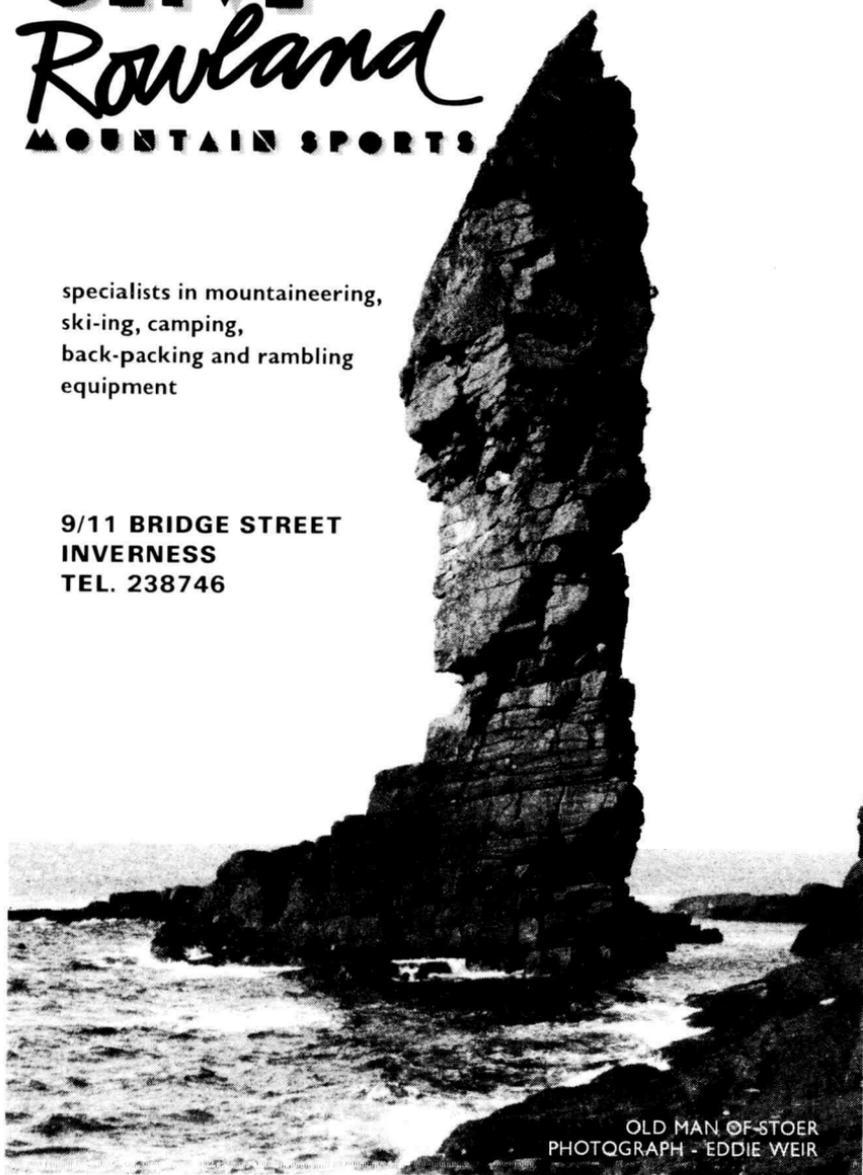
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SILVER THREADS AMONG THE CLOUDS

By Mike Jacob

*There is a region of heart's desire
Free for the hand that wills;
Land of the shadow and haunted spire,
Land of the silvery glacier fire,
Land of the cloud and the starry choir
Magical land of hills;
Loud with the crying of winds and streams,
Thronged with the fancies and fears of dreams.¹*

MY DREAM was that Ben Nevis in April would give us an Alpine-like weekend, rock and snow and sun and long days of blue skies; but here we were as the rain lashed down on a black and evil night and a disturbing roar somewhere away to our right.

It was the Allt a' Mhuilinn in full and dangerous spate after days of heavy rain and rapid thaw. I felt dizzy and weak; a combination caused by a virulent virus earlier in the week, a tiring drive from Dumfries negotiating heavy traffic, oily spray and the frustrating convoy by Lomond-side, my mind going through pointless mental exercises as I had tried to calculate by how much I would need to increase my speed to keep my rendezvous with Peter in Fort William. I had given up chasing time as I sat impatiently at another set of traffic lights when I should have been doing 150 mph across Rannoch Moor, and plans of an early walk-in had escaped out of the car window.

Late, and with a spinning head, I had offered my profuse apologies, which had been accepted with good grace. So we had dallied in the pub, debating the futility of it all but then, for no logical reason, had set off on that sweaty, body-numbing haul with overlaiden sacs. My need for long rests and drinks even before we had reached the dam had suggested a sensible retreat, especially since the forecast for the weekend, as warm fronts chased each other over Scotland, was 'rain, thaw and more rain', but we had kept plodding on, Peter waiting patiently for his languishing partner, for I had the key to the CIC hut and the Gaffersnake might be waiting outside.

Then, through the driving rain, a distant light flashed and disappeared; heads bowed in silent submission, we flogged our wet way through mud and peaty bog, over boulders and heather, occasionally picking up the path which was, by now, like the bed of a burn. We were both wet, despite wearing full sets of hi-tec waterproofs; perspiration had nowhere to go and rain found its way down necks and up sleeves. In these conditions, concepts such as 'breathable fabrics' were just meaningless. I discovered that wearing my climbing helmet, which I had been carrying so that I could scoop up large quantities of water to quench my thirst, now made a reasonable sou'wester.

It always seems impossible to establish any rhythm on the climb to the CIC hut and, consequently, to drift into that state where the mind can leave the body to act mechanically and, whilst fantasies and imaginings are lived out, time and distance pass quickly by. However, on this occasion, perhaps because the conditions were so awful, I did seem to find strength from some kind of cerebral introspection; I was buffeted and drifting on a storm-tossed sea in an open boat, while the bulk of a huge oppressive ship, felt rather than seen, thumped mercilessly towards me, the noise getting louder, its shiny, black flanks streaming surf as it towered over. The light flashed again, nearer now; it was time to cross the Allt. The roar was deafening; in two circles of torchlight all we could see was a mass of foaming water in violent turmoil, black pools of unfathomable depth swirled away down, down. This was the normal crossing below the hut, but only one or two slimy-looking boulders showed just under the surface, too far apart to use as stepping stones. We tried further up, above the hut, but here the water funnels in a suicidal ravine, the welcoming light from the hut window a few impossible yards away. We looked up and down in vain, the whole hillside seemed to be awash, ankle-deep everywhere. Soaked, and now rapidly chilling, shivers setting in, opening my rucksack to get a pile jacket merely allowed the deluge to pour in.

We poked and tested boulders for security but each time stepped back from the racing torrent for we could see no way to go. As the water raged we could hear the muffled thuds as rocks were pounded into each other and memories of school geography lessons on the 'erosion by water' flashed

through my mind but the situation was too fraught for such things and, as quickly, they were swirled away. We hesitated, unsure quite what to do next. Peter hinted at a sensible retreat and it began to seem the inevitable final option. In desperation I took off my pack, tied on the rope and, belayed by Peter, staggered and hopped a crazy dance from one foaming lump to the next, each time managing to keep my balance as boulders moved under my boots, water up to my knees. If I had slipped I would have been washed away on to the rope, there was no doubting the force of the water. I lunged at a rock on the far side and hugged it gratefully for not rolling on top of me, then fixed the rope as a hand-rail, the whole escapade taking over an hour. Well after midnight we squelched into the hut and sat soggly down on the benches in the porch, water draining from us as if from huge sponges. The Gaffersnake, with his usual Irish luck, had chanced into a descending Godefroy Perroux and acquired his key. Roused from his bunk he provided us with hot sweet tea for were we not, after all, in a state of shock?

*There are perils of knightly zest
Fit for the warrior's craft;
Pitiless giants with rock-bound crest,
Mystical wells for the midnight rest,
Ice-crowned castles and halls, to test
Steel with the ashen shaft;
Realms to be won by the well-swung blow,
Rest to be earned from the yielding foe.*

All night the wind and rain battered the hut, and the scene at first light was one of low cloud and streaming rock, reminding me of childhood trips in the Welsh mountains; always, it seemed, with mist swirling round wet and intimidating rock towers. I lit the gas heaters in the drying-room and went back to my sleeping bag, for there seemed little point in doing anything else. The hut was surprisingly quiet for an Easter weekend, a pleasant change; there were no crowds of climbers congregating near the hut so it was possible for emerging occupants to avoid running the gauntlet of glowering 'outsiders'. Eventually, after a leisurely breakfast, and because it had actually stopped raining, we ambled up towards Coire na Ciste, negotiating pools of water and wondering if there was any snow left to be found. There was, and so we slipped a soggy way to the cliffs only to retreat quickly as a waterfall blew sideways on to us. Everywhere we looked there was bare rock and water; we needed to go higher and the choice was, like the routes, lean. So, more in hope than anticipation, we toiled upwards again, through the thinning mist towards No. 3 Gully Buttress. Miraculously, the cloud level rose and the freezing level dropped. Almost immediately, the snow became crisper and the water stopped

dripping. In the afternoon we had a fine climb, with ice pitches and sensational positions, which would stay long in the memory but for the next day.

*Frosted cities of timeless sleep
 Wait for the errant knight;
 Kingly forest and frowning steep,
 Spirits of mist and of fathomless deep,
 Snow-winged dragons of fear that keep
 Watch o'er each virgin height;
 Treasure of dawn and a crown of stars,
 His who can shatter the frozen bars.*

The freezing level continued to fall and there was verglas outside the hut the following morning, which was too good to be true, yes because, with the arrival of one of the avalanche-forecast team, was the warning of imminent warm front and more rain. But the sun shone and the sky was blue so I planted the seed of an idea and watched while it germinated. The Gaffersnake knew that he would never get a chance like it again, none of us would for, as he said later, you don't get many mountaineering days like that in a lifetime. So, Observatory Ridge, his last Nevis classic ridge, a route that, I knew, had been an objective for a long time. It was also one that held an aura of seriousness, not least because of the tales of difficulty and frights with which we had been regaled by various strong teams, and the rescue we had witnessed a couple of years earlier, with a clattering helicopter hovering over the hut in the middle of the night, spindrift blasted by the down-draught from the rotor blades in a pool of white from a powerful searchlight.

There was no hurry as we strolled up past the Douglas Boulder, stopping two or three times in the sun to remove clothing for, despite the overnight freeze and slight snowfall, now, in the middle of April, the sun was gaining in strength. We picked our way over avalanche debris, compact lumps of concrete-like snow, and scree, at the foot of Observatory Gully. A pair of climbers were retreating from Point Five, the first pitch incomplete, whilst further up Tower Scoop gleamed green and blue amongst rocky walls. Slingsby's Chimney, a shallow gully, was completely bare; yet only a month earlier we had scraped our way up powdery snow, until, high up, the blizzard had arrived, and we found ourselves in a much more serious situation. A struggle to complete the dangerous traverse from the First Platform of North-East Buttress to Coire Leis in the gloom as nightfall approached and a hurricane-force wind tore our shouts to shreds, battered us and instilled doubts. It all looked so innocuous now, like the burn-crossing near the hut, gone the short daylight hours and grey, dour Scottish winter for an 'och, man, ye dinnae need a torch'.

Away from the sun, dwarfed in the shadows at the foot of Observatory Ridge, we soon replaced our clothing, or was it the chill of expectation? There was verglas on the rock as I set off, a consequence of the earlier thaw; now all the nooks and crannies and sloping holds were plated with black ice. An apparently straightforward chimney took a lot longer than I had expected. Suddenly, I had doubts. This wasn't the Diff. climbing I had been expecting and I was well aware of what the guide book had to say about such conditions. I could see a flicker of worry in Peter's face when he joined me at the terrace where some people traverse in from the foot of Zero Gully. We had to wait while the Gaffersnake tussled. We were climbing as two parties, for the Gaffersnake had been joined by Andy the previous evening and they had gained the lead. A light wind blew an air of tension; I put on a cagoule and looked over to the crest of Tower Ridge where groups made rapid progress by our standards. Impatient to be moving, I climbed up about 20ft to a piton at a small overlap and waited again. The shiny new karabiner that the Gaffersnake had discovered on his arrival at the same point had been removed, and now glinted incongruously at his waist, looking out of place amongst his small collection of faded old tapes. I think that most of his gear had been found on a climb in Ireland when we had discovered every stance littered with abandoned goodies.

Eventually, momentum lost, the way ahead was clear. The next moves were made trying to avoid the ice smears, a few feet of friction climbing on frosty rock with no satisfying hand-holds, then I reached a groove with a good runner and a dry mouth. I suppose the next pitch, a very steep and smooth slab, with crampon scrapes like the scratches from a large cat's claws, which testifies to its difficulty when covered by snow, is the normal crux. It felt secure enough despite a drooling smear of thick ice just where I needed a left foothold. In the end I managed an inelegant thrutch but Peter, sensibly, smashed the ice away with a large nut like a weird game of conkers, to reveal a crucial hold. Conscious of the deepening void into Observatory Gully, a traverse right, under an overhang, took us on to a huge wall suspended over the drop, but the terrain was much easier with large blocks and secure belays. Now back in the sun, verglas was no longer a problem, and, after a couple of pitches, we reached the crest of the ridge with a large tower looming above. It was well after lunch-time but we felt the need to keep moving for we had lost too much time on the lower buttress.

The others had only just surmounted the next barrier and it transpired that Andy had gone off route and fallen a short way before managing to stop himself. I got vague answers to my enquiries as to where he had been, but he didn't know that I knew that he hadn't known about the Richardson Step – 'an incut foothold in a blank wall beneath an overhang where you must move left; it's normally hidden by snow, the bloody English don't know about it and get stuck'. Precisely so, for this was the scene of the rescue that

we had witnessed. However, we did know, and so up we went to be greeted by the sight of lots of snow and ice in superb condition. I looked up to see the Gaffersnake's loose crampon bindings on a pair of what looked like old walking boots; Terrordactyls hung from his wrists and these concessions to modern ice climbing matched his miner's helmet. I remembered him climbing at Lochnagar with his trusty old walker's axe, and crampons with no front points, as we chopped steps up in yet another storm. The nickname came earlier, from a home-made Snakes-and-Ladders board which had been constructed as we kicked our heels in Greenland waiting for the arrival of the boat with our equipment, each snake featuring a member of the expedition.

It was time for us to put on our crampons and unstrap our ice-axes. Peter, happier on this sort of terrain, led up and traversed right to and round a corner, out of sight. I had time to sit and gaze around me. For all our climbing, we were still only level with the bottom pitches of Point Five. What a theatre for the struggles, dramas, tragedies, successes and climbing history enclosed within those rocky walls. I looked around – Carn Mor Dearg became a Himalayan giant, with a sea of mountains and cloud stretching to the far horizons; a party on Tower Ridge were having a slow fight up the Walker Spur on the Grandes Jorasses; the Orion Face looked both awesome and committing, the ultimate challenge. I was glad not to be there and looked away yet, glancing back, fancied that I saw two figures, in anoraks and tweed breeches, cutting steps up this daunting arena and I marvelled at their courage. I focused on a crystal in the rock, had anyone seen it before? A distant shout, a pull on the ropes and I was drawn back to reality, the appreciation that it was late afternoon and that we still had another 1000ft to go and that we had had no food or drink. Steep but straightforward ground, with excellent belays, led to the famous knife-edge arete overlooking Zero Gully, into which we traversed, discretion taking precedence over the purity of the direct line. Somewhere over to the right was a huge sheet of thick ice, dominating the whole upper part of the face, like a great white sheet draped over the cornice.

The ice was excellent, axe placements secure. We were bombarded by our friends with lumps of hard snow, and even **with** a Friend, as the Gaffersnake attempted to redress the balance between his pitiful supply of gear and Andy's prodigious quantities. A couple of pitches from the top of Zero Gully, in the confines of a short but steep ice-step, I found a perfect thread belay and hung securely in my harness as I brought up my partner. The sun was setting behind bruised, purple clouds gathering in the west while a chill wind started to moan around the cliffs. Slowly, steadily, safely we reached the end of 2000ft of mixed climbing, the grade irrelevant. Swathed in rope, we stood on the freezing plateau, warm from the knowledge that it had been committing enough to put us to the test and that we had each won our own fights.

In the twilight we shook hands, and then, in the last of the fading light of Easter Sunday, somewhat wearily headed for the top of No. 4 Gully; there was still a tension inside, perhaps a mixture of reluctance to be leaving the scene of a memorable experience, and the awareness that it was too soon to relax. We slipped carefully down the steep snow until, near the lochan, we finally stopped in pitch dark. At that moment Ben Nevis was ours; overhead the stars twinkled, reflecting the silence and solitude of that massive presence. A verse from Geoffrey Winthrop Young, echoing through my mind since I had glimpsed the ghosts on Orion Face, were the only words that I could find –

*All that the wanderer's heart can crave,
Life lived thrice for its lending,
Hermit's vigil in dreamlit cave,
Gleams of the vision that Merlin gave,
Comrades till death, and a wind-swept grave,
Joy of the journey's ending:-
Ye who have climbed to the great white veil,
Heard ye the chant? Saw ye the Grail?*

Rummaging for my torch I realised that I had left it, against my better judgement, in the hut. My companion, however, had not been so foolish and provided the light to illuminate our way down the series of cliffs from Coire na Ciste, whilst I, at least, could provide the memory of the way down.

We burst ecstatically in on an elated Gaffersnake, for Andy had already departed, and drank pot after pot of tea, talking like wee boys at a midnight feast, too high for sleep as we re-lived the day and the weekend. To me, Ben Nevis was like an over-familiar drunkard, switching inexplicably from quick-tempered aggression to placid somnolence, losing the inhibitions which mask the moods of everyday life – the 'Benigma Variations' – a mysterious theme, one of adventure and ambivalence.

Very early the following morning the Gaffersnake disappeared out of the hut, apparently, and strangely, concerned about being late for work. Myself, well I think he was trying to avoid scrubbing his porridge pot. I reached the door shortly later and yelled after him, but he was too far away to hear my shouts questioning his parenthood and merely turned and waved. A couple of hours later, after cleaning up the hut we, too, headed down, racing the descending cloud and with the wind, for once, at our backs.

¹We acknowledge the publishers, Methuen, for the use of verses from G.W. Young's 'Knight Errantry', published in his 'Collected poems'.

A RIBBON OF LIGHT

By Donald M. Orr

THE GREYNESS seemed to rise from the sea. It suffused the air and filtered into the landscape a still, damp aura of gloom. Footsteps were deadened in the dank, moist atmosphere and the lack of movement in the air increased the humidity leaving him almost breathless. He scanned the area beyond his immediate gaze. Coloured lights were held in their own reflection by a foggy halo that isolated them like lost embers. The pebble beach undulated dully down to the flat-oxide water. Farther out he noticed wavelets struggling to rise from a seemingly starched element that, at its edge, had set and moulded to the contours of the stones. The architecture of the promenade merged into a series of greys and ochres that crept off into the recesses of the night and invoked in him the same feelings of dread as the half hidden chambers in a Piranesi prison.

The seaside town, shrouded in melancholy, exuded disinterest and ennui through the staleness of the evening air. A last claim to gaiety was staked by neon illuminations flickering into life along the main street but this dipped the scene towards the garish and revealed nothing but the organised supply of baser instincts. He headed home slowly, trying to balance the clarity of the day with the turgid nuances of the evening.

The morning sun had drawn him out of bed early and, seen from the kitchen window, the crags high on the escarpment overlooking the town caught the sun's rays on their southern margin and beckoned him with their glimmering edge. To keep him in trim for tomorrow's course a work-out on the steep slabs set into the side of the moorland plateau would be a perfect solution to his solitary day.

By mid-morning the rock was hot to the touch and he was glad of the onshore breeze that carried up the low tide tang of serrated wrack and, above that, the woody verdure of the farmland immediately below him. Perched on the wall, absorbed in the quiet technicalities of his craft, he became aware of a muffled, rhythmic thumping and turned to see a paddle steamer come into the pier far beneath. Moving up a broad corner on slim holds he reached a ledge below the crest and sat relaxing, resting his arms and chalky fingers, in the sun. The twin funnelled ship was now leaving the bay and heading out to the islands. The heavy wooden paddles churned the sea into a lather and drove the ship out over the blue firth, streaked offshore by amethyst reflected from the heather hills of the islands. The sound and colour of the scene enveloped him in the folds of his boyhood summers.

The casual jumble of images, of hot sand, sea and the endless days of beach activities revolved with the memory of his parents. He smiled sadly at the recollection and rose to stem further reminiscences. The steamer was now well down the channel and starting the slow turn round the southern end of the large island when a single wave from the wake caught and held the sun's brilliance, converting the sea foam into a rod of liquid light.



He lay in bed considering the arrangements and mentally ticking off the equipment for the next day's climbing course. As he settled down his abstracted mind was drawn again to the single wave of floating luminescence that had flashed across the sound, thrusting behind the rocky foreshore of the island promontory. The shimmering light beat towards him, widening and expanding, approached closely, wrapped him in opalescence and soft warmth and bore him off to sleep.

Much later, in the chill of the night, his snorted bursts of breath broke over grey rock. His vision was limited to a few feet around him as he levered out on a ragged undercut and his body recognised the spasm of hurriedly placed protection. Sweat coated the holds within his dream ascent on steep, nigrescent crackline charred against the dark. A dim, deeper edge of blackness flanked his left and coldly he knew this was the border of stone and sanity where rock and reality become something else. On the rock rim, clinging to the stone margins he waited, recognising in the planned movements of the climb a formula for his own decline. The blend of age and skill balanced at the precise moment when strength splits from will. Gripped in sleep he paused and broke the code that held the secret to those mystic rites of passage. He breathed the runic, rounded vowels of 'Porphyry' and turned away from the night's game and into a sounder slumber.

It was still quite early in the morning when they crossed the roaring, boulder strewn river by the narrow, wooden bridge spanning the gorge, and started padding up into the valley. Later it promised to become one of those hot, cloudless mountain days that memory could burnish into gold but then, as they carried the heavy sacs up to the cragfoot, it was still cold in the shadows of the deep defile that held the crashing torrent. They moved higher, quickly threading their way through the boulderfield and contouring across the coarse screes whose sands and gravels had been sucked away by successive floods. Above a small waterfall they stood for a moment breathing deeply, sucking down the chilled air in the shadows and drinking handfuls of cold water as their sweat-soaked T-shirts turned to icy rags.

He looked over to David and they both grinned. It was going to be a great day – the final fun day of a short course they had been asked to run by the group assembling below. The sense of pleasure and confidence had grown as the team developed competence very quickly on single pitch routes and basic techniques on a weekend visit to the Lakes. They had all climbed before, one way or another, and had now come together to gain more experience. This would be their second spell on multi-pitch routes, working through moderate standards of climbs to polish their abilities in leading, protecting and belaying.

Looking up and across at the high wall of sunlit, pinkish rock he traced the lines of the climbs that they would use later with the group, then slowly raised his eyes higher to the heather and juniper terrace above the cliff.

Two crows took flight silently from a distant sunbathed ledge. In the early morning light their black plumage appeared to be edged with an ivory luminescence as they drifted quietly up and away from the crag, utilising the updraught of thermals from the wall. The gleaming wave floated to the forefront of his mind and in a dazed and absent way he heard himself whisper the word 'Porphyry'. His eyes glazed and a dizzying awe overtook him. The birds met the crosswind at the lip of the coire, the second crow cawed and shot out a streak of silver from its rear. We watched it, as a rippling ribbon of light against the sharp blue of the morning sky, holding its glittering shape in view as it snaked down to splatter somewhere on the rocks above.

A cold, hard fear crashed through his brain with the casual ferocity of a blunt instrument. He knew immediately that they should not climb on this wall today. He knew also that there was no way of explaining this rationally to David or to anyone in the group that he could now see down in the valley starting on the ascent.

Stunned at the link to the day before and his dream during the night, he stood in utter confusion. Fortunately, David had skelped on up the path and he had time to gather his sac, breath and will to stumble on. Staring at the track and concentrating on the simple motion of upward progress he tried to rationalise what he had experienced.

He wondered if the sudden gulps of cold water could have brought on some spasm but he knew that a message had been transmitted clearly and accurately. As he climbed he scanned again the wall above. He knew this wall well, and all the routes on it. All the hard routes were above the terrace where they would not be working. Balancing out his feelings he felt good about this area, only sheer stupidity could lead him to have an accident here. Instantly, another wave of terror broke over him. Feeling cold and sick his stomach was wrenched by the easy torque of fear as he sensed this inexplicable, sinister warning was perhaps aimed at one of the group.

By mid-morning they were all in the full comforting warmth of the sunlight and had geared up the group, explained the layout of the crag and selected climbing teams. While talking through the final points of the day's organisation his voice cracked and he stuttered attempting to regain the flow. It was so obviously a nervous reaction that he saw David stare, his eyebrows drawn in and down, puzzling at him. By tilting his head slightly and raising an eyebrow David silently asked the natural question. Back in control he shook his head at him while continuing the run-down of events for the day.

The early warm-up climbs went well. He and David soloed around checking nut placements and anchor points, shouting encouragement and offering advice. Lunch, at the foot of the crag lying in a saucer-like depression of cropped grass soaking up the sun's rays eased some of the feelings of dread, but the sense of foreboding would not die. Only when they left the crag would it depart. The strong afternoon sunshine could not

melt his anxiety, only blend with the beauty of their situation to form a dramatic juxtaposition with his fear.

At some point during the afternoon he was standing, belayed, in a recess of reddish purple rock, watching Jenny lead up through some easy broken ground towards a terrace. On his left, Valerie was on a small ledge just below the crux moves of a crack climb; about 80ft above her partner and maybe 15ft from her last runner. He looked back to Jenny as she pulled on to the wide heather-covered ledge and turned smiling and excited.

He returned a strong-arm wave of congratulations and she moved back to rig up her belay. His eyes drifted back to Val on her ledge. She was placing a chock above her head and her long black hair blended with her dark T-shirt and navy breeches in forming a single sombre shape against the light coloured rock. She fixed the runner in place, checked it and stepped back – and off.

He stood, stunned by the realisation of what he was witnessing and the feeling of guilt that burst inside him as, silently and seemingly slowly, Val fell the length of the crackline. At 30ft she jerked and then continued accompanied by a brief whirring from the hex that had ripped out. John, on the belay, was suddenly aware that something was wrong as loose coils of rope piled around him. He watched Val hit a sloping ledge 10ft out from John and bounce off over the edge, whipping the line away as quickly as it had landed.

Apart from the noise of the rope slithering over the rock the valley was still as if silently witnessing the hushed, slow flight of a falling climber.

In the same way that a depressed switch immediately lights a darkened room the tightening of the lead rope on John's Sticht plate triggered them into action. Val uttered a long, distressed moan, John screamed after her and roared for David as he tore at the belay roped around him. David appeared on the buttress and prepared to abseil down the crack, telling him to go up and get Jenny and the team he had been working with down from the terrace. He raced uphill collecting equipment and people as fast as their questions would allow. By the time he had led the remainder of the group down the path and around the foot of the crag back to their base David had finished the first aid work. A wrist, two fingers of the opposite hand and her nose had been broken and a ragged cut under her chin would require several stitches but she was up and talking – frantically chatting, explaining, crying and laughing, bubbling with the relief of being alive.

They packed up quickly and quietly with the same blend of concern and embarrassment and no one could know that his relief was tinged a different colour from theirs. As Val was nursed down the hill he looked at the blood stain on her face that had snaked out from her broken nose and wondered again at the notion of the silver wave, his bizarre dream and his certainty about the crow's 'warning'. On gaining the path he stared again at the wet blood as it caught the reflected sun's glare, changing the blood streak into a ribbon of light.

THE BLACK SHOOT CENTENARY

By H.M. Brown

A HUNDRED years ago the first ascent was made of the Black Shoot of Stob Maol. This forgotten route is worth remembering however, if not for itself, then for what it stood for and the spirit which made its ascent possible – at a fourth attempt.

Climbing, as we define it today, was in its infancy in Scotland but was more centralised and cohesive than south of the Border, thanks to the newly-formed Scottish Mountaineering Club, which enrolled in its membership most of the active Scottish participants and Alpine Club types from further south. It was all very gentlemanly, (it took a century for ladies to gain a foothold in the SMC!) and at the third dinner ‘some good songs and recitations were contributed’, while much talk was no doubt about the newly-published Tables compiled by H.T. Munro, a fairly cataclysmic event. One contemporary guide book suggested there were perhaps 30 hills over 3000ft. Suddenly, to find there were hundreds was an astonishing treat. Exploring this inheritance was at once desirable, and several Meets a year were instigated and proved very popular. There was quite an emphasis on winter activity (still a club membership perquisite) and everything was enthusiastically recorded in the early journals. It must have been great – and unique – fun then with everything new.

To many, Scotland was basically a practice ground for the Alps, so Skye was the Valhalla, with its crown, the Inaccessible Pinnacle, falling to the Pilkington brothers in 1880. As Professor Ramsay, first president of the SMC, rather long-windedly put it at the first SMC dinner, ‘Whereas of old it was thought that every mountain had but one top, and that there was but one way, and that the easiest way, to the top of it, the Alpine Club has discovered that the number of ways to the top of any mountain is infinite, and that that way only is to be discarded which is easiest.’

Thus the club gathered at Loch Awe for the Hogmanay Meet of 1892. The weather was mixed. On one day we read that ‘some of the party ensconced in armchairs before a blazing fire felt inclined to leave the hills alone’ – but still ordered a trap and trotted off to ascend the Taynuilt Peak of Cruachan. On the last day Munro and Rennie took the train to Tyndrum, bagged the four Ben Lui Munros, (the nickname was in use within a couple of years of the Tables’ appearance), and returned, afoot, to the Loch Awe Hotel after a 10-hour expedition. On the first of January, a party made the third attempt on the Black Shoot, a climb which could well be called ‘the first great problem’ and which had been attracting attention for several years.

Messrs. W.R. Lester and R.A. Robertson 'looked at it' first of all in December 1889, when descending Beinn Eunaich. It was described as a narrow chimney nearly 400ft high in the side cliffs of the great coire of Ben Anca (Beinn Eunaich) overlooking Glen Strae. They called it the Black Shoot of Stob Maol, which on maps now is given to the spur of Eunaich which runs south to Castles Farm and hides the coire from distant view. The Cruachan group of hills must have many comparable gullies so I should think it was chance as much as anything that brought this one to brief prominence. Lester wrote that, being struck by the unusual appearance of the shoot, they went up to prospect as far as possible under the 'not very favourable conditions, all the rocks being coated with snow and ice and we being equipped with nothing more formidable than walking-sticks'. They actually climbed 100ft then, but Robertson dropped his stick and they were reduced to picking holds or melting the coat of frozen ice with their finger tips, a situation described as 'neither speedy nor agreeable'. They wisely retreated.

On the second attempt (April 1890) the party was Lester and Fraser Campbell. This time they took a rope. The snow and ice had all gone but was replaced by slimy moss and water, 'easier but quite as disagreeable as before'. They climbed 30ft higher before being freaked out. Lester reported, 'We came to a stop, feeling very doubtful whether it was possible for us or any one else to go higher. All that could be seen above was an exceedingly steep and smooth chimney, which had to be approached over slabs equally smooth.' They worried too about being able to exit on to the hillside at the end. Sounds familiar doesn't it? And of course they returned to the Black Shoot.

The Dalmally Meet at Easter 1891 also had a look at the Black Shoot: Messrs. Gibson, Campbell, Lester, Stott, Munro and Robertson. 'Absolutely impractical' in the conditions they declared. Some of the party went on to fight their way up a nearby route, a four-hour battle with driving spindrift and bad snow. They noted plenty of other good lines. (Given a good freeze-up this could be an area to look at again.) Munro and Stott went up Eunaich after soloing routes of their own. Munro had quite a saga. They reached the summit in the worst gale and visibility Munro had ever known. On the descent there were moments when they were blown to a stop by the wind.

On New Year's Day 1892 the A-Team of Messrs. Gibson, Naismith, Thomson and Lester set off on the third attempt and, as Douglas wrote, reporting the meet, 'Although fully equipped with alpine appliances, including ropes, axes and even spikes, the attempt was unsuccessful'. (Could the spikes be nascent ice pitons one wonders?¹) Lester's euphemistic cry this time was, 'This was extremely trying.'

¹ More likely crampons. Ed.

They roped up at the start and, with axes, made rapid progress to the previous highest point reached. No mention of standing on each others' shoulders and other such antics. Another familiar truism was noted. 'It seemed remarkable how, on each attempt, we, with perfect ease, reached the highest point previously gained, surmounting without difficulty obstacles which had before taxed us severely. Only past these points difficulties seem to begin. The unknown above seemed to magnify the obstacles in every first ascent.'

This third attempt had failed at a wedged boulder. Lester had led up the vertical chimney (back and knee work in a waterfall!) but the icy boulder defeated his best efforts nor was there room for more than one person so, after three hours, they packed it in.

The fourth attempt was made in May 1892 and Lester could write, at last, 'The Black Shoot has now succumbed ... to four members of our Club on the Queen's Birthday holiday – Messrs. Gibson, Naismith, Douglas and Lester.' Oddly, Lester, an original member, fades from the record after this saga (its account is his only Journal contribution) yet, he was on all the attempts (it was 'his' climb) and he brought together the formidable trio for the successful climb. He died in 1946.

They quickly reached the jammed block and Gibson, leading, soon climbed round it, belayed, and brought up the other three to a somewhat crowded stance on a ledge 'under a small cascade'. There they suffered for an hour while Gibson tried and failed on a couple of lines before finally climbing a third choice of continuation. The angle eased after that but loose rock made for considerable danger. One dislodged rock fell 20ft, hitting the last man on the shoulder, luckily with little damage resulting. Two and a half hours of climbing saw them out on to the hillside above. They decided not to try and descend by the same route! 'Feelings of exultation were considerably damped by the thorough soaking we had got. A quick scamper over the hills to the top of Ben Eunaich helped to bring back our normal temperature and the evening saw us safely back at Dalmally. As to the Black Shoot, on one point we all agreed – that it would never see any of us again.'

Of course not. Climbers look forward. Without the Black Shoot of Stob Maol we would not have had the Waterpipe Gully saga, or the Clachaig Gully climb or Zero Gully or ... but who knows what lies ahead? Such changes in a hundred years yes, but also, happily, how little has really changed. Lester introduced his story of the Black Shoot by stating that the climb was 'a pure piece of mountaineering gymnastics' and was 'a case of seeking out a difficulty for its own sake'. That was new then and being our inheritance ever since, it is worth remembering.

A second ascent was made at the New Year Meet of 1897 by Bell and Napier and that year's Winter Meet saw Harold Raeburn and Maclay climb it. They even did the avoidable lower section and were thoroughly soaked

as was usual. The boulder blocking the chimney had disappeared. On the last day of 1900 Raeburn returned with Sang and Mackay to climb the Black Shoot again in decent conditions – and found a very worthy climb. His article in the SMC Journal vol. vi pages 161-166 is the best help today for finding and/or climbing this route. I'd always assumed it was low-down and seldom in condition (the name Stob Maol is so placed) but it lies between the 1750ft-2100ft levels and Dr Clark's photograph makes it look 'interesting' even now. If only they had used grid references in those days. (149 322 is my guesstimate from the data available.) The SMC Journal vol. vii p. 94 also gives a route description in its Guide section and ever-shorter help appears in the Central Highlands General Guide. The SMC Journal vol. 30 p. 21 (1972) has an article by the editor, Robin Campbell, on the Black Shoot, probably its only ascent since the early days. 'Pink Elephants in the Black Shoot' has 'wit well-seasoned by awe'. Given our gear what might they have done a century ago.

Raeburn was an outstanding climber, one of the first to use 'delicate balance' rather than force and wedging tactics. He kept out from the gully as much as possible – and stayed dry – or climbed the side walls. The Shoot itself is still a deep-cut, overhanging cleft, a technical challenge and perhaps worthy of investigation in the centenary year. Any takers? I dare a team to don period costume and climb it using the equipment of a century ago. As a concession wet suits may be worn below Inverness capes and tweedy knickerbockers

A HUNDRED YEARS ON

By Andy Tibbs

Unknown to H.M. Brown, and oblivious of his gauntlet, a team of young worthies from the SMC did, in fact, pursue a Centenary ascent in traditional style. Tormented by problems of ethics and botany, they describe below their fresh look at an old route.

THE CENTENARY fell on a Tuesday; a baking hot weekend in the Cuillin had been abandoned and a day's valuable holiday had been sacrificed for the venture

Shaw had done his research well and had issued Bearhop and myself with a chunky, photocopied pamphlet which he called, 'The Black Shoot Fact Sheet'. The plan was to make an ascent in traditional style and the car drew to a halt amidst a heated debate on the ethics of arriving by motor vehicle – shouldn't we have caught the train to Dalmally and walked the extra three miles? But ethics can be taken too far.

We were one short of the first ascent team of four – should we have brought along a stuffed effigy of W.R. Lester to make up the numbers?

It was warm work trudging across the dried-up bogs, conditions were far from ideal, it was far too hot and dry and such a climb would inevitably lose much of its character. As we turned the corner of the glen a steepening of the hillside came into view above. With club ties loosened the pace hotted up in anticipation and we soon reached a gully feature which could only be the Shoot itself.

A consultation with the fact sheet revealed that Robin Campbell had walked straight past 'the scruffy little crag' in 1971. Not wishing to repeat this mistake we made our final mental preparations, posed for the team photograph, then set off into the bowels of the mountain. A few moments later we were back at the gully mouth repulsed by a severe overhanging pitch reminiscent of Waterpipe Gully a few days' earlier.

Our respect for the pioneers mounted as we decide to reconsult the fact sheet, things didn't seem quite right. According to Raeburn the climb starts with a '*Luzula*-bedecked wall of very considerable steepness', and although we had no idea what a *Luzula* was we felt sure we'd recognise it when we saw it. Exploration further to the right revealed a long cave-like feature high on the crag; below this was a shallow gully and cascading over the steep rocks at the foot was a fine ribbon of green vegetation. 'Surely this must be *Luzula*'.

Fortunately, the *Luzula* was in good condition and with Bearhop kicking steps out in front the path was easy to follow. The climb continued in a similar vein over a well-bedded chockstone to the foot of the notorious 'twisted chimney'. At this point Shaw was prodded to the front, the whole idea was his in the first place. We were treated to a masterly display as his tweed adhered where lycra would have failed.

Eye, mind and muscle coordinated, he drifted upwards and disappeared from view. Even Raeburn or Lester might have been faintly impressed. Bearhop and myself were admiring the view through a thin drizzle of plants and other organic matter when the scratching and grunting above came to an abrupt halt – he was at the belay. We followed without incident though we were mildly surprised at the quantity of rock the pitch had to offer.

The final pitch was mine and after a short, steep bulge the climb finished as it had begun at a steep *Luzula*-bedecked wall with bits of dead tree for runners. Soon the gully petered out and we assembled on a grassy ledge for a bite to eat and further ethical debate. 'Do we really have to go to the summit of the mountain?' The rain answered the question for us and we bounded back down the hill to Glen Strae.

We all slept well that night, content and smugly proud of our achievement. It's a fine climb with plenty of character, but slip in a nylon rope and don't forget to go in the spring when the vegetation is fresh and firm to the touch.

BEATING THE RECESSION

By G.J.F. Dutton

IT WAS a fine late-October day, in the middle of well, either Gaick or the Monadhliaths, we are not supposed to say which. We strode over snow-freckled heather, across a plateau of bowed heads similarly dusted. Between them, huge declivities of black glens. Above us, the cold blue sky of early winter.

We always came here at this time, to breathe the change of air and tread freshly-frosted earth. Soon all over Scotland the gullies would be in condition, the faces beckoning with ice. A glittering prospect. It should be a good winter. Why, there was even a fair stretch of snow already in the little coire just below us.

We ran down to it. Just to get that hard slither beneath our heels again. It was snow right enough, an inch or two on top of old hard stuff. Really old snow, dirty, scattered with bits of twig and spruce needles. Spruce needles! Here in the middle of the treeless plateau of – er – Gaick. ‘Updraughts’, explained the Doctor. But he could not explain the depth of old snow, at this time of year. Nor – look – the spoor of tracked vehicles across it. We kicked – hard as ice. The Doctor screwed in his axe (he’d brought one, to make things look wintry); but couldn’t reach bottom. Last season’s? Not possible, these warm years, at just under 3000ft. But, still, the coire faced north-east and could catch miles of blown snow from every direction on this table-land.

Then we saw snow fences, to gather drifts and encourage them into the coire. And machinery – a snow-maker with its hose snaking into a plastic lochan, and a couple of piste-bashers, pistie-beasties. And coloured sticks marking the slalom course. Obviously a good snow reservoir like this had been taken over by the Ski Industry. Yes, a track led up from below. With a truck, tractors and bulldozer. And workmen. And buildings down there, and a cable over pylons – clearly restaurants and chairlifts ...

We hurried over. The Doctor was astonished. ‘No mention of skiing here in any plans I’ve seen. The main road, yes; not here. Must find out!’

The truck and bogeys were being loaded with great heaps of stuff cleared off the snow, and taking them down the roadway.

Heaps ... of spruce branches! Spruce branches ...?

Ecological snow fencing? Why taking them away, then? We went up to the gaffer and enquired. Pure nosiness, of course. He gave a slow smile.

‘We’re jist makkin ready for the winter. Now the hard weather’s settin in. Clearin awa the cover.’ And would not be drawn further. ‘Na, ye’ll hae to ask Dr MacPherson. It’s his affair.’

A bell rang under the Doctor’s fishing hat. ‘Archie MacPherson?’ he asked.

'Some might call him Erchie,' was the experienced reply. 'But he's owre there', pointing.

The Doctor peered. 'It is, it is old Archie. Lord, I knew he was back, what a coincidence. Fancy him starting a Ski Resort. At a time of Recession, too. Let's go and ask him about it.'

On the way he explained that Archie, a fellow-student of his, though older and studying geology, had gone abroad and struck it lucky with oil in Alaska. Had made a fortune. A prudent man, hard-headed, very reserved. In fact, downright Mean, but possessing a fairly mineralogical sense of humour. He'd retired early, come back a few years ago and bought an estate in the old MacPherson country. A sentimentalist, like all these self-made men. A hell of a lot of land, the Doctor recalled, here in (shall we say) Gaick. 'So that's what he's up to. Ski resorting – strange; he never used to like people.'

Archie MacPherson, a short powerful pipe-smoking man in an old cap and filthy raincoat, did not seem to like us, at any rate. He grimly surveyed the Doctor, and ignored the Apprentice and myself. But we overheard.

Yes, this was his estate. Then a pipe-smoking silence. The Doctor, avoiding the main question, chose to ask:

'Spruce branches ...?'

'From my woods in the glen.'

Yes, but why moving 'em down again?

'Because I brought them up here in the summer.' Stare, puff.

The Doctor, pipeless and thus at a disadvantage, could only venture further in pure nosiness. 'Why bring them up in the first place?'

MacPherson looked him over, then examined us carefully. We stepped back. The Doctor began to re-introduce us but the pipe waved him down. We had, however, passed scrutiny. The pipe answered.

'To preserve the snow. I am building up snow here, year after year. This coire collects a great amount, I bring in more, and it's sheltered from any warm wind. The branches keep off the sun. Give insulation. We get very little thaw even in a hot summer: even after a poor winter.'

So things became clearer. It was for skiing. Year after year, and we'd never heard of it. Archie had bad P.R. But a wonderful idea, trying to keep last season's snow to gain an early start to this one. We asked the direct question, indirectly:

'You're certainly making a fine place here for skiing in the winter. It should become very popular.'

He withered us. Skiing? Skiing!

'Do you think I've nothing better to think about than ... Skiing! Nothing better to spend my time and money on a childish self-indulgence like that?' He put away his pipe. His eyes became dreamy. 'I suppose you've heard how they've managed to bring back ospreys? And sea eagles? And reindeer? And how some people – good luck to them! – want to bring back bears and wolves? A kind of paleo-conservation mania, for reintroducing

the Post-Glacial fauna?' We nodded, quite at sea (was he going to suggest Polar Bears?).

'Well, I am bringing back – a GLACIER. I am reintroducing a Late-Glacial inhabitant. I have brought back a glacier, the beginnings of one, and here I am conserving it. I know something about glaciers, I worked with them long enough in Canada and Alaska. This,' he stamped vigorously on the snow, 'is a glacier. Now' – he stared fixedly at us – 'I am being confidential. I don't want it blabbed around, encouraging' – he stared at us one by one – 'fools here to poke and prod and break up the surface. The first few years of a glacier's life are critical. Disturbed, it never develops, fades away. Mind you, once settled in, it makes its own climate, doesn't need cossetting like this' – he waved at truck and tractors – 'keeps on growing, cooling things down. Positive feedback.' He took out his pipe again, a little warmed by our astonishment. He struck matches, the flames quivered.

He was fiercely possessive of his glacier. Any suggestion that it might merely be an occasionally perennial snowfield like the one below Cairn Lochan provoked wrath. He flung the last match away.

'I've piled enough depth here now for the bottom to be pressed to ice. It's begun to FLOW. A whole metre forward this last year – look how those sticks have moved. Internal strains developing too – subsurface cracks and incipient crevasses – found 'em by sonics and lasers. Yes, it's a glacier right enough. Though for Final Popular Proof,' he added scornfully, 'we'll need open crevasses, I suppose.' He glared at us.

Alas, we failed to disguise our doubts sufficiently. He plucked out his pipe, spun round, waved dismissively and marched off to a rusty Land-Rover. So much for the hospitality of an old friend.

'A hard man, Archie, a difficult man,' observed the Doctor, lighting up now the competition had gone. 'But a wonderful depth of cold compressed motivation. He'd wear down any opposition. Just keeps pressing on.'

We strolled over his acre or so of proto-glacier. If only it were a glacier; the first for 8000-odd years. We began to thrill. One man alone, fighting Global Warming. Reconstituting his own glacier. A world-wide recession of them, but not here. Private enterprise, indeed.

We inspected the outfall, a mini-snout, its progress being measured weekly with the latest apparatus by that dour-faced Archie, kneeling in the patched puritanical breeks of a visionary millionaire. Soon, perhaps, it would spill over and down the burnside, through the old gap its predecessor had made, re-enter its rightful glen, grunting and shoving aside with piggy delight turf and trees, piling up boulders, heaving itself into great blue and white icefalls between scoured cliffs – making wonderful climbing ... It would chill all its fellows into resurrection: the A9 would run a gauntlet, fanged and grinning above you. And here we were at the start of all this!

We sighed and gazed around at the resolutely unglaciated landscape.

Ah, well. Then – a crack. The Apprentice had disappeared. He was not there when we turned in alarm. Just a hole. And a furious voice from below.

He had fallen through the crust. Was jammed about five feet down in a baby dimple that hugged him lovingly – and our rucksack and spare line.

'A real crev ...' gasped the Doctor, stepping back: and vanishing likewise.

I made for the side and sank slowly; my last view was of a couple of grinning tractor men and a grimly complacent pipe.

We were cold down there in the pale blue, damnably cold. But we needn't do a Joe Simpson; it was an infant catastrophe, the glacier was just learning: not deep – we were all unhurt and loudly demanding a rope.

Archie took his time. He needed photographic proof, he explained, and sampling of the failed crust before it was messed up by things like rescue operations. Great probes and instruments with winking lights purred about us unfeelingly, intent on their own personal business. Things like huge dentists' drills – quite on their own – operated small toothy saws, trepanning the ice alarmingly near our immobilised heads. We supposed it really was very necessary – after all, this glacier was on a Life Support System.

Eventually all was completed and we were hauled out – by floodlight. We stood grey, frozen and shivering on the heather as the men jovially slapped us down. We stared at the equipment still trundling up and down the cables from the laboratory twinkling below. Like a dream. We were speechless. And Archie?

Archie was as pleased as ever he allowed himself to be. As pleased as if he'd introduced bears and they'd eaten someone. His glacier felt at home, had asserted its place in the Late-Glacial biosphere. He twinkled icily beneath the stars. He crackled orders. Cameras still flashed: holes, foot-steps and broken-up surface were recorded.

Archie in fact exuded a kind of Polar bonhomie. Although we had messed up his – Scotland's – glacier inexcusably, we had provided Final Popular Proof, and our hungry (and thirsty) expectations rose, not to mention hopes of a roaring wood fire. Yes, he had thawed; he took us down in the Land-Rover, the gaffer driving, and remarked how cold and hungry we must be. Ah! – we stopped at the Big House (dark and shuttered). Archie got out. 'You'll be mighty glad, I'm sure, of a good meal right now.' Splendid man! We agreed heartily and half-rose in our seats. 'Now they do you a fine one at a little place in Dalwhinnie' he went on, describing a ghastly refrigerator we'd suffered in before, 'it's rather late, but just mention my name and they'll likely open for you. It's quite cheap, too. Well, good to have met you. And thanks for the Subsurface Monitoring,' he added. 'Quite useful, in fact.' Slammed the door, waved, and went.

The gaffer dropped us at the car. He seemed damnably amused about something. We climbed stiffly into cold seats.

'A hard man, Archie,' the Doctor reaffirmed, as we drove off to pie, chips and a gas fire at Pitlochry, 'Mean as hell. But if anyone can encourage a glacier, it's him.'

SPILLITUDE

By Grant Urquhart

FAT GEORGE rolled from the passenger seat of the stationary Sierra on to the parched grass of Clachaig Green and lay moaning in the sunshine. This job with the distillers was certainly proving enjoyable. It looked like big routes on the Ben were out for today, though. Maybe something nearer, like Aonach Dubh.

A spot of breakfast in the Milk Bar had George looking as near human as he can get, and strolling gently up towards the East Face. Suddenly he stopped, a look of horror directed towards a group of matching cagoules ascending the path on the ridge above.

'What is that?'

'Synchronised hill-walking, George. Very popular these days. Probably be a demonstration sport at the next Olympics.'

This did not mollify him. Hill walkers on the climbers' descent path? Stentorian Glaswegian carried clearly through the shimmering air:

'You're going the wrong way!' Briefly, but fatally, the cagoules hesitated. This stimulated George to even greater decibels:

'You are going the wrong way up the mountain!' The victims were now seriously perplexed, and spent several minutes in a huddle, consulting compass and plastic-bag-covered map. Mercilessly, George administered the coup-de-grace:

'This is the Glen Coe Mountain Rescue Team. We strongly advise you to descend immediately!' Pathetically, but still in close formation, the cagoules turned to descend; hopefully to spend the remainder of that glorious day contemplating the folly of ovine behaviour.

It was some time before we were properly able to breathe, but eventually we resumed our snail-like ascent, pausing awhile for a chortle.

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'George, there's absolutely no protection up here.' 'Don't be silly. There's sure to be some in the groove up there.'

'Are you sure this is the right way? It's far too scary for the grade.'

No reply, just a pointedly bored look at the watch. What to do? Up or down, up or down? Death seemed easier to face than scorn, so I inched up the big bald forehead to its solitary wrinkle. Steep, fingery, and high enough to die; I needed a runner right now, but I couldn't find one. The

crack a mirage, a mere crease in the surface. I tried, though, every gadget in every possible combination, till a nut ripped free, tearing my knuckles, and I almost swung off; ragged fingers trying to squeeze blood from the rock, legs quivering, weighed down not only by gravity. Below, a small herd of tourists had gathered, sniffing the blood like hyenas.

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The block looked like a trap: sitting squat in a little niche, glued in by mud and time. Forty feet up the wall on incut holds, pushing the boat out, no runners, no idea how to downclimb, and as usual a nagging hangover clouding the issue. A big chock went behind the block, psychological protection. But I just couldn't make the move into the niche; I'd tried the little I knew, and I was getting tired. Anyone with any sense would have gone down; a waist belay to an old piton, a useless runner, hundreds of feet of precipitous rock below. But not me. Going down was for women and old men. I was young and tough, and I only knew one thing about climbing: if you pushed on hard enough, somehow you would make it, somehow you wouldn't fall.

Then I had a great idea: if I could just get both hands on that block, and pushed straight down, and didn't pull outward, I could mantel up on to it. So I gingerly moved over and pushed down and was scared to pull out: and it felt horrible and wrong and I didn't even know enough to know that when you try to climb down you need to lean out to see where to put your feet: then there was this little sucking noise and this feeling in the pit of my stomach that the unimaginable was happening, that I was dying.

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Plastered to the wall, torn between memory and ambition, between fear of death and fear of failure. I could have done without a visit from that old ghost. But he and I were old acquaintances: pay too much attention to his type and you'd soon be forking out a subscription to the local golf club. So toughen up: that micronut might not hold body weight but the arcane rules of the game say it's Protection; and there's sure to be a big hold, and a better runner, just over this bulge.

Well, there were neither, just more smooth, perfect rock with little flat edges scattered around and a couple more hairline cracks to take wee brass wires. And it was all technical and bold and magnificent and the adrenals were pumping pure 100 octane now. Just below the top there was a proper

runner, and I looked down at last to check that the tourists were suitably impressed: but they'd gone, and I realised it wasn't climbing they had stopped to watch.

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Back on the Buachaille, things weren't going so well. No feeling of panic, certainly no desire to emit the cinematic shrieking diminuendo: just a big black hole with a burning white OH NO in the centre, and cold, quick thinking about how to limit the inevitable damage. Draw the legs up, cover the eggshell head with the arms, and wait, interminably, for that rope to come tight.

It could have been a lot worse. If the Big Man hadn't ignored the rope burns and the considerable risk to his own life, if the bendy old peg hadn't held both our airborne bodies, I wouldn't have ceased my descent unscathed. If it wasn't for the elastic recoil of kernmantel and the fact that the old Whillans harness tied on way below my centre of gravity, I wouldn't then have spun upside-down and cracked a few ribs against the mountain.

At least it gave me time to reflect, lying winded on the heather, on the follies of youth. Ruptured spleen, lacerated aorta, or perhaps a flail chest and slow asphyxiation? Gradually the indescribable pain began to ease; maybe just a pneumothorax, then? As the fear of immediate oblivion receded, it was replaced by an older and deeper horror: rescue! MacInnes being all sympathetic and serious on the telly. Oh, the ignominy, I would never get into the SMC now.

Well, I limped back to the car unaided in the end, and hirpled round the hills for many months, marvelling at the idiocy of those crazy men up on the crags. At length I did venture back on to rock, a Diff. in the Coe, Quiver Rib I think, up on Aonach Dubh ... and it felt bloody hard, but at least I knew one thing, now, that never again would I risk everything for a daft game, pushing my limits too far from safety ...

* * *

Luxuriating in the heather, letting the first rush of endorphins wash over me like a coral lagoon. All too soon, Fat George's grisly pow hovering into view.

'Not a bad route. Quite easy, though.'

'A bit necky for the grade, though, George.'

'Ah well, yes, that's why I had to hide the new guide from you down there. It's a couple of numbers harder now. Fuckssake, Grant, this belay is total crap ...'

Oh, what the hell, anyway, Just another wondrous day out in Glen Coe.

THE KEEPSAKE

A myrtle stone marbled curiously
green with the gardeners gift and rain,
perched deftly, when I grasped it
following a buttress on A'Chrois.

A metaphoric flake, loosely bedded
in the schistose bandings,
waiting silently to impart its gift
of fright and scarried tread

of boots on brittle edges,
as handhold in hand
I pivot to the winds delight,
granting a wider vista.

Retaining this lurestone
I pocket myth and memory
to later recall high rewards
as mica sparkles in my palm.

Donald M. Orr.

THE GEOLOGY OF BEN NEVIS

By Rod Burt

THE GEOLOGY of Ben Nevis is composed of a central core of volcanic rocks overlying an older metamorphic basement (Fig. 1). This core is completely enclosed within the Inner Granite, which is in turn partially enclosed along two thirds of its circumference by the Outer Granite. Together these components form the Ben Nevis Igneous Complex.

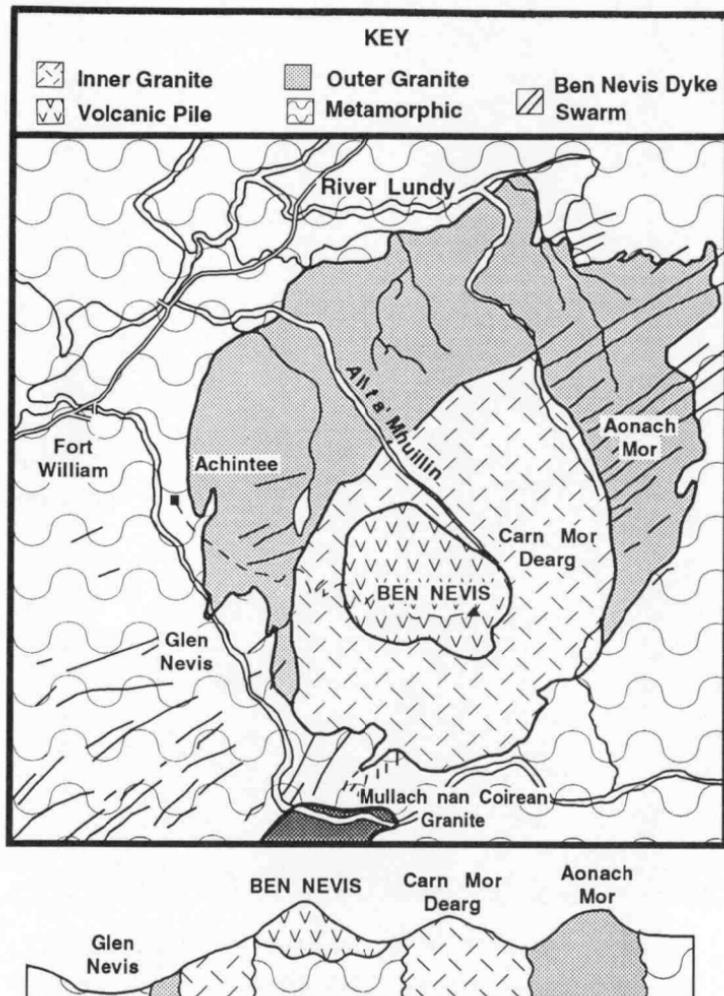


Fig. 1 The Geology of Ben Nevis.

A height difference of over 1350m (3900ft) occurs between the lowest exposure of the Outer Granite in Glen Nevis and the highest on Aonach Mor making this intrusion the largest vertical thickness of granitic rock exposed anywhere in the U.K.

Igneous rocks fall into two categories, intrusive rocks such as granite, are emplaced into the Earth's crust without reaching the surface. Extrusive igneous rocks are found on the surface either as a lava flow or a pyroclastic deposit. Lava is molten or partially molten rock whereas pyroclastics consist of fragmented volcanic material which has been blown into the atmosphere by explosive volcanic activity. A diagram of a volcano and its associated geology can be seen in Fig. 2.

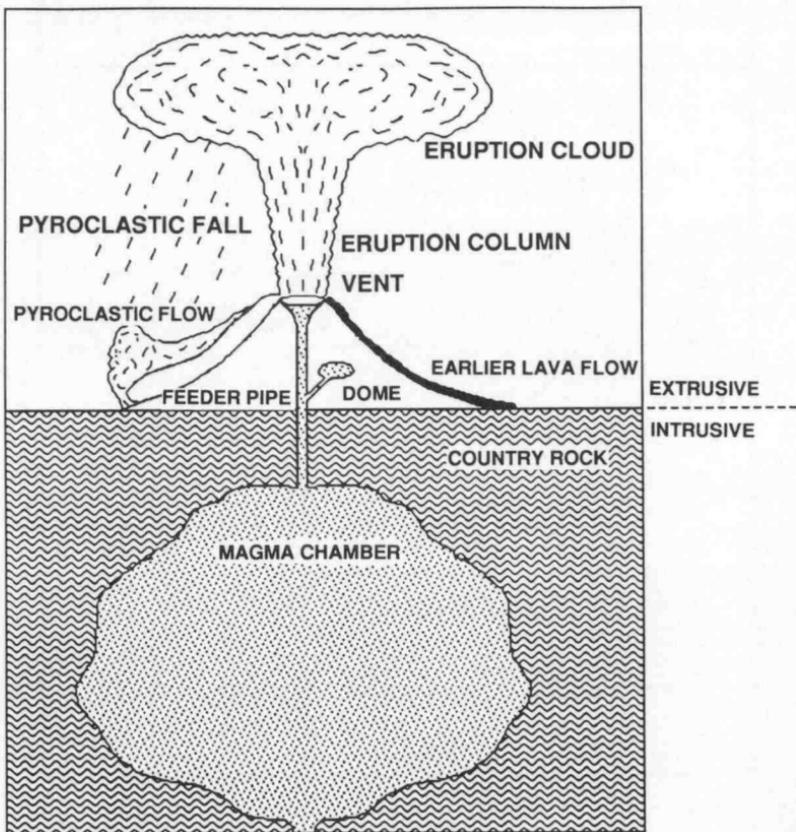


Fig. 2 Igneous Rocks and Explosive Volcanism.

Before examining the geology of Ben Nevis it is worth looking at the geological framework into which any model for the evolution of Ben Nevis must fit.

The Earth is believed to be some 4600 million years old (4.6Ga). The first traces of life occur in rocks that are nearly 3Ga but fossil remains are relatively uncommon until the evolution of organisms with hard shelly parts at the end of the Precambrian. The magnitude of geological time is difficult to comprehend. If the entire history of the earth is compressed into one year then the oldest rocks we know of date from mid-March and the earliest life forms appeared in May. The first land plants and animals evolved during late November, at around the same time as the rocks forming Ben Nevis were crystallising from molten magmas. Dinosaurs became dominant during mid-December but were extinct by Christmas and man-like creatures appeared during the evening of Hogmanay. The last Ice Age ended 1 min 15 secs before midnight.

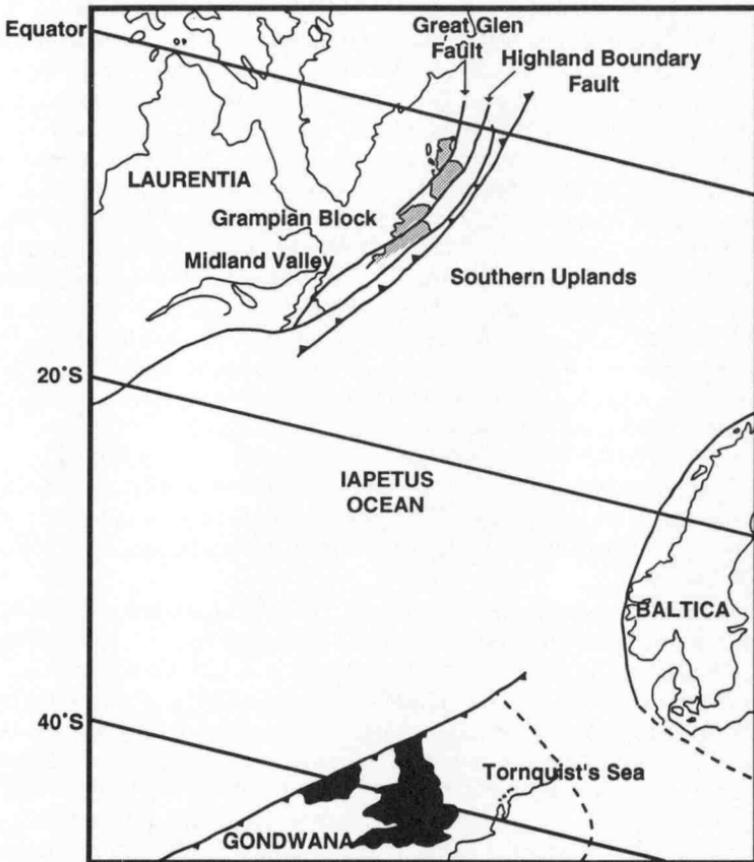


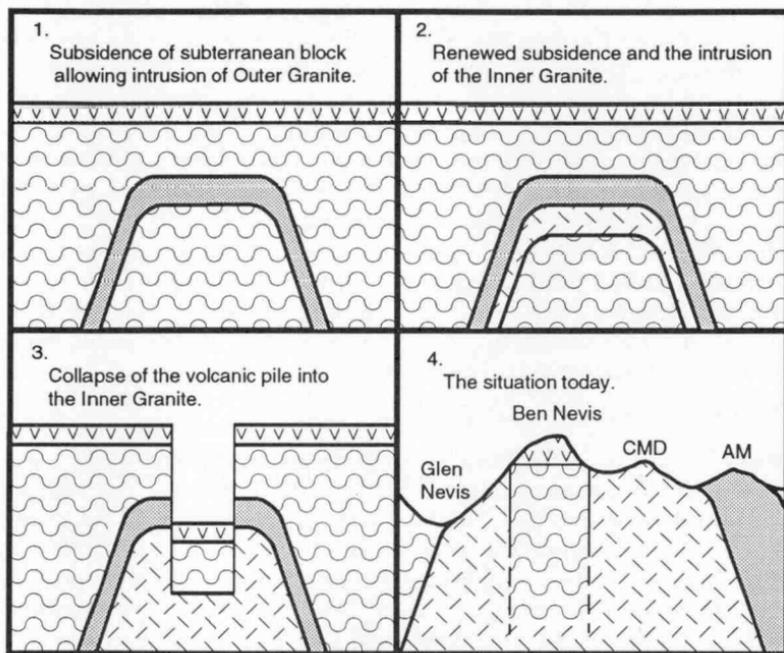
Fig. 3 Distribution of continents prior to closure of Iapetus.

Scotland's geology is dominated by the effects of the Caledonian Orogeny, a period of mountain building which ended around 390Ma. Modern ideas for the development of this orogeny are based on the movements of three ancient continents known as Gondwana (Europe and Africa), Baltica (Scandinavia) and Laurentia (the Americas and Greenland). The Iapetus Ocean (Iapetus, father of Atlantis in Greek mythology) separated Laurentia from Gondwana and Baltica. Closure of Iapetus led to the development of the Caledonian orogenic belt. The geographical distribution of the continents in the Cambrian is displayed in Fig. 3. An eastern arm of Iapetus, Tornquist's Sea, separated Gondwana from Baltica.

Ben Nevis is located in the area of Scotland known to geologists as the Grampian Block. This block is bounded to the northwest by the Great Glen Fault and to the southeast by the Highland Boundary Fault. Normally the surface geology of the Grampian Block is subdivided into three units; the Central Highland Division (CHD), the Grampian Group and the Dalradian Supergroup. Division, Group and Supergroup, are all terms used by the geologist to define packages of sediments or metasediments with similar geological histories. Metasediments are sediments which have been subjected to increased temperatures and pressures i.e. have been metamorphosed. If as in the case of the CHD, the temperatures are high enough then partial melting of the rock can occur producing a high grade metamorphic rock known as a migmatite. The CHD is believed to have undergone an earlier episode of mountain building and continental collision known as the Grenvillian Orogeny, prior to the deposition of the overlying Grampian and Dalradian sediments. The contact between the CHD and the Grampian Group has been obscured by movements along a fault line, the Grampian Slide Zone. Although the Grampian Group passes conformably (without noticeable break) into the Dalradian, in the area of Ben Nevis it is separated from the Dalradian by another slide zone, the Fort William Slide. During the Caledonian Orogeny all three units underwent several episodes of folding and at least one major metamorphic event. The Dalradian is now known to be entirely Precambrian, and older than 590Ma, as are the earliest fold structures.

Scotland is normally considered to be part of the Laurentian continent, and separated from England and Wales (Gondwana) by the Iapetus Ocean until the end of the Caledonian. The orogeny is associated with upheaval and violent volcanic activity, a kind of geological protest from the very bedrock of Scotland at this unholy alliance. However, recent work on the timing of deformation events in the Dalradian suggests that the Grampian Block is more akin to Gondwana than Laurentia. It is now recognised that orogenic belts are composed of a number of far-travelled 'terranes'. A terrane is a fault-bounded area or region which is characterised by a geological history distinct from that of adjacent areas. This process can be seen in present day southwestern America where the San Andreas Fault is moving California northwards relative to the American continent. If the

Pacific Ocean were to close in 100 Million years (Ma) time, and California has a velocity, relative to North America, of 8 cm/yr, then California will have travelled some 8,000km and the rocks exposed at the surface today will bear no relationship to those exposed wherever California finally comes to a rest. 8,000km would put California on the other side of the Pacific from its current location. The Grampian Block can therefore be analogous to a fossil California.



KEY

-  Plateaux Lavas
-  Inner Granite
-  Outer Granite
-  Dalradian Schists
- CMD - Carn Mor Dearg
- AM - Aonach Mor

Fig. 4 Geological Survey Model for the Evolution of Ben Nevis.

During metamorphism the mineralogy of a particular rock type changes in a predictable way allowing the pressures and temperatures of metamorphism to be estimated. From such work, it has been suggested that the present day land surface was buried under a substantial thickness of rock, up to 35km in some cases, although 20km is a better average. This gives a total crustal thickness approaching that of the Alps or even the

Himalayas, suggesting that the Grampian Block metasediments formed the roots to a now vanished mountain belt at least as high as the Alps.

Prior to the intrusion of the Ben Nevis granites, the orogenic belt underwent uplift and erosion, reducing crustal thickness to values only a few kilometres thicker than today's. Many of Scotland's granites were intruded at this time, including Glen Coe, Cairngorm, Lochnagar, and Rannoch Moor and it is highly likely that the land surface was peppered with volcanoes located above the granites as they were forming.

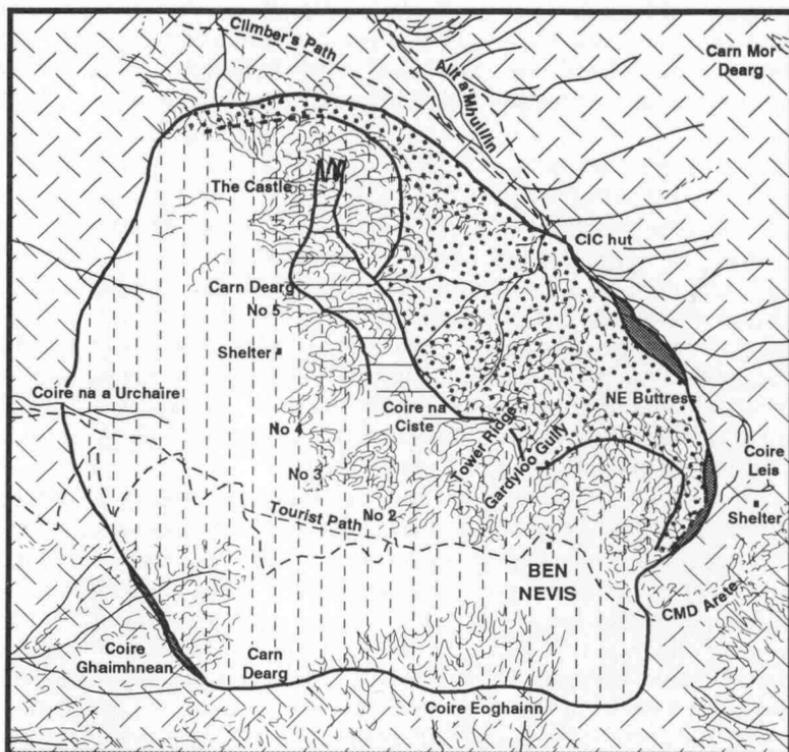
Just as theories in geology have evolved over the centuries, so have models for the formation of Ben Nevis. Early models are based on the chemical precipitation of metamorphic and igneous rocks from an ancient ocean. The most recent model is based on work by the Geological Survey undertaken at the turn of the century. Ben Nevis is divided into two granite units, the Inner Granite and Outer Granite, and a central volcanic pile. The Survey model for their formation is shown in Fig. 4.

The degree to which the volcanic and the granite magmas are related is not clear. Detailed geochemical work is required before any firm conclusions can be made. This article concentrates on the development of the volcanic pile without resorting to black box geology. Most of the evidence on which the final model is based can be seen in the field.

The Volcanic Pile:

No detailed study of the lava pile has been documented prior to my own work. This account is therefore the first detailed study of the volcanic pile to appear in print. Geology, like any other science, has developed its own terminology, furthermore this terminology has evolved over time. For instance, most accounts on the geology of Ben Nevis (tourist brochures and scientific papers alike) are based on the Geological Survey's descriptions of the volcanic pile (agglomerates and andesitic lavas). However, the fragmentary rocks which have been termed agglomerate are better described today as Volcanic Breccias. The use of agglomerate has changed from a blanket term encompassing all fragmentary rocks with a large proportion of igneous clasts to a more restricted term which should only be applied to volcanic deposits primarily composed of bombs (Clots of Magma) thrown out of a volcano during an eruption. The Ben Nevis 'agglomerates' do not fall into this category and should be referred to as volcanic breccias. Volcanic breccias are rocks which were formed by the fragmentation of pre-existing volcanic material by later explosive volcanic activity.

Because of the degree of alteration and erosion that Ben Nevis has suffered (how good will you look in 400M years time?), analogies with similar but more recent volcanic complexes are crucial in understanding the development of the Volcanic Pile. In particular Broken Hill, Mount Belknap (Utah) and Mount Aetna (Colorado) are especially good analogies.



KEY

-  Inner Granite
-  Andesite
-  Ledge Route Airfall Tuff
-  Volcanic Breccia
-  Basement Dalradian and overlying sediments

Fig. 5 Simplified map of Volcanic Pile.

The Volcanic Pile can be conveniently subdivided into three units; a pre-volcanic basement, a unit dominated by volcanic breccias and a dominantly andesite lava unit. The geographical distribution of these units is depicted in Fig. 5. Andesite is a type of volcanic rock with a particular chemical composition and typically found as lava flows. Not readily fitting into the above categories are a series of intrusive rocks which will be discussed after the three main units.

An important point to stress is the lack of lateral continuity to individual beds/flows within the volcanic pile. Where distinctive horizons have been identified, their lateral extent was found to be minimal. Any model for the development of the Volcanic Pile must account for this feature.

Basement:

The base of the volcanic pile is formed from Dalradian schists called metapelites (metamorphosed mudstone), exposed in the west bank of the Allt a'Mhuilinn some 200m upstream from the CIC hut. Normally underwater, but exposed during longer dry spells (there are some), a small exposure of quartzite (metamorphosed sandstone) outcrops beneath the metapelite. Two styles of deformation can be identified within the schists. An earlier fold-dominated style of deformation, presumably related to earlier Caledonide events, followed by a later brittle faulting episode related to the collapse of the Volcanic Pile.

A second outcrop of the Dalradian can be found in Coire Ghaimhnean (Five Fingers). The Dalradian in this location has been extensively altered by the action of hydrothermal fluids. Most significantly, this locality has the only examples of the regional dyke swarm (Fig. 1) exposed within the volcanic pile. This important feature indicates that the formation of the volcanic pile, occurred at roughly the same time as the intrusion of the Outer Granite. The type of dyke exposed is extremely rich in silica, ie is a felsite. Elsewhere in the Ben Nevis Complex, felsite dykes are only exposed in a small nameless burn SE of the gondola base station and in Allt an't Sneachda, and appear to have been intruded early in the development of the Outer Granite.

Overlying the Dalradian in the Allt a'Mhuilinn, and also exposed between the North East Buttress and Brenva Face, is a sequence of fine grain muds and silts interbedded with much coarser sedimentary breccias. No sediments were found above the Dalradian in Coire Ghaimhnean. The fine grain sediments have none of the sedimentary structures present in typical marine sediments and a freshwater lake is the preferred environment. Into this lake flowed a series of mass flow units or landslides. These are represented today by heterolithic and poorly sorted breccias. Heterolithic and poorly sorted are terms which give the geologist some idea of the way in which a breccia is made up. A heterolithic deposit is one in which a large variety of clast types occur and sorting refers to the distribution or range of clast sizes encountered. A well-sorted deposit, depicted in Fig. 6, is one where all the clasts tend to be within a restricted range of sizes whereas a poorly sorted deposit will have a wide variety of clast sizes. Whilst clasts of up to 25cm in diameter can be found in the breccias, no igneous clasts are present, leading to the obvious conclusion that igneous activity had not yet begun in the Ben Nevis area.

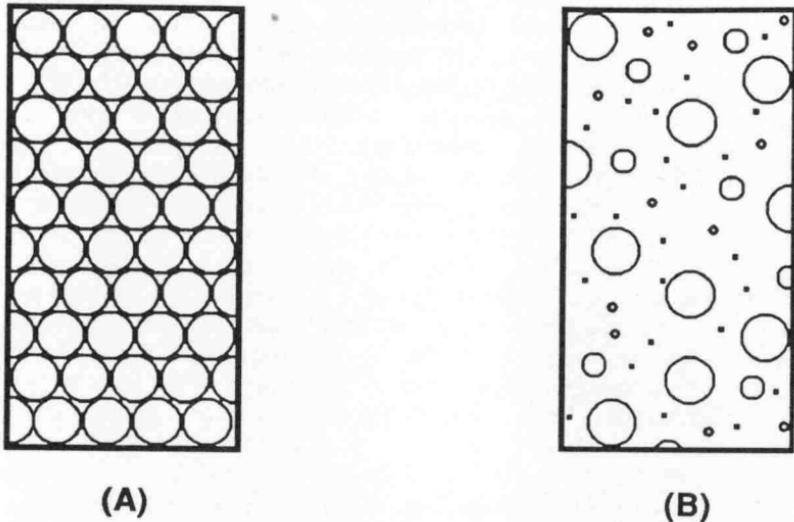


Fig. 6 Sorting and Support.
(A) Well-sorted Clast Support.
(B) Poorly-sorted Matrix Support.

Volcanic Breccia:

The breccias overlying the basement unit below the North-East Buttress differ from the main outcrop of volcanic breccia exposed around the CIC hut and below Coire na Ciste, and termed the Coire na Ciste Volcanic Breccia, in that they contain a significant fraction of metamorphic and sedimentary (Country Rock) clasts, up to 5%. Country rock clasts are few and far between in Coire na Ciste Volcanic Breccia. The proportion of country rock clasts decreases away from the basement unit and probably reflects swamping of the source areas by pyroclastic or lava flows. From a distance the clasts of country rock appear to be aligned in the same direction. The Coire na Ciste volcanic breccia does not show any alignment of clasts which may reflect a different emplacement mechanism to the North-East Buttress breccias, or that, because the igneous clasts tend to be equidimensional, they do not show a preferred alignment. It is not clear as to whether the North-East Buttress breccias were generated by landsliding or volcanic activity. Unfortunately, the contact with the Coire na Ciste Volcanic Breccias lies under the boulderfield between the Douglas Boulder, Allt a' Mhuilinn and the North-East Buttress.

The Coire na Ciste Volcanic Breccias range from a few metres to several tens of metres thick. Some of the thickest formations contain intermittent layers which are interpreted as separating individual flows with clast types and textures that are so similar it is not normally possible to identify

separate flows. Strongly sheared fine grain bases which coarsen up into the main body are often present. Less frequently, fine grain (ash?) dominated tops occur. The breccias are very poorly-sorted i.e. they have a chaotic assemblage of clast sizes, and lack any form of sedimentary structure. Clast sizes range from very fine grain particles (ash?) to a few metres. Alteration of the finer material has obliterated any textures which may have been present. Both matrix and clast support can be found within individual horizons; see Fig. 6. Matrix support requires simultaneous deposition of both the matrix and the contained clasts. This is generally associated with some form of mass flow, rather than deposition from flowing water. Glacial tills are typically matrix supported. It is very difficult to trace any of the breccia units for any distance laterally and the main bulk of the Volcanic Breccia outcrop is found in Coire na Ciste and around the CIC hut (Fig. 5). This strongly suggests that the movement of the breccias was gravity driven and therefore controlled by an ancient topography confining the breccias into natural drainage channels. This is an important line of evidence for identifying the mechanism of emplacement.

Thin, finely laminated muds and silts are found sporadically throughout the Volcanic Breccia sequence. Of limited lateral extent, these sediments appear to fill small localised depressions and probably represent the remnants of much larger lake-like bodies of standing water. An attempt was made to extract small fossils (microfossils) from some of these sediments but, unfortunately, none were found.

Several andesite units are found within the Volcanic Breccias. These andesites are of similar type to the main outcrop of andesite which will be discussed in the following section.

Andesite:

There are significant problems needing to be overcome before a fully detailed study of the andesites can be undertaken. This is due to problems of both terrain and weather. The great bulk of this unit forms the steep vertical cliffs of the Orion Face and North-East Buttress, as well as the cliffs around Castle Coire. On the summit plateaux, a large boulder field obscures much of the exposure.

Once again individual units are laterally impersistent. Each unit is of high aspect ratio, (Height/length) relative to typical plateau lavas, such as those on Skye, Mull and other islands of the Inner Hebrides. This feature is controlled by the viscosity of the lava. Thickness of individual flows range from a few metres to, possibly several tens of metres. Flow banding or flow folding is not normally observed and the lavas are phenocryst-rich with very few vesicles and a chaotic joint pattern. A phenocryst is a large crystal relative to the much finer groundmass (igneous equivalent to matrix) and a vesicle represents a bubble of gas trapped during solidification of the lava. The andesite is normally brecciated throughout the entire

thickness of a flow. Brecciation, in this case, is referred to as *autobrecciation*, and has been caused by the way in which the lava flowed and not because of explosive volcanism or by sedimentary processes. This feature can be explained by proximity to the source vent and a high viscosity which would also explain the high crystal content and the lack of vesicles.

Between the Volcanic Breccia and andesite subdivisions, on the northern side of Coire na Ciste, a yet another type of breccia deposit is exposed. This breccia will be termed the Ledge Route Breccia (LRB) where it is particularly well exposed. In contrast to previously described breccias, the LRB are moderately well-sorted and it is suggested that these breccias, which can also be found on the Orion Face above the Basin, represent a pyroclastic airfall deposit. No connection could be found between the two areas, suggesting two separate sources vents which are nearby but not exposed. The LRB tend to have a well developed preferred orientation. This is not a normal feature for airfall deposits (but abnormality for the Ben is normal) and it is suggested that the breccias underwent downslope movement after being deposited on the land surface. Volcanic areas are associated with frequent earthquakes, which together with rapid deposition of material leads to the generation of unstable slopes prone to mass movement. The mass of moving material was enough to erode, and in some cases mix in the underlying sedimentary layer which can be seen at the southern end of the Coire na Ciste variation start to Ledge Route.

Intrusives:

Those rocks identified as intrusive, fall into six groups, listed below:

(i) Around the contact between the Volcanic Pile and the Inner Granite is an intermittently exposed intrusive rock, hereafter called the Fault Facies. A very strong contact parallel vertical fabric, defined by colour banding, preferred xenolith and feldspar phenocryst orientation, can clearly be identified in hand specimen. Indeed the weathered surface texture of the Fault Facies and of the associated group (ii) intrusions, looks almost like spaghetti, such is the strength of the fabric. Occasionally this fabric tends to a sub-horizontal orientation. Traditionally, this rock has been termed the Flinty Crush Rock (FCR) and was formed when the Volcanic Pile collapsed into the Inner Granite magma chamber. But evidence for fault related crushing has not been identified. Phenocrysts are not fragmented and the fabric has textures more akin to flow than crushing processes. The Inner Granite does not contain either amphiboles or xenoliths of country rock, both of which can be found in the Fault Facies. The significance of the Fault Facies will be discussed later.

(ii) Fine grain pink to pink brown rhyolitic (fine grain equivalent of granite) dykes veins up to 2m thick, penetrate the lower part of the volcanic pile. Individual dykes vary in thickness from 10cm to a metre or more. Along the length of the dyke, the rhyolite can be seen to diverge into

separate offshoots which may or may not link up again further on. Phenocrysts of plagioclase feldspar and a streaky colour banding, define a strong fabric in a similar way to the Fault Facies. At least one example of this group, near the CIC hut, can be seen to pass into the Fault Facies. This group is especially common at the base of the Volcanic Pile; i.e. where it is closest to the Fault Facies, and can be traced for 100m or more.

(iii) In Gardyloo Gully and at the mouth of a steep sided gorge defining the southern end of the slopes leading up to Coire na Ciste, 5-25cm thick yellow-brown coloured dykes intrude the Volcanic Breccias in a present day vertical orientation. It is possible that these dykes were feeders to surface eruptions.

(iv) Semi-conformable (parallel to bedding) rhyolite lenses, up to 10m thick, form shallow hollows within the cliffs of Ben Nevis and Carn Dearg. The significance of these lenses has yet to be determined.

(v) On the opposite side of No. 4 Gully from Comb Buttress, a 15m. by 20m ellipsoidal vent intrudes the andesite. A strong vertical fabric to this rock unit and its fragmentary nature suggests that this may be a feeder pipe to a small explosive vent. In thin section, rounded clasts of Dalradian quartzite and pelite can be identified along with a suite of andesite fragments, within a very fine grain matrix.

(vi) Two small intrusive dome-like bodies of andesite, have been identified. In contrast to much of the geology on the Ben, one example is extremely well exposed just where Ledge Route flattens out above the amphitheatre of No. 5 Gully. This example is perhaps 12m thick by 50m wide and has its feeder pipes exposed.

Pyroclastic Deposits:

Pyroclastic deposits are subdivided into three groups, these being; pyroclastic flows, pyroclastic surges and pyroclastic falls. Each group has its own set of features by which it can be identified and represents a different emplacement mechanism. As Fig. 7 highlights, flows are confined by the topography and follow natural stream lines. Surges tend to be concentrated into areas of low relief but also mantle the topography. Falls, as the name suggests, fall out of the eruption cloud and so mantle all but the steepest slopes where slumping and sliding occurs – see the LRB.

Field relationships in the Coire na Ciste Volcanic Breccias indicate that these rocks are constrained by an ancient topography (Fig. 5). From this evidence alone it appears that the Coire na Ciste Volcanic Breccias are the pyroclastic flows. Depending on the number of vesicles in the clasts, pyroclastic flows can further be subdivided (this is a science after all).

Similar Volcanic Breccias to those found on Ben Nevis have been described from Mount Pelee, the eruption of which devastated Martinique in 1902. Here, angular to subangular andesite blocks rarely >6m, supported

in a matrix of smaller andesite clasts and ash were deposited by fast moving gravity driven pyroclastic flows. Clasts of older rocks are rare, and the largest clasts are dense juvenile (fresh andesite produced during the eruption) fragments. This type of deposit is termed a 'block and ash flow'.

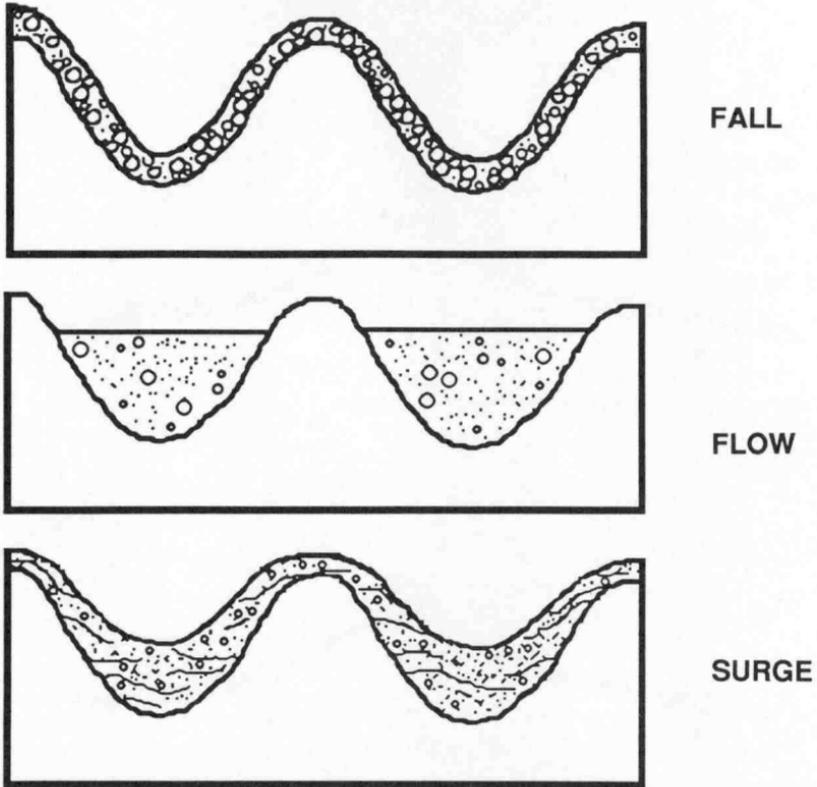
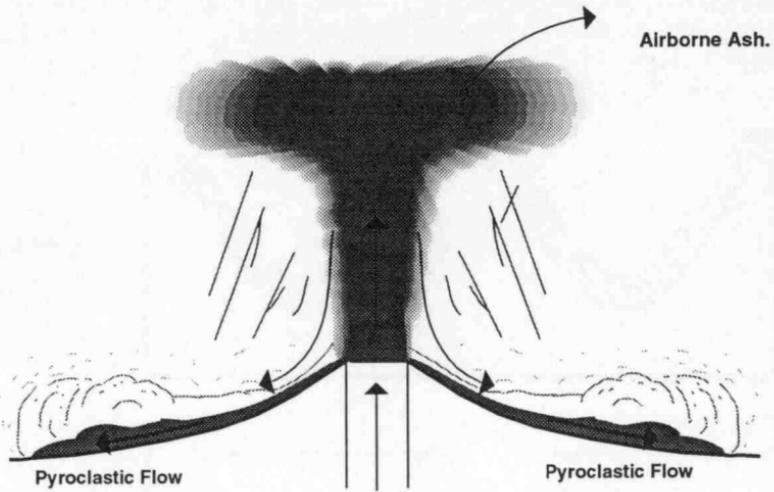
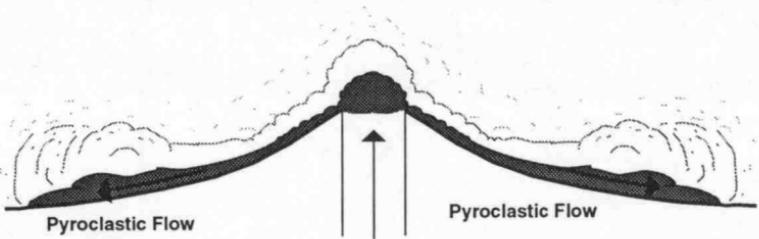


Fig. 7 Pyroclastic Deposit in relation to the Underlying Topography.

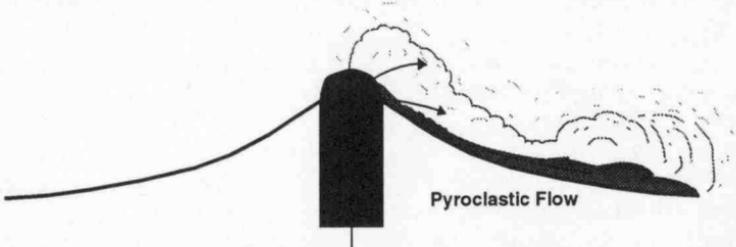
The text book description of a block and ash flow is as follows 'These are topographically controlled, unsorted deposits, having an ash matrix and containing large generally non-vesicular, cognate lithic blocks which can exceed 5m in diameter'. This is a pretty good description of the Coire na Ciste Volcanic Breccias. Cognate simply means that the large clasts were formed during the eruption that produced the block and ash flow. This requires the clasts to be mainly of a single lithology and this appears to be the case for the Coire na Ciste examples. Fig. 8 portrays the three mechanisms which produce pyroclastic flows. From these diagrams, it can be seen that Ben Nevis was not the site of a volcano but on the flanks and possibly several kilometres away.



A. Vertical eruption and column collapse.



B. Low Pressure boiling over.



C. Directed blast or Dome collapse. (eg Mt St Helens)

Fig. 8 Three mechanisms for the Generation of Pyroclastic Flows.

These eruptions are very violent, in human terms, were they to occur today. In geological terms, block and ash flow eruptions are rather small events compared to the much larger and very powerful caldera type eruptions which are discussed below.

Calderas:

Caldera formation is accompanied by exceptionally powerful eruptions. One of the more recent, Krakatau (Indonesia 1883), resulted in the deaths of 36,000 people, mainly due to drowning from tsunamis (tidal waves). Some 18km³ of material was ejected out of the vent and the explosion could be heard as a thunder-like rumble some 1000km away. So much ash reached the upper atmosphere that the following year was known as the year without a summer. Many artists painted spectacular red sunsets, again an effect of the ash in the atmosphere. This eruption though powerful in human terms, was, on a geological scale, quite small. Some caldera-forming eruptions in the United States have ejected at least 1000km³ of material onto the surface in the space of a few days.

Volcanic eruptions are essentially driven by the volatile content of the erupting magma (gases contained in solution within the magma such as water, sulphur, ammonia, carbon dioxide, nitrogen, etc.). Magmas with low volatile contents produce less violent eruption than magmas rich in volatiles. For a caldera to form, two requirements need to be fulfilled; the magma needs to be rich in volatiles and the roof of the magma chamber must be close to the surface and of sufficient strength to contain the gradual build up of magmatic pressure prior to catastrophic failure. Collapse occurs when the lithostatic pressure on the roof of the chamber exceeds the chamber pressure by the compressive strength of the overlying rock; i.e. the roof can no longer be supported by a combination of its own strength and the support of the underlying magma. There are several ways of achieving this and one of the simplest is to add fresh magma into the base of the magma chamber, increasing the volume of magma stored in the chamber. The easiest direction for the chamber to expand is up, putting the roof under tension. Rock is not very strong when stretched and the chamber roof may fracture, leading to the escape of magma to the surface. This reduces the support given to the roof which then fails along a ring shaped fault and collapses into the chamber, forcing large volumes of magma to be ejected via the ring fault.

When the roof of the chamber fails, the confining pressure is removed and volatiles flash out of solution. Explosion of gas bubbles causes fragmentation of the magma producing large quantities of fine grain ash and vesicle-rich lava (pumice) further increasing the volume of the chamber. As the fragmentation level descends deeper into the chamber, the overlying lava + gas mixture is forcibly vented onto the surface.

A large eruption column develops over the caldera site. Gravitational collapse of this column generates large volume pyroclastic flows known as ignimbrites. Close to the source, ignimbrites contain enough energy to surmount any topography. At greater distances, flows become channelised into pre-existing drainage channels. Finer particles are swept high into the atmosphere, affecting the Earth's climate. A depression forms above the collapsed block into which material from the eruption column may pond. Crater Lake is one example of a partially filled caldera depression. The block which subsides into the chamber is bounded by a ring fault which may or may not contain remnants of the erupted magma.

Can Ben Nevis be identified as the site of a former caldera? If so, how do the rocks exposed today fit within the caldera-forming process described above? Older Geological Survey publications have the roof of the magma chamber simply collapsing into the chamber with no mention of caldera formation which was unknown at that time. The Flinty Crush Rock was identified as a product of faulting and friction. Such a mechanism cannot account for the flow type fabric, whole feldspar phenocrysts and the contact with the Inner Granite. In fact it has all the characteristics of magma which was ejected along the ring fault during collapse. But no large volumes of ash and pumice are exposed on Ben Nevis today. The Survey Model does not explain the destination of the Inner Granite that must have been forced out of the way of the subsiding block. If the area of the volcanic pile is measured (3.5km^2) and multiplied by the minimum distance that the pile subsided into the magma, (650m) an estimate for the volume of Inner Granite which had to be displaced can be obtained.

$$3.5\text{km}^2 * 0.65\text{km} = 2.275\text{km}^3$$

This is a minimum figure because the edges of the volcanic pile were deformed as it subsided into the Inner Granite, giving the Volcanic Pile a bowl shaped cross-section. Also, the calculated figure represents the volume of ejected magma and no account has been made for the vesicle fraction which may have been very large. A basic assumption of the above calculation is that the block subsided in a single event or eruption.

There is a correlation between the volume of a pyroclastic deposit and the density of its fragments. Flows of small size contain dense fragments, whilst those of larger sizes contain highly vesicular fragments such as pumice. Using this relationship, it is expected that a 2.275km^3 eruption will have a substantial vesicle component. The volcanic breccias consist of large blocks of solid andesite in a fine grain ashy matrix. The blocks do not contain evidence for large scale vesiculation. The ignimbrite must therefore have been lost to erosion and the volcanic pile represents a pre caldera sequence

The model is summarised diagrammatically in Fig. 9a, 9b, 9c, 9d.

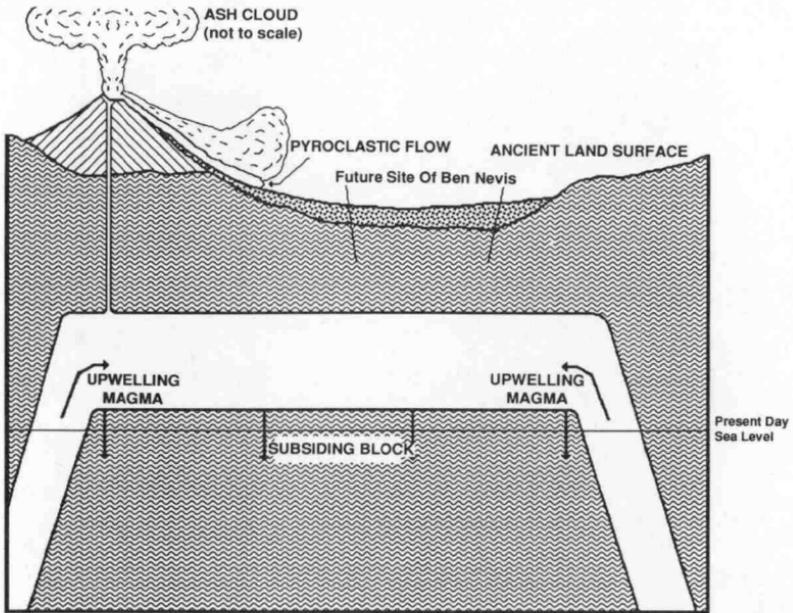


Fig. 9a Intrusion of the outer granite by subterranean cauldron collapse. Initiation of explosive volcanic activity on the surface.

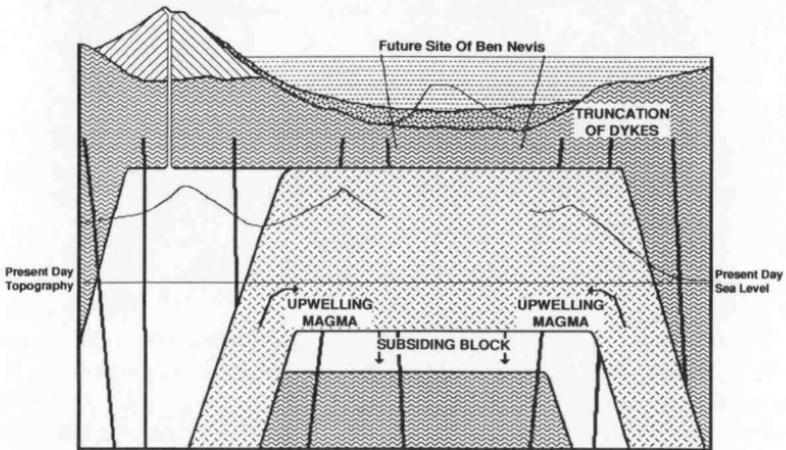


Fig. 9b Extrusion of lavas. Injection of the Ben Nevis dyke swarm prior to renewed cauldron subsidence and the intrusion of the inner granite followed shortly after by (Fig. 9c overleaf) failure of the magma chamber roof and the formation of a caldera.

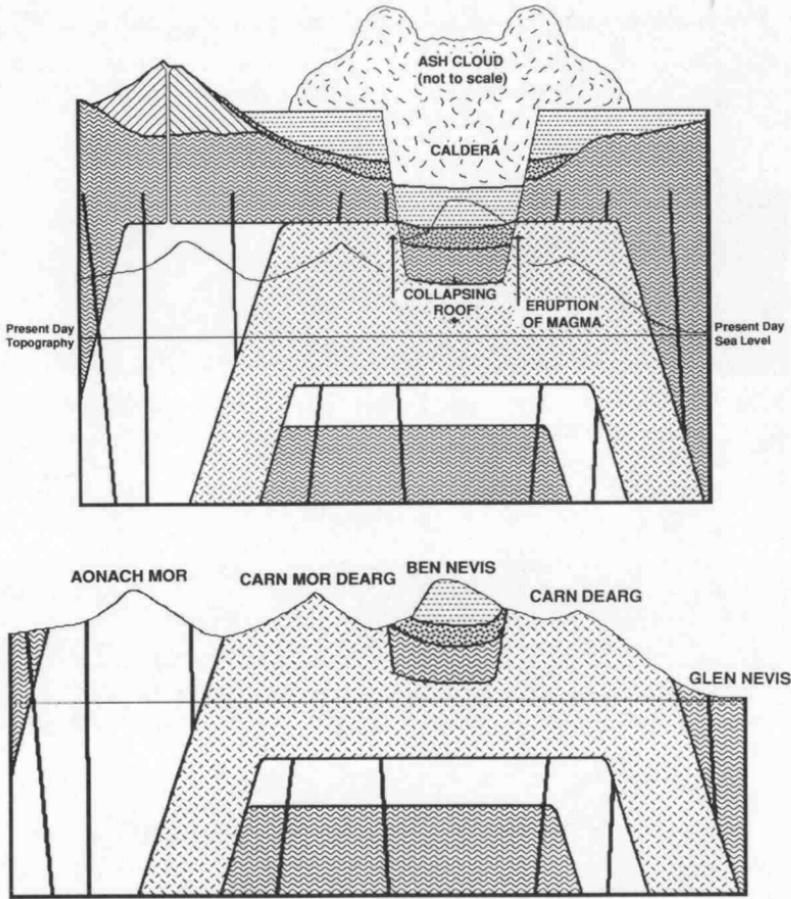


Fig. 9d 420 MYRS of erosion culminating in the last Ice Age.

Both Dalradian outcrops formed part of an ancient land surface subsequently covered by the volcanic rocks of Ben Nevis some 420Ma.

The basement unit provides no evidence of volcanic activity above or below ground. That the area was tectonically active (earthquakes) can be inferred from the volume of soft sediment deformation within the muds and silts and this may have been caused by the subterranean movement of magma. Whilst the area of Ben Nevis was situated in a low energy topographic low, not so far away considerable and rapid erosion spawned fast moving slurry-like mud flows, entering the lake with enough energy to rip up clasts from the lake bottom.

The absence of sediments above the Dalradian in Coire Ghaimhnean could be explained by the location of this area above the level of the lake and on the slopes of the depression, whereas Coire na Ciste and the area around the CIC hut were within the topographic depression infilled by the lake. Such a hypothesis may also explain the low volume of block and ash flows in the vicinity of Coire Ghaimhnean. Block and ash flows being gravity driven and topographically controlled would be confined by the topography and forced into the low lying areas of the ancient land surface. Igneous activity began with the influx of block and ash flows into the valley, possibly from a source several kilometres away. Small, near source lavas occur throughout the volcanic breccia unit. Also located throughout the Volcanic Breccia are small exposures of fine grain sediments representing periods of relative quiet.

The most extensive sedimentary band occurs at the base of the LRB and its thickness (20m+) implies a substantial period of quiet before the eruption of a small fire fountain type volcano. Rapid build up of material and continued earth movements led to slumping of the associated airfall deposit deforming the underlying sediment.

The andesite lavas above the Volcanic Breccias may represent the migration of the source for the Ben Nevis pile to a site closer to the Ben. Evidence for this is based on the occurrence of Felsite Dykes at the base of volcanic pile in Coire Ghaimhnean. This type of dyke was only intruded very early on in the intrusion of the Ben Nevis Granites, and it is possible that as the granite was being intruded below the surface a volcano was located above which generated the andesite lavas. Near source andesite lavas dominate the succession, again suggesting that the source to these rocks must have been fairly close. Sporadic horizons of Volcanic Breccia occur through the andesite sequence representing periods of violent explosive activity. The two types of deposit can be produced from the same volcano. Plugging of the vent would allow the build of magmatic pressure required to produce a violent eruption and the generation of a block and ash flow. Such an eruption would clear the vent allowing relatively quiet effusions of viscous, gas poor lava until the vent becomes blocked by one of these flows continuing the cycle again. How long this cycle of events went on for is unknown.

Intrusion of the Inner Granite buoyed up the roof of the chamber which subsequently failed and collapsed into the still molten Inner Granite, forcibly ejecting some of the magma out of the chamber and onto the surface in an extremely powerful and violent eruption. Enough ash may have reached the atmosphere to alter global climates by a few degrees.

Once the dust had settled, slowly and inexorably the forces of erosion, culminating in the last Ice Ages, sculpted Ben Nevis into the familiar hump we see today. The last Ice Age was punctuated by interglacials when the

temperatures were warm enough for hyenas and jackals to live in Westminster (some things never change). The last glacial episode ended around 10,000 years ago.

No trace of the ancient volcano, the caldera, or of the roof of the granite magma chamber has survived.

The pyroclastic flows and lavas of Ben Nevis survive because the collapse of the magma chamber roof allowed the mountain to subside into the magma chamber. Thus the rocks of Ben Nevis were formed some one to two kilometres above its present location which originally was a low lying area relative to the ancient land surface. Today, Ben Nevis is the highest mountain in the UK.

Useful Reading:

Cas, R.A.F. & Wright, J.U. (1988). *Volcanic Successions Modern & Ancient*. Unwin Hyman.

Johnstone, G.S. (1966). *British Regional Geology: The Grampian Highlands* 3rd edn. H.M.S.O.

Craig, G.Y. (1992). *Geology of Scotland* 3rd edn. The Geology Society.

Bailey, E.B. (1960). *Geology of Ben Nevis & Glen Coe*. Memoir Geological Survey U.K. 2nd edn.

Haslam, H.W. (1968). *The Crystallisation of Intermediate and Acid Magmas at Ben Nevis, Scotland*. *Journal of Petrology* vol. 9, pp. 24-104.

'YOU CAN TRACE OUR LITTLE FOOTPRINTS':*Reflections on Scottish Mountain Paths***By Robert Aitken**

*'In the mountains we find the last relic of the primeval in an otherwise ordered landscape, and this is their greatest attraction.'*¹

TEN YEARS ago the Countryside Commission for Scotland put in train a reconnaissance review of the condition of Scottish mountain footpaths. That review developed into the Footpath Management Project, a trial and demonstration project now under the aegis of Scottish Natural Heritage. The Project in turn spawned specialist contractors to tackle the challenges of mountain path management, the pioneer firm being Pathcraft Ltd. SMC members may well have encountered Pathcraft's big blue vans parked in Glen Coe, Glen Nevis or Glen Brittle, often with teams setting off up the hill into weather in which no sane climber would hazard his Gore-Tex. Members with an eye to the SMT accounts may also be aware that some of the Trust's money is helping to pay for these operations.

While the Journal has from time to time cast a generally benign eye on these proceedings,² it is perhaps timely to provide an outline of the issues we have been dealing with over those 10 years – a period in which the volume of work on hill paths has increased by about a hundred-fold – and to communicate something of what we have learned in the process. This review, though, aims to be impressionistic rather than technical.

The problem:

Like Jock Nimlin, many of us cling to a notion that in going to the hills we put ourselves in touch with a reality that is timeless and unchangeable, amidst the flux of our fairly insignificant and possibly rather pointless lives. We are familiar with the concept that the hills owe a good deal of their present shape to glaciers that wilted away only 10,000 years ago, and that, as Graham Holmes showed in the 1986 SMCJ,³ considerable chunks may still slide or drop off them at intervals. We have also become accustomed, if hardly reconciled, to sometimes radical change in the hill landscape wrought by forces such as hydro development and afforestation. But we usually conclude that even if our mountains are not immutable, they will see us out.

Nevertheless, any moderately sensitive climber can see that our own use is changing the mountains in ways which may still be localised, but which are sharply deleterious to landscape and to the quality of wildness.

¹ J.B. Nimlin, SMCJ, xxiv, p8.

² SMCJ, xxxiii, 235, 354, 514.

³ SMCJ, xxxiii, 292.

Footpath development and damage are now evident on all our more popular hills, and are increasingly to be found even on the remoter tops.

This damage is partly a reflection of the sensitivity of the Scottish mountain environment. Our hills are sub-Arctic in their exposure to wind and to frequent freeze-thaw cycles; they suffer heavy rainfall; they have thin, acidic, often waterlogged soils and a highly vulnerable vegetation cover. Contrast these conditions with the Alps, or even more modest ranges like the Vosges, where winter normally brings down a thick snow cover that shields the ground from frost; spring sees a rapid thaw, followed by a warm sunny summer that fosters strong growth. Soils are richer, wind exposure very much lower; steep slopes are often forested; and peat cover is virtually unknown. In a convergence of ecologically sound behaviour with natural inclination, Scottish climbers should ideally minimise their impact on our home hills by spending as much time as possible in more Alpine ranges.

But that points up the other side of the impact equation: increasing use by walkers, climbers, and the multifarious other recreations that now impinge on our hills – increasing not just in overall intensity, but in year-round activity. Our counts during path repair work show that very modest levels of use, below 10 passes per day on average, can cause acute spread and damage on vulnerable terrain.

The post-war period, and particularly the last two decades, has seen a great surge in numbers of visitors coming to the hills. This growth might have less impact if use were not so much concentrated by the car, which tends to fix the start-point, and locally by forestry, which often restricts the line of ascent. As a further concentrating force we have our curious fixation with peak-bagging, now trickling down from the Munros to encompass bumps of ever-diminishing orographic significance. Sociological theories of recreation have yet to account for this obsessional behaviour, which seems to have reached in Britain a pitch unknown elsewhere in the climbing world. I suspect it is a form of displacement activity with its roots in the Protestant work ethic.

Scotland's mountains were never designed with recreation in mind – or at least not the levels of walking and climbing, hill-running, mountain-biking, skiing and other activities that they are now experiencing.

The processes:

The processes that lead to path development and ground damage were minutely dissected in the early 1970s by Dr. Neil Bayfield, a researcher at what is now the Institute of Terrestrial Ecology at Banchory. His findings stemmed from detailed studies mainly on Cairn Gorm, but have been recognised as broadly valid by path researchers and managers around the world.

Simply put, three main physical factors contribute to path damage: *steepness*, *wetness*, and *roughness*. Of course they seldom operate in isolation. These processes and their effect can be illustrated very simply by examples.

Although the dynamics are not understood in detail, the impact of human trampling, of gravity acting on soil, and of water flow, combine to generate increasing ground damage with rising gradient. Over about 15° the effects of these processes become acute. 15°, roughly 1 in 4, is not a particularly steep slope by mountain standards. Perhaps the classic Scottish path site in this category, showing badly broken and actively eroding substrates, is the path down the west flank of Clachaig Gully, where the average gradient is over 25° and is locally above 40°. (See article by A. Watson, this issue.)

Wetness has two aspects – water on the path, in the form of scour and gullying, 'erosion' in our technical usage – and water in the subsoil, particularly in the form of peat, which can lead to extreme widening as walkers seek drier footing. The effects of water scour can readily be seen on the former path up the Buachaille behind Jacksonville, now a gully bed up to 2m deep in places. Extensive ground damage on peat is familiar enough from sites like the upper section of the Buttermilk Burn path to the Cobbler, or the bog flats above the dam on the Allt a'Mhuillin.

Roughness may relate to vegetation, but the more common effect is that the exposure by trampling of boulders or even just a stony substrate can lead walkers to seek softer going at the margins, and so foster considerable path spread. The Cuillins have a choice selection of examples, but perhaps the apotheosis of this process is the chaotic mid section of the Coire Lagan path, known among the pathwork cognoscenti as 'Shambles Hollow'.

In permutation with wetness or cross slope, roughness can lead to active migration of a path as walkers avoid damaged ground, where awkward bouldery substrates are exposed, in favour of the lower or outer edge of the path. The Northern Corries path on Cairn Gorm, and the path round from Coire Dubh to Coire Mhic Fhearchair of Beinn Eighe, show different styles of down slope migration on cross slopes. The long rise past the Foxes' Well on the approach to Lochnagar is an extreme and active example of lateral migration; the path appears to be moving northwards by several metres per decade, leaving behind a scoured boulderfield to be slowly recolonised by heather.

Where slope, drainage problems, peat and boulder roughness appear in combination, the results can be drastic damage, with severe incutting by water and with trampling damage spreading to scores of metres. Stac Polly illustrates the point most poignantly; there is probably no other site in Scotland where the character of the hill is so profoundly affected by path damage.

Once understood, these processes can be identified in almost any mountain country. The path northwards along the ridges from the summit

of Mount Kosciusko in the Snowy Mountains of Australia is a miniature study in migration that bears close comparison with the Northern Corries path. In Strathcona Provincial Park on Vancouver Island I have seen tree roots, exposed by trampling, forcing downwards migration on paths across steep slopes, exactly as granite boulders do on Cairn Gorm.

Peat, however, is something of a local speciality of British hills and moorlands, rarely found in fresh young Alpine-style mountain ranges. One standard American text on the management of wild land for recreation lacks any index entry for peat. It recommends with disarming blitheness that 'organic soils should be avoided wherever possible'. Nevertheless, Tasmania and parts of New Zealand do have path development problems on peat to compare with some of our British upland bog paths, and it is reported that Mount Kenya and the Ruwenzori are starting to show similar damage.

The remedies:

Why, we are sometimes asked, can't we build good paths like those in the Alps, or like the stalking paths of last century? The first is simple. As already suggested, environmental conditions in the Alps are vastly more propitious to the construction and maintenance of stable paths. But so too are social and economic conditions. Most Alpine communes, accustomed to collective action and seeing more clearly than we do in Scotland the crucial link between the quality of their landscape and its value for tourism and recreation, run a 'taxe de sejour' or 'kurtax' system. Every visitor, knowingly or not, contributes a small sum on bednights - in hotel, hut, or campsite - to a fund used by the commune to maintain local amenities including footpaths. For reasons I have never found remotely convincing, the Scottish tourist industry is immovably opposed to any tourism tax. The mere suggestion is guaranteed immediately to raise the temperature in any chilly conference room.

There is inspiration to be drawn from stalking paths. They demonstrate that good, durable paths can be built in the Scottish hills. Every climber has a favourite example, but exceptional networks can be found in the Mamores and locally in the Western and Northern Highlands from Arkaig to Assynt, with some of the best being in Knoydart. A romantic mystique surrounds their construction, sometimes tending towards what I characterise as the 'von Daniken' thesis: that these paths were built by Superior Beings drawing on a corpus of knowledge now lost to us. A historian of a Spenglerian turn of mind might regard this perspective as symptomatic of a late-20th century failure of confidence; I regard it as tosh. The basic principles used in the building of stalker paths are much the same as those underlying our current work. These paths are the product of vast amounts of cheap labour and regular maintenance, applied to alignments selected for dryness, for stability, and for the availability of local stone and

surfacing materials. Just how much toil was expended for how little pay may be judged by a contract for path construction on the Coulin Estate in 1869: the rate for the job was 'one penny halfpenny per lineal yard four feet wide with side drains where necessary'. Nowadays we reckon in terms of average costs of around £20 per metre.

The builders of stalking paths knew, or learned, about the need to control gradients and to provide effective drainage. They were, of course, building for laden ponies; their paths generally keep under 15°. I have heard from two independent sources that the superb grading of zig-zag traverses was achieved by driving an old cow up to the top of the relevant slope, setting it off downwards, and following its course with pegs or canes to mark its turnings. Such a vividly picturesque tale deserves to be true.

But what is very frequently overlooked is that while these paths were in process of construction, and for years afterwards, they must have looked like small bulldozed tracks. They would have been marked by raw cuttings and bankings, roughly excavated borrow pits, open ditches, bare gravel surfaces and spoil heaps. Contemporary path repair work which left such scars would bring rapid ruin and redundancy upon the contractor responsible. Wider survey and inspection also reveals that stalking paths show very variable standards of construction. For myself, while I greatly admire the skills and the labour invested in these paths, I am grateful that the network is no more extensive than it is; the stalker path is often a very imposed path style, a miniature hill motorway. It makes for quick and easy progress, but reduces the sense of intimacy with the country.

Contemporary path work rarely offers the luxury of a choice of the ideal route; usually we have to work to restore damage on paths that have evolved along walker desire lines – typically hard by burns in valley bottoms, regardless of wet ground, and straight up slopes irrespective of their gradients. Radical realignment is seldom a realistic option. In general, after much experiment with a range of materials – jute mesh, plastic drainage membranes, and sheep wool, to name just a few – and a diversity of techniques, we have largely settled for traditional manual methods using local materials.

On steep ground, stone-pitching – a form of modified cobbling rediscovered and now widely applied in the Lake District – is the key to stable surfacing. Open ditches, stone-lined cross-drains, and stone water-bars carry off the water. Local boulders are carefully moved and planted to redirect the walker and to close down braid paths. This heavy construction work is naturalised by intensive efforts in restoration and landscaping of damaged ground with local turf, either dug out of ditches or cut for the purpose. The Coire nam Beith path in Glen Coe, the subject of several lengthy bouts of work under NTS direction, is perhaps the most effective demonstration of the application of this approach on acutely difficult steep broken ground.

One area in which modern technology has made a substantial contribution is on peat, where geotextiles and geogrids – plastic membranes and meshes – have allowed us to float durable gravel paths over desperately wet ground. Former swamps such as the mid-section of Glen Rosa now offer pleasant dry walking. Masochists who mourn the loss of an intense bog trotting experience can find ample scope elsewhere in north Arran.

Ultimately, high-quality path work that respects its environment is correspondingly expensive. Since the best work is usually also the least conspicuous, it can be difficult to demonstrate value for money. Labour is no longer cheap. Path repair work also suffers from our society's generally negative perception of manual labour. Passing walkers often make plain their assumption that pathworkers must be expiating some dire crime, while senior officers of Government agencies have been heard to suggest that the mountain path problem could readily be resolved by large applications of unskilled, unemployed labour. In fact the best quality durable path restoration work requires the application of high craft, much of which can be learnt only by hard experience.

At present, we are spending something like £250-£300,000 per annum on upland footpath works in Scotland. We probably need to spend twice as much to get on top of the problem. That may seem a daunting figure, but in a very real sense we are facing the bill for 100 years of enjoyment, and for at least 20 years of failure to act when damage was developing rapidly. The contribution that the Scottish Mountaineering Trust makes to this expenditure is of immense political and practical significance, keeping the pressure on public agencies to face up to the scale of the problem. The willingness of the Trust's editors to amend guidebook directions to help reduce pressure on most vulnerable sites is also of great assistance.

The wider considerations:

Of course footpath work raises wider issues of wild land conservation. One line of criticism is that despite its good intentions path repair is reinforcing a vicious spiral, since it involves the improvement of the walking condition of paths, the encouragement of further use, and the generation of damage further up the hill: a subtle variant on Iain Smart's Curse of Sadim.⁴ There is no doubt that the stabilisation or drainage of a path makes it easier to walk on. In our early strugglings we were inclined to leave what we ungraciously labelled 'granny-stoppers': unimproved sections at an early point in the path, often wet or broken, that we felt would help to deter ill-shod or inexperienced visitors. But we have largely abandoned this negative approach. Most of these obstacles were at best seasonal in their effect; in any event it is now plain that path damage is occurring so extensively that any effects induced by the incidental 'improvement' of paths through repairs are marginal.

⁴ SM CJ, xxxi, 196.

We will never attempt to improve a rough section of path simply because it is rough, as long as it is stable and not a scar on the landscape. Thus we have left the 'waterfall traverse' section of the Coire nam Beith path alone, not least because it is a sporting scramble. It would in any event be almost impossible to render it easy.

Unna considerations loom too – and not only on National Trust for Scotland ground, because Unna's rules provide an almost perfectly cogent set of guidelines for low-key management in a much wider context. My own perspective on what Unna was aiming for is simple: he wanted wild land to be kept wild, and not turned into a national park with a wider social remit; he was manifestly resistant to any notion that, as A.D. Godley (who shared his view) put it, the mountains should be made safe for democracy.

In Glen Coe the most notorious departure by the National Trust for Scotland from Unna's prescriptions – in fairness partly pushed by mountain rescue concerns, and at the time connived at or at least tholed by the climbing fraternity – in building bridges first at the mouth of Coire Gabhail and later at Coire nan Lochan, has created very substantial problems of practical countryside management, quite apart from the principles involved. There would now be no sense whatsoever in removing one or other of those bridges, since the consequence would be the rapid development of severe path damage across very wet ground to connect the two coires. If either bridge goes, both should go.

Nevertheless, it should be borne in mind that the Coire nam Beith path, much less conspicuous but by most criteria much worse damaged than those other two paths, evolved without signposts or bridges, though it was one of Poucher's notorious 'white lines'. To its credit the NTS has invested large sums in restoring that route. Similarly the line up from Jacksonville towards the Buachaille – wet and widespread below, badly gullied and spread above – owes nothing to signposting or bridge construction. One cannot quite imagine that Unna would approve of Jacksonville...

A personal perspective:

Work on mountain paths has more affinity with mountaineering than might at first appear. Most evidently, both activities relate intimately to mountains, and both engage intensely the physical senses and the perceptions. The path worker comes to savour the qualities of rock with something of the same tactile knowingness as the climber, but with an added dimension. He or she – for some are women – can sense the heft in the hand of a stone well suited for rock-pitching, or can find the fulcrum angle for a pinchbar to raise a big half buried boulder that will provide a durable cornerstone for a cross drain; can spy the weakness in a massive obstructing rock that will yield to the sledgehammer; can protect the veneer of moss and lichen on a boulder, so that, transplanted to shut off a braid path, it looks as if it rests where a late-Glacial sludge-slide deposited it 10 millennia ago.

The path worker knows the brutal obduracy of the Torridonian sandstone – surely among the most thankless building stones on earth; the rough crystalline surface and brittle core of Cairngorm granite; and the welcome crisp, clean faces and angles of the volcanic rocks of Glen Coe.

Climbing and path work both rely largely on simple tools. The familiar feel of the ice-axe in the hand is matched by the balance and the wooden grain of the ditching spade, or the heavy cool smoothness of the pinchbar. Both activities bring the quiet but intense pleasures of craft competently applied, and simple fierce physical delight in fitness and in withstanding the elements.

Ultimately path work brings a slower, more studied appraisal of the mountain environment than does climbing. There is necessarily less movement in it, and less change of backdrop. Path workers experience the constant presence of a single mountain facet, its moods over a lengthy period, and the slow tides of the seasons, the changing quality of the light and the subtle shading of vegetation, in a single landscape. So, from months of work on the southern flanks of Glen Coe over several years, I can evoke at will the slopes and facets, ribs and gullies, shapes and colours of the Aonach Eagach flank from Clachaig to Allt-na-rìgh, with an intensity similar to that of the climber at a belay, who looks out with heightened acuity on the mountain scene.

The moral:

Attunement to the rhythm of the mountain world tends to foster slow and portentous thought. One such reflection has grown upon me in the course of watching our mountain paths degrade over 10 years. Some of us go to the hills to escape from wider realities, or at least to seek a more objective view of them. One such reality that confronts us now is our relationship to the global environment. It is one that we cannot so readily escape, as we rush in our unsustainable, non-renewable-resource-consuming transport to the Scottish hills, the Alps or even the Himalayas; there to thrust our Vibrams into mutely suffering swards or noisily complaining screens.

Path damage is not caused merely by other people, by tourists, by Munro-baggers. In the hills, as in the global context, we are all part of the problem. The evidence of damage is there for any but the wilfully blind to see, as much or more on the Waterslide route up the Buachaille as on the tourist path up Ben Lomond or on Stac Polly: we are trampling down the mountains that we claim to cherish. The time has come for us to seek a new paradigm for our mountaineering: one that puts the mountains first; that acknowledges that they are not immutable and indestructible; and that recognises that we have a duty of care. It's time to give something back.

IMPACT OF HILL WALKERS ON SOILS, PLANTS AND ANIMALS

By Adam Watson

Introduction:

THIS ARTICLE is a brief selective review of a wide subject with a growing international scientific literature. Mountaineers should know something about environmental impact; if you are aware of the problem you are better able to see your own impacts on the hill and to reduce or eliminate them. Another reason for having some reliable knowledge about it is that some people misuse conservation as an argument for keeping other people out, even where the evidence for their case is invalid.

I use 'hill walkers' to include mountaineers and people rambling on lower hills and moors. Most impacts from mountaineers are of the same kind as from walkers. Mountain biking, other cycling, vehicles, downhill skiing at ski centres, off-piste skiing, cross-country skiing and other forms of transport have their own special impacts on soils, vegetation and run-off, and I exclude these. However, I include these categories when it comes to disturbance of animals, where again they have impacts of the same main kind as walkers. I exclude the controversial issue of the effect of walkers on field sports such as deer stalking and grouse shooting. I concentrate on Scotland, though using information from elsewhere if it is relevant to Scottish conditions.

As walkers prefer to use paths, and form new ones if there are no old ones, they tend to concentrate on paths and use the rest of the hill less. The result is that paths widen, erode and proliferate. In terms of the whole hill, the landscape damage and erosion due to paths are unimportant, but for walkers they are very important because they affect the immediate ground at close range (see Dr R. Aitken's article).

Context:

It is useful to set recreational impacts in context, by comparing them with other impacts (e.g. Watson 1990). By far the greatest environmental impact on Scottish hills in recent years, in terms of destruction and damage to landscape, wildlife and access to hill walkers, has been and continues to be large-scale dense tree planting using intensive methods, paid for by large public grants to private landowners and by taxpayers' money directly to the Forestry Commission. Long-standing major impacts are deforestation, prevention of natural regeneration of trees and scrub, conversion of heather to grassland, baring of ground, and soil erosion, all due to grazing by high densities of subsidised sheep, and in many areas due to high densities of red deer. Another long-standing one is poorly controlled muirburn. Two major impacts since 1960 are from bulldozed vehicle tracks and the more localised ski centres.

Impacts from walkers pale into insignificance compared with these. However, it does not follow that walkers can thereby shrug off responsibility. Adverse impacts are not acceptable just because there are worse events. Also, some of the above, larger impacts are mainly on lower ground and do not occur severely on all hills and coires, whereas walkers' impacts penetrate to the most remote hills. Even though the physical impacts of walkers on soils, vegetation and animals on remote tops are usually small, the psychological impacts on other walkers are often substantial. A discarded beer can appears more offensive on a remote hilltop than at a lay-by on the A9 road. The Americans and others ration the number of people going into their wilderness areas on a given day, partly to reduce these psychological impacts and so maintain the quality of the wilderness experience, and partly to reduce environmental impact on the wilderness itself.

Craggs:

Mountaineers used to regard the removal of vegetation and soil from crags as beneficial or even altruistic, but times change and it is increasingly frowned on. Fortunately, most crags that are good habitats for plants are broken cliffs with earthy ledges, which are unattractive to climbers. Nevertheless certain parts of cliffs are attractive to climbers and plants, and so there is conflict. Bunce (1983a and b, 1985, 1988) has written useful articles and guidelines from experience in the Lake District, where impacts are generally more severe than in Scotland and where the zoning of different parts of a crag has found favour with climbers. Bunce noted how good liaison between climbers and bird protectionists has led to climbers cooperating by avoiding seabird cliffs in the nesting season, and cliffs where peregrine falcons are nesting.

Substantial impacts on hill ground and wildlife:

The most widespread severe impacts of walkers on vegetation and soils have been at Cairn Gorm. There, the easy access provided by building a public road on to Cairn Gorm and by operating chairlifts at all seasons led to big increases of summer walkers. Counts of people on the plateau have shown 60 times as many in summers since the developments as in summers before the developments (Watson 1991a). Summer counts on other plateaux in the Cairngorms without nearby new public roads and chairlifts showed respective increases of only 7-13 fold, reflecting the general increase of hill walkers on all hill areas. The impacts at Cairn Gorm are mainly in summer, but can be severe in winter and spring when walkers and skiers trample on thawed surface layers above frozen ground.

Vegetation damage, burial of vegetation by loosened sediment, baring of soil, consequent soil erosion, and increased run-off leading to deep rills and gullies have been severe on Cairn Gorm, spreading well beyond the ski area

on to the plateau, Ben Macdui and the Northern Corries (Watson 1985). Trampling readily breaks off bits of the 'reindeer' lichens, and these lichens show more damage even 50 metres away from heavily used paths on the plateau than near little-used paths (Bayfield *et al* 1981). On the most heavily disturbed areas away from paths, Watson (1985) found no lichens growing on soil, and markedly less blaeberry. Foot-slipping increased with slope gradient on disturbed but not on undisturbed ground; 79% of

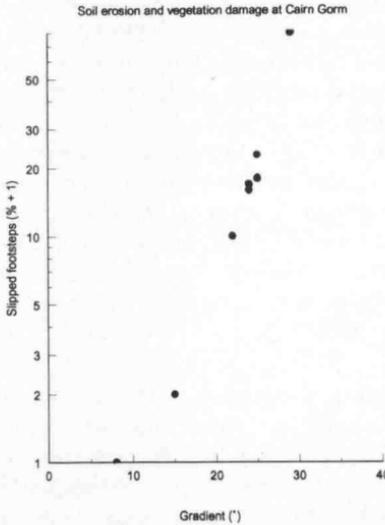


Fig.1 Percentage of slipped footsteps on slopes of eight different gradients on disturbed ground at Cairn Gorm. On slopes of the same eight gradients on nearby undisturbed ground there was no slipped footsteps. The sample size was 100 footsteps at each gradient on disturbed ground.

due to a proliferation of cairn-building and bivouacs, rocks shattered by gem hunters, stones dislodged and rolled downhill (removing the more stable under-stone habitat for many invertebrates, and in turn lying on and killing vegetation downhill), stones thrown into pools and on to snow patches, litter, disturbance of snow patches by snow holing, and deposition of human faeces and urine (Watson 1981). Another impact is the dropping of food scraps, which have led to big increases of crows and gulls, and in turn at Cairn Gorm to increases of egg-robbing by crows and gulls upon hill birds such as ptarmigan and dotterel (Watson 1979, 1982). All the above impacts have occurred on other hills, but are more striking at Cairn Gorm because so many walkers go there.

footsteps slipped on disturbed ground at 29° (Fig.1).

Each slipped footstep causes increased loosening of the slope, and makes future foot slipping more likely. The lesson is that walkers should try to avoid traversing partly vegetated steep slopes already loosened by human impact, as this adds greatly to an already serious problem. Recovery of disturbed ground at high altitudes is very slow, particularly on infertile granitic soils, and on the most exposed areas the evidence indicates that complete recovery will take many decades.

Other forms of human impact are frequent on Cairn Gorm and its plateau, such as ground disturbance

Scree-running is a widespread activity that was formerly regarded as a useful and enjoyable fast way down a steep scree, somewhat akin to glissading, but is now increasingly considered damaging and selfish. Sliding down steep vegetation comes into the same category.

Camping impacts:

Favoured sites for camping are often small vegetated patches near water, in soft places that are prone to damage. Turf on the Cairn Gorm plateau appears flattened and pale in colour after a tent has been there for just one night. In many places, damage is done by removing boulders for weighing down tent edges, and then leaving the boulder rings on the turf, whereupon the turf eventually dies. Boulders are often removed for putting on top of faeces and litter, and other litter such as tins and bottles is thrown down holes between big boulders. Other faeces are left open on the vegetation surface. Faeces and urine cause nutrient enrichment of ground and nearby water, leading to further changes in a formerly pristine wild environment, including eutrophication of streams and pools. In North America, useful wild-land guidelines request campers to pitch their tents well away from streams and lakes, and not to wash their dirty dishes (and their dirty selves!), in the water.

Much of this also applies to bothying, although recovery is much more rapid at the lower altitudes where most bothies stand. The patch of nettles at the back of the bothy is a clear indication of nitrogen enrichment from human urine. Other impacts are the removal of dead and live branches for firewood, and similarly pulling heather and removing ancient roots in peat for burning in bothy fires. At heavily used places, this has led to a shortage of things to burn in the neighbourhood. Popular camp sites also suffer from removal of firewood and heath for the same reason. This has been well documented in the United States (Cole *et al* 1987), where research on such problems and expertise in wild-land management is far ahead of the little done so far in Britain.

Impacts on animal numbers and breeding success:

Trampling by walkers kills insects, spiders and other small animals. For instance, Bayfield (1979) found that the numbers of larvae and pupae of an abundant crane-fly in blanket peat in north-west Scotland were markedly reduced by trampling. There is evidence that compaction of ground by trampling is also harmful, leading to substantially lower numbers of crane-flies, beetles and other invertebrates on heavily disturbed parts of the Cairn Gorm plateau (Welch 1981).

Walkers occasionally trample inadvertently on vole nests and on bird eggs and chicks, but it is unlikely that this has appreciable effects at the population level as distinct from the individual animal level. On the Cairn Gorm plateau and a few other heavily visited hills, some walkers have been

seen deliberately causing severe disturbance to birds with chicks in order to get photographs, in several cases threw stones at birds, and often allowed their untrained dogs to run free, chasing and occasionally killing birds and mammals. However, most walkers cause unintentional, not deliberate, disturbance. Disturbed birds and mammals usually react by flying or running away. The evidence from a number of studies in different countries is that if this happens too often, the breeding success of individual birds can be reduced directly by nest desertion and by mortality of chicks that do not have enough undisturbed time for feeding, and indirectly by predators robbing eggs when parents are off the eggs too often because of human disturbance.

Walkers often disturb hares, rabbits, roe deer and red deer unintentionally. In winter this can force these animals to run uphill through deep snow, frequently to places with less shelter and food. 'This involves a high energy cost at a snowy time of year when these animals are short of food and shelter and might well increase the death rate of individuals that are already in poor condition. Cross country skiers should try to avoid herds of deer and make detours if possible' (comment by A. Watson in Banks 1983). How damaging this is in terms of mortality has not been studied and so is still not known (Staines & Scott 1992). There is some evidence that disturbance of large woodland grouse such as capercaillie and black grouse in winter is harmful, and has led to fewer birds in heavily visited areas in the German Alps and elsewhere.

In some cases such as golden eagles in Scotland and bald eagles in the United States, adult pairs avoid areas used heavily by people. Golden eagles nested in the early 1900s in pines near Loch Morlich, and as human use of Glen More increased the birds nested increasingly further away, using more remote nesting sites, and stopped hunting on Cairn Gorm and Glen More. There is still a pair, however, so the disturbance caused a shift in eagle use of the area, not a reduction in numbers.

Studies have been done in the Cairngorms region over long runs of years, comparing adult numbers and breeding success of ptarmigan, red grouse, and dotterel, and numbers of other native hill birds and mountain hares, on heavily visited areas such as Coire Cas, the Cairnwell and the Cairn Gorm plateau, and on other areas comparable except in having very few human visitors (Watson 1979, 1988). The results showed no difference so far in adult density (number per unit area) and breeding success of these native hill species on heavily visited versus seldom visited areas. The only difference was that the mostly alien species that scavenge on waste food (crows, gulls, rooks, pied wagtails and snow buntings) and graze on reseeded fertilised grass (sheep, reindeer and mountain hares) were much more abundant on heavily visited areas.

Studies on heavily visited moors in the Peak District and other parts of northern England have shown no effect of recreational visitors on numbers

and breeding success of red grouse (Picozzi 1970; Hudson 1982). On the shores of Loch Morlich, however, where human impact has been far more concentrated than on the hills above, the numbers of common sandpipers and other waders have drastically declined over the last few decades, to the point where hardly any are left; this has not happened at the far less visited shores of nearby Loch an Eilean (Watson *et al* 1988). A snag about most of the above studies, and indeed about nearly all studies of human impact, is that the observations were done after the human impact was recognised as a problem, and so there were no observations before the impact took place. Hence differences, or lack of them, between disturbed 'experimental' areas and relatively undisturbed 'controls' might be due to inherent site features which have nothing to do with human impact. This snag, which is called pseudoreplication, has been well publicised but is often ignored. Nevertheless, in some cases such as the golden eagle, dotterel and the Loch Morlich shorebirds, there were some observations from before the period of major increase in human visitors, and these provide a more reliable basis for the conclusions and for generalising about them.

In recent years, several publications have claimed that the numbers and breeding success of golden plover have declined due to human impact on heavily visited moors in the Peak National Park (e.g. Yalden & Yalden 1989), and that numbers of golden plover, curlew and other waders are lower on heavily visited parts of other moors (Haworth 1987). In a report to the Peak Park Joint Planning Board, Anderson (1990) used these publications and other new surveys to recommend 'sanctuary areas' for birds. Such publications have been used by grousemoor owners to argue that people should be kept out for reasons of wildlife conservation. The Joint Planning Board accepted the Anderson report and decided to 'shelve' making proposed new access agreements on the Peak moorland. The Ramblers' Association, which already had doubts about the justification for this decision and about some of the publications which led to it, subsequently commissioned me to review the Anderson Report, and I produced a critique of it and its associated publications (Watson 1991b).

Haworth found fewer waders near roads and paths, and used 'indices of disturbance' based on the presence of roads and paths, but did not allow for the fact that people tend to make roads and paths on dry ground rather than on the wet ground favoured by waders. Hence his conclusion that disturbance caused the lower wader numbers was faulty; one would expect fewer waders near roads and paths for habitat reasons alone. The Yaldens' research was seriously flawed by inadequate scientific design and field work, and invalid statistical analysis. In particular, they produced an artificially high, inflated sample size by using repeated observations of the same individual birds rather than a randomly chosen observation from each bird. This violated the basis for the tests.

The effect was that the tests in turn showed far too low probabilities of the results being random or due to chance. High numbers of golden plover

in 1988 (which went against the authors' general case) were explained away unconvincingly by suggesting without any evidence that fewer birds deserted their territories, because 'recreation pressure' during Easter week 'seemed low' in association with bad weather. There were other serious faults with this study. The authors may be right that golden plover are vulnerable to human impact. However, their conclusions on this were overstated and the evidence presented was insufficient and too flawed to accept their conclusions as being reliable.

Following the publication of my critique by the Ramblers' Association, the Joint Planning Board's Chairman has stated that the Board stands by its policies as set out in its 1988 National Park Plan. As the Plan committed the Board to extend the area covered by access agreements, the Chairman's statement means that the Board have given up their decision to 'shelve' new agreements. I have given this example some prominence, partly because it is important for walkers' access, and partly because it demonstrates clearly that reliable scientific work must be objective, free from political or any other non-scientific influence, and above all critical and open to criticism at all stages from other workers.

Final remarks:

It should be realised that every plant, vegetation community, and animal individual and animal population has its threshold or limit to disturbance and other human impact, beyond which it will suffer damage, and that severe impacts can kill plants and animals, impoverish vegetation communities, reduce breeding success and numbers of animals, and even exterminate certain plants and animals locally. Where research has shown no good evidence of damage, all that this means is no good evidence so far. Mountaineers and everybody else should be aware of these problems and should take care to leave minimal impact behind them, so that the hills remain as wild and attractive to wildlife and people as we have been fortunate enough to find them.

Further reading:

A few detailed but readable reviews on human impact are: on soils and vegetation (Liddle 1975), on birds and walkers (Sidaway 1990), on red deer in Scotland (Staines & Scott 1992), and on birds generally (Hockin *et al* 1992).

References:

- Anderson, P. (1990).** Moorland Recreation and Wildlife in the Peak District. Report to Peak Park Joint Planning Board.
- Banks, M. (1983).** Skiers take to the trails. *Geographical Magazine* 55, 620-623.
- Bayfield, N.G. (1979).** Effects of trampling on *Molophilus ater* (Diptera, Tipulidae). *Biological Conservation* 16, 219-232.

- Bayfield, N.G., Urquhart, U.H., & Cooper, S.M. (1981).** Susceptibility of four species of *Cladonia* to disturbance by trampling in the Cairngorm Mountains of Scotland. *Journal of Applied Ecology* 18, 303-310.
- Bunce, R. (1983a).** Is climbing killing off Lakeland's plant life? *Lakescene*, December number.
- Bunce, R. (1983b).** Tramp, tramp, trample, trample. *The Guardian*, March 30.
- Bunce, R. (1985).** Impact assessment of cliff vegetation in the Lake District. Institute of Terrestrial Ecology, Grange-over-Sands.
- Bunce, R. (1988).** Gardening. *High*, February number.
- Cole, D.N., Petersen, M.E. & Lucas, R.C. (1987).** Managing Wilderness Recreation Use: Common Problems and Potential Solutions. General Technical Report INT-230, Intermountain Research Station, Utah.
- Haworth, P.F. (1987).** Recreational disturbance, gamekeeping and moorland breeding birds in the south Pennines. Appendix 8 in Comments on the Government's Consultative Proposals for Further Legislation on Common Land (The Moorland Association), pp. 41-99.
- Hockin, D., Ounsted, M., Gorman, M., Hill, D., Keller, V. & Barker, M.A. (1992).** Examination of the effects of disturbance on birds with reference to its importance in ecological assessments. *Journal of Environmental Management* 36, 253-286.
- Hudson, P. (1982).** Red grouse production and management in relation to tourism. Moorlands: Wildlife Conservation, Amenities and Recreation (ed. by K.A. Hearn), pp. 45-54.
- Liddle, M.J. (1975).** A selective review of the ecological effects of human trampling on natural ecosystems. *Biological Conservation* 8, 251-255.
- Picozzi, N. (1970).** Breeding performance and shooting bags of red grouse in relation to public access in the Peak District National Park, England. *Biological Conservation* 3, 211-215.
- Sidaway, R. (1990).** Birds and Walkers. Report to Ramblers' Association, London.
- Staines, B.W. & Scott, D. (1992).** Recreation and Red Deer: a Preliminary Review of the Issues. Institute of Terrestrial Ecology, Banchory. Report to Countryside Commission for Scotland, Perth.
- Watson, A. (1979).** Bird and mammal numbers in relation to human impact at ski lifts on Scottish hills. *Journal of Applied Ecology* 16, 753-764.
- Watson, A. (1981).** Detailed Analysis. Evidence to Lurcher's Gully Public Inquiry, Kingussie.
- Watson, A. (1982).** Effects of human impact on ptarmigan and red grouse near ski lifts in Scotland. Annual Report, Institute of Terrestrial Ecology, Cambridge.
- Watson, A. (1985).** Soil erosion and vegetation damage near ski lifts at Cairn Gorm, Scotland. *Biological Conservation* 33, 363-381.
- Watson, A. (1988).** Dotterel *Charadrius morinellus* numbers in relation to human impact in Scotland. *Biological Conservation* 43, 245-256.
- Watson, A. (1990).** Human impact on the Cairngorms environment above timber line. Caring for the High Mountains (ed. by J.W.H. Conroy, A. Watson & A.R. Gunson), pp. 61-82. Centre for Scottish Studies, University of Aberdeen.

- Watson, A. (1991a).** Increase of people on Cairn Gorm plateau following easier access. *Scottish Geographical Magazine* 107, 99-105.
- Watson, A. (1991b).** Critique of Report 'Moorland Recreation and Wildlife in the Peak District', by Penny Anderson, Peak Park Joint Planning Board, 1990. Report to Ramblers' Association, London.
- Watson, A., Nethersole-Thompson, D., Duncan, K., Galbraith, H., Rae, S., Smith, R. & Thomas C. (1988).** Decline of shore waders at Loch Morlich. *Scottish Birds* 15, 91-92.
- Welch, R.C. (1981).** Invertebrates in relation to human impact. Supplement 5 in Watson (1981).
- Yalden, D.W. & Yalden, P.E. (1989).** Golden Plovers and Recreational Disturbance. Report No. 64 to Nature Conservancy Council, Edinburgh.



PECULIARITIES OF THE HIGH CLIMBER

By W.H. Murray

WHEN RECENTLY shredding old files, I came across a letter from the Mountaineering Federation of the USSR, which may interest Scottish mountaineers. In December 1962, when SMC president, I received this letter from Eugene Gippenreiter, saying that his Federation was collecting for study data on the qualities peculiar to high altitude climbers. The purpose was to work out how best to select expedition members. He asked six questions. They were ponderously worded – no doubt an effect of translation – so I re-express them in clear English:–

Q1. When choosing a team, is it important to pay attention to individual peculiarities?

Q2. Have you, or your team-companions, had difficulties in the work and life of an expedition caused by such peculiarities?

Q3. Specify the peculiarities most annoying at high altitudes.

Q4. If you have seen difficulties of that kind arise, do you know of any situations in ordinary life from which you might predict that difficulties could arise at high altitude?

Q5. What life-situations might be touchstones to determine psychological fitness or otherwise in a given person for expedition life?

Q6. Enumerate the personal qualities that in your opinion should be especially inherent in high altitude climbers, e.g., moral qualities: comradeship, collectivism, individualism, egoism, responsibility, patriotism, etc.? And what volitional qualities: boldness, resolution, persistence, etc.?

When I first read this list, I reflected how simple had been the choices I'd hitherto made. I chose companions because I liked them, trusted them, and knew them to be good for the job on hand, be it rock, snow, or ice. I had paid scant attention to anything else. However, I could see that for a huge country like the USSR, my simple prescription could be just too simple – although it had worked well enough for John Hunt, who in 1953 had used an equally simple system of the 'old-school, old-club' kind. But I could not say such things to Dr Gippenreiter, whose Federation comprised 15 Republics, most of which dwarfed Britain. Moreover, in the 1960s many of our club members had either been recently climbing in the Pamirs and Caucasus, or were hoping to go there soon (excluding me, who like Eric Sipton had already been damned in *Pravda*, November 1951, as 'a well-known international spy', and so felt wary of ending up in the Lubianka).

A reply was politic. But one from me alone being inadequate, I wrote to John Hartog, Hamish MacInnes, Tom Mackinnon, Tom Patey, George Ritchie, Douglas Scott, Malcolm Slesser (then writing *Red Peak*), and Tom Weir, and asked for their answers. After 30 years, I can no longer remember

what replies they made, or even if all did make them, but I was able to make the joint response to Moscow early in 1963. My original collation of these opinions has long since vanished into the abyss of the club's files, but among my own files I found the originals of the two replies sent to me by Hartog and Patey. It is these that I now offer to the editor of the Journal.

Both men were of quick, clear mind, but of such strongly different character and divergent background – the one Aberdonian, the other Westminster and Oxford – that readers may feel as entertained as I by the contrast of opinion. On their first ascent of the Muztagh Tower in 1956, they had by choice shared the same tent. Their opposite views on camp-tidiness (A3) may reflect that experience. For the rest, any Communist ideas on 'Collectivism' as applied to mountaineering was anathema to Patey. He goes for that red rag like a Seville bull, horns flashing; whereas Hartog, diplomatically aware, turns a deliberate blind eye. His strong control of emotion by reason was part of his life's training (part enforced, part voluntary).

A1. **Hartog:** Yes.

Patey: Yes. I would select a team of individualists, each with his own eccentricities – in preference to a team of essentially similar (and usually somewhat negative) personalities. I would *never* select a team comprised of members all sharing the same social background, i.e., pre-war British Everest expeditions or a team of obedient morons prepared to entirely subordinate their natural emotions 'for the good of the party' (so-called). But they would need to be through and through individualists – men possessing the strength of character and purpose to admire and respect the often conflicting viewpoints of their fellow climbers and still hold their own. Men who were completely and in every way sure of themselves, and would at any time be entirely self-reliant should circumstances demand this.

A2. **Hartog:** Yes.

Patey: Yes. But I have been equally annoyed by the type of climber who shows no individual peculiarities and *never* any marked reaction. In retrospect, and indeed often at the time, I have more respect and fellow feeling for the eccentric and the individualist than I have for the 'negative' man, who always does as he is told without asking why. Although I admit I have often been riled myself by the first category, any minor conflicts resulting have been quickly forgotten as one learns to 'give and take' without lasting recriminations.

A3. **Hartog:** (1) Lack of respect for other peoples' possessions: indiscriminate borrowing; failure to be tidy and to look after their own equipment. (2) Selfishness; lack of consideration for the well-being, comfort, or enjoyment, or fair shares for other members of a party.

Patey: Personally – being a naturally untidy person – I find a fastidious, tidy camper the most irritating of my fellow climbers.

A4 & 5. **Hartog:** Yes. This is particularly lack of maturity in the true sense. It does NOT imply that youthfulness of spirit is any bar to the likely contributions of a member. Usually these immature traits are hard to pick out in city life or at university, but in times of hardship they soon stand out. One must combine both hardship and some individual responsibility, e.g., some scientific, distasteful work, to measure up a man's real worth.

Patey: No. Living rough in the mountains anywhere, not necessarily in pursuit of technically hard climbs, but for lengthy periods of time in all weathers with only basic essentials. The greater the degree of squalor and general discomfort the more searching the test.

A6. Hartog: Moral Qualities:

(a) Comradship and sensitivity to companions. (b) Unselfishness. (c) Sense of humour (not practical jokes). (d) Sense of fun (not at others' expense). (e) Responsibility, to one's own duty, to the object of the expedition, and to companions. (f) Persistence, patience, and drive. (g) Courage.

Volitional Qualities:

(a) Training and acquisition of needed skills. (b) Self-discipline. (c) Endurance. (d) Common-sense. (e) Apprenticeship to big mountaineering. (f) Understanding of mountain conditions, weather, snowcraft, rock-structure, glacier behaviour, nutrition, first aid.

Patey: Moral Qualities:

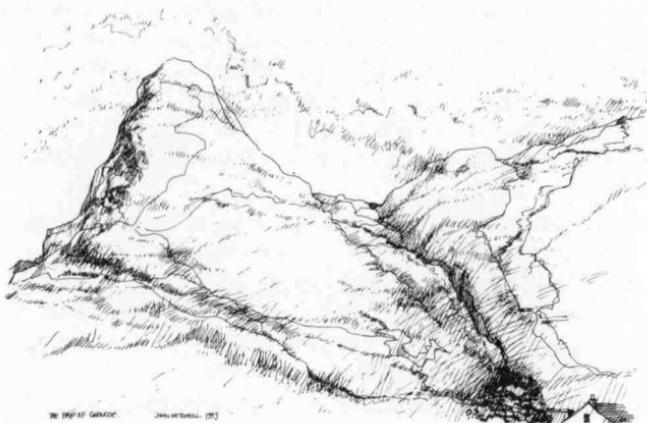
(a) Individualism – first for reasons aforementioned. (b) Comradship, which must and can coexist with (a) if the right men are chosen. (c) Responsibility – a *sine qua non*, but I would have thought this should not arise in a final selection. (d) Collectivism – indicates too much subordination of individualism. (e) Duty – to what? To one's fellows – yes. To the expedition's patrons or organisers – doubtful. To one's country (patriotism) – certainly NOT. Mountaineering has no frontiers. (f) Egoism, as opposed to individualism – most definitely not. (g) Discipline, if self-discipline – certainly yes. There should be no need of discipline from any other source in a well-chosen party, which makes its own decisions, the leader acting merely as chairman with a view to reaching a consensus.

Volitional Qualities:

(a) Unremitting determination and ruthless self-discipline. (b) A definite dash of boldness, sufficient to take calculated risks, yet not amounting to rashness. (c) A sense of humour.

While it is interesting to see what replies were made, and to agree or disagree, I doubt whether Gippenreiter, or anyone else at Moscow, would take aboard the answers, whatever their source. It is not, I think, that he would disagree with Patey's heavy emphasis on individualism, provided that, like Patey, he equated that with the purposive and self-confident initiative that the big ranges demand (and develop), but rather that the questionnaire reads to me like the work of a bureaucrat in the Soviet

Ministry of Sport, as ignorant of mountains, mountaineers, and mountain eering as any of his contemporaries in the Scottish Sports Council. I felt confident that Gippenreiter, the mountaineer, would file away the answers as I filed away the queries, each knowing full well that we would choose our companions not by elaborate, psychological calculations, but by swift, common sense appraisal in the field. None the less, the questions had to come, granted the circumstances of the time (Moscow's need to delegate assessments), just as the reply had to be made. Both gave us brief fun, yet made us think.



SPORT CLIMBING – A RATIONALE

By Rab Anderson

The following text is an edited version of an illustrated talk given by Rab Anderson as one of a series of mini-talks before the Club AGM. The seminar, on bolting as currently practised, was enlivened by slides and by the presence of a mean-looking rechargeable drill.

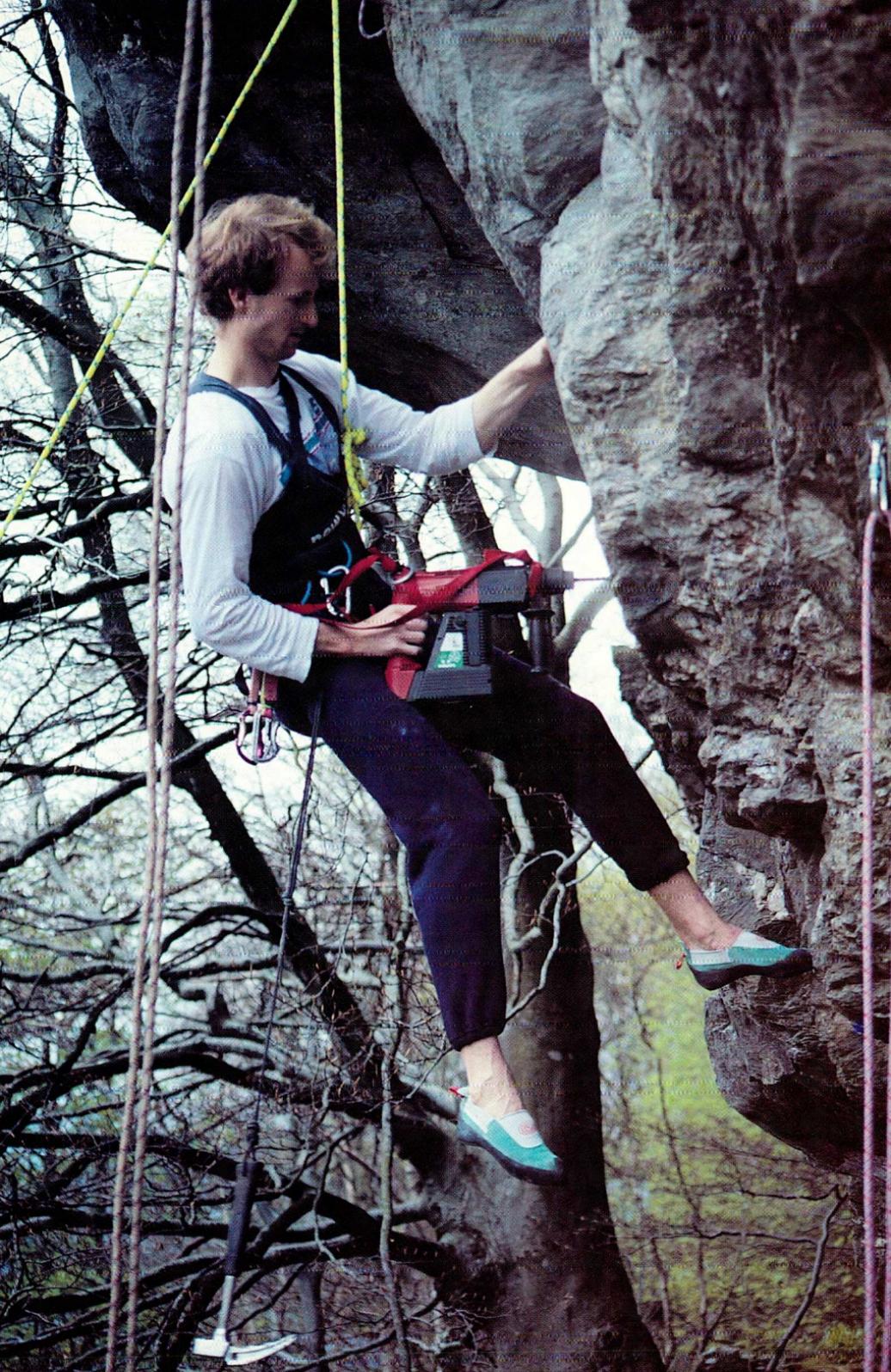
I HAVE the feeling that in Scotland there is still some apprehension – and even resistance towards bolts. Like it or not, bolts are here to stay, as an integral part of climbing. I'm not saying that you have to endorse bolt climbing, just that you have to think about the subject and show consideration for others who have taken a different path. Bolt climbing is not new.

A good number of years ago, together with other leading Scottish activists (all of whom are now into bolts and sports climbing), I played an active part in holding back the introduction of bolts. The time wasn't right. We had not yet reached the stage where we were ready for the next step forward. Change can often be hard to accept, though it was about to happen. Rock climbing had reached an impasse, not for all climbers, but for many involved in the pure rock climbing side of the sport.

Traditional climbing, that is climbing with leader-placed protection, appeared to have reached a high point with a number of outstanding bold leads. There was nowhere to go for the leading climbers of the day. The sport had to progress. To sit still was to stagnate. The critical item of equipment, the bolt gun, is rechargeable, and will drill about 10 to 15 holes per charge, depending on the rock type and size of bolt. We are currently using 10 mm Hilti studs with Petzl hangers. Long, thick, glue-in bolts are the best, but are both more costly and harder to place. There are other methods of bolt placing, one of which is by hand drill, but this is slow and often painful.

The placing of bolts is not just a simple case of abseiling down a piece of rock and letting rip with the drill. Firstly you have to be sure that the intended route will actually provide a sport climb. I've abseiled down a line I thought about bolting and found good, though strenuous places to position wires – no contest. No bolts went into this line and the route was done, after a bit of thuggery, at about British 6c.

If a route will make a sport climb, in many cases finding the best places to put the bolts can be very time consuming, particularly on very steep





ground. For instance you could spend a day cleaning the route, then a good few hours top-roping bits of it to find out where to put the bolts. You then have to take into account the time taken to bolt the route. After all of this, the route might be led in two minutes! This explains why in developing new routes climbers like to attempt the impossible, to find a route they cannot climb, so that they can work on the route over a period of time. It is common for climbers, even the best, to be physically incapable of stringing together certain moves on a route. The act of actually trying the move develops the strength to eventually do the move, and the next move, and so on. Added to this is the fact that the body is incapable of performing at such a high level of output for too long without resting. Power weight lifters do not do repetitions with full weights.

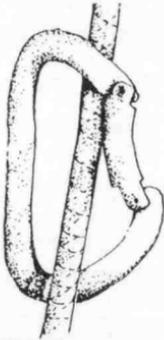
This, therefore, is how some bolt routes can take so long to do, 10-20 days sometimes. As I've said the actual placing of the bolts is important. Bolts are not supposed to be made any more difficult to clip, though in many cases if you are short, clips are harder. Rock allowing, bolts should be placed within most peoples reach, usually by the best hold.

There is no point in having fixed gear which you cannot reach – all that will happen is that a sling will be added. Bolts should also be logically spaced so that you are not effectively top roping the route when leading. At the same time there is no point in placing the bolts so that you will hit the ground if you fall off. Hence the reason why the first and second bolts on a route are usually closer together.

Sport routes become popular and are climbed by many others, so there is no point in bolting the route up to suit your own individual needs. Having taken the decision to place bolts there is no point in making the route artificially harder than it is already. This would be almost as bad as minimalist bolting. That is, taking what is not effectively a sport route, for example a route with a bold section on it, and placing one bolt, to overcome that section.

Routes with fixed gear are commonly known as clip-up routes. Fixed gear is usually clipped with two crabs and an extender, commonly known as 'clippers' or 'draws', from quick draws. Fixed gear should never be clipped with a single crab. The crab can become captive and the rope can escape! However, it is common practice to sometimes clip the first bolt with a single screw gate. Crab on crab without the tape extender should be avoided.

They are not as strong and the forces applied in fall can open the gates. Because you take many falls in sport climbing and end up hanging on the gear you become very safety conscious. The crabs used usually consist of a straight gate for the eye of the bolt and a bent gate for the rope. Bent gates are easier to clip the rope into, but used incorrectly they can be lethal. The two different type of gates allow you to denote the crab which the rope should always be clipped into. Do not reverse these.

To Climber**To Belay****Leader Falling****To Climber****To Belay****Leader Falling**

In the course of his talk, Rab Anderson chilled the audience with a demonstration of what can happen if you clip into a runner using a bent gate karabiner upside down. The drawing should be self-explanatory.

The crab through the eye of the fixed gear, or wire for that matter, picks up scarring. It has been shown that a rope running across this scarring can have its sheath stripped. I become annoyed when other people using my rack just grab and clip and try to ruin my bent gates. This happens in winter, as do seconds hooking ice axes into my bent gates – one of the problems of using your rack both in summer and winter. Mind you, clippers and bent

gate crabs are much easier to clip with frozen fingers in winter. It is particularly important to clip the rope into the clipper the right way, particularly with bent gate crabs, no matter what type of climbing you do. Because you are in and out of your harness all the time and re-tying in all the time it is necessary to be much more aware of safety. It is too easy to become blasé.

People have been known not to tie in properly – I've seen one of my partners do this, noticing just as they were about to jump off in the lead – he had to reverse to the nearest clipper, hang there and re-tie in. It also happened to one of the world's top climbers when she leaned back to lower off at the top of a route and fell about 100ft. into the ground. Luckily her fall was part broken by some trees, as indeed were a number of bones. Within a year she was back winning climbing competitions. Whilst on the subject of epics, do not put your finger through the eye of a Petzl bolt hanger. People often do this in panic. It means that you cannot clip the bolt. It also means, as in the case of a certain well known Scots climber, who tried it at Malham last year, that you could get your finger stuck with possible unpleasant consequences. Luckily, whilst others scrambled to get a top rope to this nameless individual, he managed to free his finger just as his strength ran out. This resulted in the fall he should have taken in the first instance! All of this was in front of an audience of about a 100 other climbers, who, whilst concerned at the time, will have no doubt spread the story far and wide.

One of the impressions that some try to give of bolted sports climbs, is that they make it easier to cheat. Yes they do – if that's the way that you perceive climbing and feel that that's what the bolts are for. This is the wrong attitude with which to approach bolted climbs. The bolts are there to enable you to make a clean ascent. The sport climbing approach has certainly helped clear some of the muddy waters surrounding traditional rock climbing ethics. Climbing has become more open and honest.

In sport climbing it doesn't really matter what you do to achieve the end result but that end result, if you want the leader's tick, must be a clean ascent – a redpoint. In other words you can top rope the route. You can bolt to bolt it. You can dog it, work it in sections, yo yo it. Anything you like but at some point you have to pull the ropes through, psyche up and go for it – a clean lead from bottom to top without weighting any of the gear. Not easy, and not the foregone conclusion that some of you might imagine, especially if you are climbing at your limit. I failed to redpoint a route in France last year and just had to go back this year to do it and get it off my mind. There are obviously better styles of ascent but the best and most coveted is the onsight flash – just as it is in traditional climbing. That is leading the route clean from bottom to top on your first effort, never having seen it before, knowing nothing about it. If you fall you fail and have to redpoint. Some people onsight flash to an incredibly high standard – this

is a measure of how good you are, hence the reason for competition climbing having taken off.

As an example – *Marlene* at Dunkeld is likely to have seen well over 50 ascents, but as far as I am aware has only had two or three onsight flashes. Climbing requires you to use skill and judgement to balance the mental with the physical. Whatever grade you climb at, whatever style of route you climb, it is a case of risk management, not risky management. It has been said that climbing is not just about physical gymnastics on rock. Neither is it the worry of serious injury all the time. Too big an issue is made of boldness. Although there are some who would like you to believe it, in reality there are not many who specifically seek out danger and less, if any, who do it on a continual basis. The risk of hitting the ground on sport routes may have been removed (even although many people still do for one reason or another).

There is, however, a different set of worries and dangers. Due to the extreme stresses and strains of asking the human form to perform continually at a high level, a catalogue of unpleasant injuries are occurring. Pulled and ruptured finger tendons are amongst the most common, as are tendon and ligament damage to the feet and legs from the falls. There are not many sport climbers who have managed to remain injury free. The mental worry in sport climbing can simply be the decision of how hard to pull on that one finger pocket – this is a case of balancing your desire to do the route with how long a ruptured tendon could put you out for! It can be the decision of how many bone jarring falls to take before packing it in. Two or three whippers (that is falls where you come slamming into the rock) of about 10-15ft. are usually enough to put me off for one day! The strain of repeatedly failing to redpoint your route is considerable – especially when your holiday is coming to an end after three or four weeks and you still haven't managed to redpoint your main project. If sport climbing is so safe, why is it that some who are unaccustomed to it are often conspicuous by their insecurity on bolts?

In some cases they will be climbing with double ropes, trying to wriggle in wires between the runouts, or refusing to push themselves into fall situations. A different approach is required, as in ice climbing and snowed-up rock climbing. It takes a bit to get used to falling onto a single rope, onto a single bolt with no back-up. In nut protected climbing if you are unsure of a runner you are often able to back it up.

Forcing yourself to cover the ground between the bolts can be very hard – it's a bit like that feeling of covering the ground between the blank runouts on the Etive Slabs. The feeling of being totally pumped and having to pull up the slack on your one and only rope to clip that bolt is something else. Sport climbing is not as easy as some people would have you believe, unless, that is, you climb safely, well within your limits – but then the same would apply to traditional climbing and as we all know, climbing is about

pushing yourself and your standards. The more you put in the more you get out of it. At one point it was expressed that the bolters would bolt up every piece of rock in sight, and that bolt ladders would be appearing on existing classic routes. This was a scaremongering tactic used by the anti-bolters. It hasn't happened and isn't likely to happen, for a number of reasons.

Quite simply, in this country we don't have enough rock of the type and difficulty required for bolted sports climbs. Another point is that many of the crags here are too far from the road – the spindly legs of some of the modern crag rats wouldn't be able to carry them for more than a 15-minute walk. There is another factor, one that is quite conveniently forgotten. There are many sport climbers who need traditional climbs. It's a fact that the hardest and the boldest traditional routes are being climbed by those regularly climbing on bolts.

Sport climbing is enabling climbers to develop the skill and stamina to push traditional standards even further. Some of the traditional routes of the past few years are quite exceptional. The freeing of *The Scoop* on Strone Ulladale springs to mind – this has now also had a number of repeat ascents. Former desperates such as *Agrippa* (the arete left of *Titan's Wall* on the Ben) have seen queues and are now considered modern classics. Quite simply, if you wish to get good nowadays it is well nigh impossible to do so without climbing on bolts. Sport climbing rather than threatening traditional climbing, complements it. The bolters are responsible people respecting the traditions of the sport and the ethos of leader placed protection. Many are deeply involved in all aspects of the sport. I have no desire, therefore, to change what is known as traditional climbing – I am an active participant. I do not intend to place bolts on the HVS climbers' traditional climbs, so why then does the HVS climber chop the bolts from the sports climbs? To do so is to deny others the freedom of choice to climb in the manner which they wish. To do so is also an attempt to try to prevent the sport from developing for purely selfish reasons.

Too many people view climbing as a selfish activity – if it was not for people it would not be worth doing. Climbing is enjoyed by others too. Isn't this why we are here today? There are some who say that sport climbing is elitist. It may well be, but that is a good thing. There has to be a cut-off point. There are few easy climbs. Rightly so. It prevents bolts from being placed on climbs that do not need them. Although standards are fairly high, there are many people prepared to put the effort in to be able to climb these routes. The beauty about climbing is that it has now developed into a sport with many different facets. There is room for everyone to derive some enjoyment from it. Some have dismissed sport climbing and bolts by saying that it not real climbing. Well I can assure you that it feels very real to me. I can quite easily say that sport climbing and bolts are the best things that have happened in my climbing career.

PANCH CHULI – 42 YEARS AFTER

By Graham E. Little

'One could not in this world find mountains more worthy of ascent. Their beauty of shape and situation are quite unusual. The final peak of the Panch Chuli stood right before our eyes, a shining chisel blade of ice. So thin were its upper edges that over a stretch of a thousand feet we could see the sun shining through.' – W.H. Murray, 1950.

WHEN I FIRST read these evocative words the conviction that I should climb Panch Chuli II, 6904m, was overwhelming. An application to the Indian Mountaineering Foundation in 1984 was rejected on the grounds that the mountain lay within a 'restricted' area. In 1992 I decided to try again, going for a post-monsoon expedition approaching from the south-east. As plans were progressing for this trip, I was invited to join a joint Indian-British expedition led by Harish Kapadia and Chris Bonington in the pre-monsoon season. Two expeditions to the same mountain in the same year – quite ridiculous – but who could resist?

My employers, who are now conditioned to my madness, were understanding enough to agree to one trip on annual leave and one as unpaid leave.

Although I missed the social events and expedition send-off from Bombay, I joined the team for a floodlit garden party at the International Centre in Delhi. Vast quantities of food and drink plus a bevy of autograph-hunting teenage girls provided a delightful contrast to the chaos and frustration of my previous departures from Delhi.

When it comes to Himalayan travel, Harish Kapadia, joint author of 'Exploring the Hidden Himalaya', successful businessman and consumer of vast and frequent meals, is an acknowledged expert. The six-day journey to base camp proved remarkably hassle free, only acute diarrhoea making my bus journey from Ranikhet to Munsiri a miserable experience.

Base camp at 3270m, below the snout of the Uttari Balati Glacier, is by Himalayan standards very low (the glaciers of the Panch Chuli massif descend to exceptionally low altitudes, fuelled, as we were soon to discover, by daily precipitation). Being there was a particular privilege for the British members of the expedition as the last Westerner to tread this valley was Heinrich Harrer in 1951 when he made a bold, lightweight attempt on the west spur of Panch Chuli II (the 1950 SMC team approached the mountain from the east).

Being an enthusiast for small, lightweight expeditions; six British climbers, five Indian climbers, a Liaison officer, a Sirdar, seven Kulu porters and a cook, not to mention over 80 porters for the walk in, seemed like a major happening. Such necessities of life as Chris's laptop computer





and solar panels, Stephen Venables' collection of tripods and Victor Saunders' chess clock (I carried it out to India for Victor, convinced all the time that it was a wind-up) all served to emphasise just how inadequately equipped I'd been in the past!

The lower Uttari Balati Glacier has three major icefalls and very climber unfriendly they are. However, Dick Renshaw and I easily by-pass the first on the left, Victor and Steve Sustad the second by some increasingly hazardous seracs on the right (later to be abandoned for an equally hazardous by-pass across crumbling rock on the left) and the third and most frightening, thankfully, allowing Chris and myself to sneak up a snow gully to its left. High in this gully I pick up and admire a frail comatose butterfly, its wings pale yellow to olive green, each spotted with a brown and white 'eye'. The contrasts of scale, permanence colour and mortality are never greater than in the mountains.

Advanced base camp is established below a rusty outcrop (good bouldering!) at an altitude of 4840m. Chris and I are the first to settle in and quickly hatch a plan to tackle an acclimatisation peak. Although of comparatively low altitude, point 5782m (Sahdev West) on the opposite side of the glacier is a stunning mountain, defended by vast rock walls on all sides and rising in splendid symmetrical form to a pointed capping snow cone. A sharp edged rock ridge, dropping from its east shoulder, snakes for over half a kilometre to the east, rising to form a knife edged snow arete, terminating in an elegant snow peak (Sahdev East, 5750m).

Leaving the tents at 0145 we reach the bergschrund by dawn, encountering splendid, crisp snow conditions en route. The bergschrund, partly choked by unstable snow, leads on to the clean snow rib falling from the summit of Sahdev East (so clearly seen from ABC). What, from a distance, appears to be perfect neve turns out to be thick, unconsolidated snow overlaying ice and becoming progressively more unstable as height is gained. Our apprehension is however deflected by a stunning view to the west as the dawn sun bathes the great white wedge of Nanda Devi in golden light. She totally dominates the skyline, the lesser peaks crouched around, paying homage to her stature and beauty.

Belays become increasingly psychological as we gain height. Visions of a nightmare climb on Huandoy Este in 1988 flash into my mind – nothing could be as frightening as that! Sahdev East does its best and Chris expresses doubts over the sanity of our undertaking. I push on one more pitch, employing a swimming motion to make upward progress. The consequences of a slip cannot be contemplated.

Quite suddenly I'm there, axes hooking into a blade of crusted snow, cloud churning far below over the untrodden Dakhini Balati Glacier. Although higher peaks tower around me, I am on top of the Himalaya. Chris joins me with a broad grin, babbling about his best peak since Everest. Hyperbole I'm sure, but it captured the mood of the moment.

The marginally higher Sahdev West is over half a kilometre along a snaking blade-like arete. To our later regret we decide to give it a miss and descend quickly to a greatly expanded advanced base and a warm welcome.

Our next outing turns into something of a fiasco and as it is detailed elsewhere I will not repeat the sorry tale. Suffice to say it resulted in Chris and I descending to base camp for a period of recuperation.

During our absence from ABC the four Brits have embarked upon a marathon traverse of Rajrambha 6537m, whilst the Indians have consolidated ABC and started to push out the route towards Panch Chuli II.

The day after our return to ABC we join Harish and company to follow their route through the icefall and up on to the Balati Plateau. The line of steps picked by Muslim Contractor (yes that's his name) and the ever energetic sirdar Pasang Bodh are very welcome but I am never at ease, being acutely aware of the avalanche prone state of the slope. With some relief we establish a joint camp at 5750m on a level area on the edge of the Balati Plateau (the term is something of a misnomer, the area to the SE of Panch Chuli II being more accurately described as a glacial basin).

Four inches of snow fall overnight. I wonder how the lads are coping on Rajrambha. It is a bitterly cold morning with a cloudless sky and splendid views. We stomp around in camera happy mood, freezing forever the deep dawn shadows and virgin snows. Nearly 3000m below, the long brown valleys are brimming with cotton wool cloud. It is an inspirational sight, a generous reward for our toil of yesterday. Chris and I prospect our way through a heavily crevassed area to make an equipment dump close to the toe of the west spur whilst the Indians push across the Balati Plateau to establish a well stocked camp on the south-west col.

Back at the communal camp we join Harish and Monesh for supper, talking of past trips and future plans.

An overnight fall of three inches, but it is another beautiful clear morning. I feel very rough having struggled with a splitting headache during the night.

Through Harish's powerful binoculars we can see tiny figures approaching the summit of Rajrambha – a fine performance.

Chris does most of the trail breaking to the equipment dump and we move on further to pitch our Gore-Tex mountain Gemini at a height of 6120m but well clear of debris fall from the ice glistening north-west face. We enjoy a sunny snow-free afternoon which is encouraging as the unstable snow lie is becoming very worrying.

Chris sleeps deeply, I battle with a hyperactive mind that refuses to take a break. Chris is the normal battery that gets switched off when not in use, I'm the Duracel that's permanently switched on!

We pack up and get moving by 0400. It is clear and cold, although the snow is still unconsolidated, and breaking trail to a platform at the base of

the spur is hard work. We cross the bergschrund with ease but are immediately confronted with a great sweep of brittle water ice that, despite its relatively modest angle, requires sound belays and occasional runners. Beyond this great tilted rink we gain a well-defined ice arete which provides beautiful climbing with the rising sun. In places, scales of crusted snow adhere to the ice – making progress easier. However, as we draw closer to the steepening of the spur, the snow starts to deteriorate, our steps collapsing until crampon front points make tenuous contact with the hard ice below. The serac wall above looks extremely difficult so we embark upon a traverse on to the north-west face, attempting to by-pass the steepest section.

Chris pushes out the boat with decreasing conviction. The prospect of a rising traverse on very unstable ground with scanty protection brings his doubts to a critical point and he voices them. My offer to lead the pitch, however, gives him new impetus and I'm soon following. Two more breath-holding pitches in a swirling mist, that has quite suddenly enveloped us, lead back on to the spur and a perfect tent-sized platform below a low, stable serac wall on the very edge. At 6610m it is an ideal camp site and we brew the afternoon and evening away, enjoying the brief glow of the sinking sun as clouds roll away and the temperature plummets.

By now I've sussed the reason for the man's impressive performance on the hill - he sleeps! It is a function that doesn't come naturally to me at altitude and one that seems to become increasingly evasive the greater my desire to enjoy it. Sleep deprivation, combined with a nagging headache is bad enough but lying next to Chris who is snoring blissfully is an added irritant! I shake off my wakefulness shortly before my watch alarm shatters this brief respite.

Much new snow has fallen overnight. Everything is white, frozen and inhospitable. We make a late start and plunge straight into knee deep dragging snow that takes an age to climb and saps our will. Chris dumps his sac to climb a serac wall then hauls it up. I follow on a tight rope, the good ice compensating for a dragging sac. We spot three tiny figures descending the south-west ridge. We shout and wave but elicit no response. They disappear into the swirling cloud. It starts to snow. We have gained only 120m of vertical height. At a height of 6730m we are less than 200m below the summit but decide to camp, trusting that the established weather pattern of clear mornings and cloudy afternoons will be sustained another day. A rightwards traverse to the end of a long crescent shaped serac leads to a potential campsite. We level off a powder snow arete where the soft swirl has formed a slight grotto at the merging of the icewall and icefield; it is precarious, but adequate.

My headache has intensified to a throbbing pain and I lie useless as Chris struggles with the bloody stove. By late afternoon it is snowing heavily and drifts pressure the tent sides.

The night is pretty grim but I snatch a few Temazepam assisted hours of sleep. I must look very bad as Chris says the summit is not important compared to my health! I'm grateful for this concern but assure him that I'm O.K. After a protracted stove coaxing session, we don gear, toes and fingers nipping in the intense cold.

We rope up but climb together, thankfully on good ice then neve. A stiff breeze blows away the night, mountain silhouettes turning amber in the first probing rays of the morning sun. We soon gain the final whaleback section of the south-west ridge, ripe cornices hanging to the east, long plumes of spindrift blowing far out to the west. A red scarf is semi-frozen into the ice, the light is bursting all around us, the angle eases and the panorama unfolds. We are on top, I am breathless with delight not altitude; Chris thumps me on the back in elation (causing my headache to instantly reappear). Only the horizon limits our view, a stunning 360° frieze of ice-clad peaks bending around the curve of the earth; the massive Gurla Mhandata, the sacred Kailash, the far Karakoram, the clean wedge of Nanda Devi, Api in Nepal; great peaks and ranges merging in their vastness into an endless collage of rock and ice, floating in a sea of boiling cumulus. Only to the south is there a beyond, the brown foothills falling down on to the great plains of India. I snap away in abandoned euphoria whilst Chris struggles with a recalcitrant camera. Bill Murray's words come to me from afar. I know he will enjoy these moments.

Reality sinks in: my highest summit, a first British ascent, a new route and a dream fulfilled.

The weather begins to change. From nowhere clouds are swamping the lower peaks and are building into great dark hammerheads. It is time to descend. Roped together we head down towards the icy wedges of Panch Chuli III, IV and V.

Our tent is swamped in drifting snow and the greying sky promises more. We pack up, regain the south-west ridge, then with a sense of urgency commence the long descent. The broad icy ridge narrows and steepens and we happily abseil from two pegs left by the Indian team during yesterday's descent. At the base of the step we are into deep unconsolidated snow, the tracks of our Indian friends just visible but completely filled.

A wave of tiredness threatens me but after some chocolate and a drink I rally and carry on over a snow hump gaining first sight of the Indians' camp II far below. We crampon down steepening ice to a shattered rock band. I rig up an abseil from dubious blocks and we are soon ploughing through slush towards the camp. The first few flakes of afternoon snow fall around us. Harish strides out to welcome me, a congratulatory hug saying more than words could ever achieve. Chris and I slump down with a cup of tea, bodies relaxing after days of tension. We learn that Muslim, Monesh and Pasang topped out on Panch Chuli II but did not enjoy our magnificent panorama.

Yet again there is heavy overnight snowfall and daylight filters reluctantly through a veil of thick mist. Route finding over the Balati Plateau is problematic but we feel strength in numbers. Harish breaks a cautious trail, we follow. At camp I the mist thickens but we are fortunate that the tracks of porters visiting yesterday from ABC are still just visible, leading us down on weary legs to comparative luxury below.

The rest of the Brits have descended to Base Camp after their successful traverse of Rajrambha. Chris and the Indians also head down after a good night's sleep. I stay on at ABC hoping, after a short period of recuperation, to climb Sahdev West either solo or with one of the Brits when they return.

It is strange to be at ABC on my own. It is also very enjoyable and peaceful. I spend the day lazing in the tent reading the brilliant 'Staring at the Sun' by Julian Barnes and making endless brews. A bright butterfly enters the tent, rests, then flies out. Before bedding down for the night, I look out of the tent flap, over the darkening glacier, past its vast hemming walls, to the moon-glowing final cone of Panch Chuli II, impossibly high, ethereal in the haunting silver light. I do not take a photograph – some moments can only be recorded in the mind.

I lie in a state of bliss, enveloped by an overwhelming silence. Distant footfalls break the magic. The lads must have come up from BC getting a late start. The steps get closer and I call out, 'Victor, Dick, Stephen' (one or both). There is no response. They are walking around the tent but still do not respond to my welcome. A chill shiver runs up the back of my neck and my body tenses. The contrast with my utterly relaxed state of minutes ago couldn't be greater. The footsteps make one circuit of the tent then fade into the night. I lie awake for hours then drift into a series of bizarre dreams.

The Brits arrive mid-morning after spending a night at the intermediate camp. There are mutual congratulations. To my great surprise none of them wants to climb Sahdev West, all being sold on the idea of a complete pull out and a relocation to BC on the Panch Chuli Glacier. Given the time scale, I can't see this as a feasible option for me but after some arm twisting and friendly advice on responsible behaviour (rather ironic) I agree to abandon plans for Sahdev West and to descend with them.

Deteriorating weather eases my conscience as I stagger down under a ridiculously heavy sac. Arrival at BC in torrential rain further enforces the wisdom of my reluctant decision to bail out. The whole expedition is together again which calls for a celebratory meal and large measures of whisky.

It is one of life's great mysteries that climbers of most other nationalities manage to look clean and smart in the mountains, yet the British, irrespective of the quality and quantity of the clothing they possess, always seem to retain an air of scruffiness about them. Even after scouring off multiple layers of sunblock and dead skin and donning clean clothing, I still resemble a down-and-out compared to the dapper Indians!

Base camp is alive with the black and yellow flutter of swallowtail butterflies and the buzz of plans to climb another of the Panch Chulis. However, it is time for my departure. With a feeling of both sadness and satisfaction I make my goodbyes and head for home.

With all the new growth over the last month the path through the jungle is hard to follow and I stray off on several occasions. A crashing in the foliage above causes me to look up and to be confronted by the frost rimmed face and dark wide eyes of a large monkey, fixing me for a second with fear and curiosity. Further on two lime green parrots break from the humid canopy in raucous flight. On the open hillside beyond, lilac tailed lizards scuttle ahead of me, the sun burns down, perspiration runs across my scalp and down my back, the rucksack straps bite without compassion.

I eventually collapse on a grassy alp, looking out across the deep Goriganga to the lights of Muniary my unattainable destination. So near and yet so far! I have walked out in less than 10 hours the four days' walk in. I crawl exhausted into my sleeping bag, plug in my Walkman and drift asleep to 'On the Beach', the faint background buzz of mosquitoes and the distant grumbling of an electric storm to the West. My lone journey to Delhi is not without its difficulties and on arrival a temperature of 44°C and high humidity dictate that the only sensible course of action is to sit in a shower and drink chilled beer. Several bottles of 'Guru' later and all my cares and frustration have been washed away! The hotel advertises spacious rooms with designer style decor and floor carpets! – what more could a man ask for?

On visiting the Indian Mountaineering Foundation I am accorded celebrity status (such are the perks of climbing with Chris and Harish) but disappointed to be informed that the Indian Government have now refused permission for a post-monsoon attempt on Panch Chuli II from the East. The IMF invite me to choose a new objective. My thoughts immediately return to a conversation with Harish and his suggestion that I should climb Nilkanth. To quote Frank Smythe, 'There is no more majestic and awe inspiring peak of its height in the world' (The Valley of Flowers). Nilkanth it would be! Sitting in the lounge of the Inveroran Hotel, seven weeks after my return from India, the projector throws memories on to a white screen. The three living members of the 1950 Scottish Himalayan Expedition watch as Chris and I make the final climb along 'a shining chisel blade of ice' to the summit of Panch Chuli II. Forty two years have elapsed and yet time is reversed; they are there again, looking out over the Greater Himalaya, sharing the magic, reliving the joy that is forever within us.

Postscript:

From a base on the hitherto unexplored Panch Chuli Glacier several more peaks were climbed by the expedition, most notably the superb Panch Chuli V, 6437m, by Dick, Stephen, Victor and Stephen. On the descent Stephen Venables fell 80m sustaining severe leg injuries and had to be helicoptered out.

GREENLAND 1992

By Ian Angell

AT THE 1991 Annual Dinner an invitation to join the Wallace/Slessor/Smart trip to the Staunings Alps in East Greenland was appended – ‘... if you can be an independent, self-contained group of three ...’

Six months later Bob Barton, Tim Pettifer and myself joined the main group of six at Glasgow Airport. We were the rookies, as most of the others were names familiar from any reading of exploration in the Staunings and other parts of Greenland over the past 40 years. The first obvious signs came when, as a result of a bottle of Laphroaig changing hands in Iceland, boxes of supplies from the senior party were dropped out of the plane on to the Skel glacier. The value of this was apparent to us three hard days later.

Mestersvig, the landing air-strip, was everything somebody new to the Arctic could have hoped. Blue skies, deep snow, husky dogs, and surrounded by mountains. Rapidly learning, a half litre of Bell's procured two skidoos from the visiting Serius Patrol to carry most of our 150kg of supplies four miles to the 'little red house' 200m up the hillside. Built by the American, Washburn, it now seems to be available for use by such parties as ours and gave an ideal first night before pressing on.

The next two days, with unfitnes, heavy loads, sledges overturning, skins not sticking, and difficult and dangerous snow all made for hard going but eventually camp was established besides the Skel glacier in a frozen wilderness. It came as a surprise to find that after all the effort we were 130m above sea level.

A cache of food and some equipment was left while a first sortie with four days' supplies and basic needs for Alpine-type climbing was packed. The glacial moraines of the Bersaerkerbrae were taken as a route past the icefall and a camp established about five miles further up in the middle of the glacier, which at that point must have been about a mile wide. From here three peaks were attempted, one with success, thus demonstrating where we were on the Arctic learning curve.

Harlech via the S flank and SE ridge: This attempt was halted by dubious snow even after waiting five hours for cooler evening conditions. The only time I would have welcomed hundreds of Austrians to piste the slope into submission.

Beaumaris from the Glamis Col: Our ascent was stopped with the summit seemingly assured, by a ridge corniced on one side and with snow giving increasingly loud crumping noises on the other.

Dunottar: The two earlier failures showed the virtue of north-facing slopes outside the middle of the day. A bivouac 300m below the summit, during which the first of the rare snowfalls of the trip were experienced, provided an ideal start at 8am, and after an icefall, rock and steep ice provided a safe

way to a superb summit. Airy in the extreme with magnificent surroundings it made for three happy boys.

Following a restock of food at our Skel cache, from which a fox had been helping himself to our box of pepperoni and chocolates, the camp was moved further up the Bersaerkerbrae so that the more remote peaks could be attempted. It was here that a welcome meeting with the main group was held as they returned from visiting the Col Major to reminisce.

Glamis was climbed via a hard technical route up the North Face and named after Bob's daughter, Flora, whose fifth birthday it was.

A bivouac was made under Col Major from where Point 2750m on the Hjornpieds ridge was reached. Very impressive surroundings and a good area for technical ascents as well as ski peaks.

Beaumaris was attempted again, this time successfully as a late evening climb ending in twin rock pinnacle summits which were carefully sat on.

This was followed by a crossing of Glamis col, considerably higher than the map or book suggests and a quick visit to a nearby peaklet followed by a beautiful ski return to the Skel base. From here heavy carries were made to a camp on the Gefion Pass and a round made of the very Drummochterish hills to the South, three peaks in all, loosely named as the ScheeleBjerg.

Finally a descent back to the Little Red Hut and a reunion with everybody, including the successful Peden traverse party.

An ill co-pilot gave an unexpected bonus of an extra evening at Mestersvig in which the full beauty of an Arctic evening was experienced and then flights home. The final treat was 'Executive Class' seats to Glasgow with free champagne.

Notes:

Food for three people for three weeks weighed 60kg, cost £192 to buy and £99 air freight Glasgow to Akuryeri, although this may have been reduced by Malcolm's persuasiveness with the carrier. The menu was determined by four main factors:

1. Maximum energy content. 2. Minimum weight. 3. Minimum fuel requirement. 4. Minimum wrapping disposal problems.

The result was porridge/muesli for breakfasts, chocolate, fruit, nuts and pepperoni for midday, pasta or smash plus varieties of soya and fruit with custard in the evening. Walker's fruit cake laced with whisky and wrapped at home was brilliant. Oat cakes with butter/cheese etc. took the place of bread. 13 litres of fuel was sufficient. Most of the rubbish was burnable, that which was not was buried or carried out.

The diet was reasonably interesting, sufficiently high in energy and ensured complete regularity.

The area of the Bersaerkerbrae was really ski approaches plus alpine climbing of the summits. Further inland ski summits may have been possible and the coastal peaks certainly were. Continuous daylight gave tremendous flexibility to travelling. The possible consequences of injuries were always apparent and perhaps meant more caution than on a normal Alpine trip. Some of the ascents were undoubtedly firsts in winter conditions, if that means anything, and quite likely to be new points or variations etc. The Glamis ascent must have been one of the earliest hard technical mixed routes in the area, 12 pitches of mixed climbing and say D sup. The scope remains vast with unclimbed faces similar to those on the Plan and Courtes there for the taking.

Equipment was more or less standard alpine with Scottish winter climbing gear. The air temperature rarely rose above zero but in the sun and moving it could feel quite warm. At night it was cold but good sleeping bags and insulation gave comfortable rests. A duvet jacket was taken but not really needed. For bivouacs, Gore-Tex covers were used with sleeping bags and all clothes.

Alpine touring skis were used with a variety of bindings and Dynastar Tourlite boots.

Cooking was with an MSR stove burning Jet A1 aviation fuel and using both petrol and paraffin nozzles. It worked well most of the time but despite insulating platforms still sunk into its own melt hole. A working stove is one of the few absolutely essential items and so a spare was taken.

We had a Vango Odyssey 600 tent which was excellent for the three of us with good storage space each end. During one night it stood up to strong katabatic winds well. Anchorage was variously with ski poles, ice axes and buried sledges.

Snow conditions – Bob Barton

The peaks of the northern Staunings are steep, rocky and surrounded by generally flat glaciers. In May, the ambience was not unlike the Mer de Glace or the Leschaux in winter, and although glacier travel was straightforward, the deep river beds testified to more exciting conditions in summer. The amount of snowfall during the winter seemed rather less than one would expect in the Alps.

We had generally good weather throughout. Early in the month conditions were wintry with nighttime temperatures of -25°C and little melting except on south-facing rocks. Spring, however, advanced rapidly and by the month's end slopes exposed to the sun softened, even at high altitude, with heavy melting on the coastal strip.

The sun never attains a great height in the sky and thus its effects on other slopes is less pronounced. Its arrival or departure is not accompanied by the dramatic temperature changes familiar in the Alps; on one disappointing occasion on Harlech a two-hour wait in the shade failed to bring any improvement in the dismal quality of a south facing slope. Snow cover was generally uniform with little evidence of drifting but as we skied down from Col Major a strong wind rapidly transformed the glacier into a maze of sastrugi. A widespread and brittle suncrust made for tense downhill skiing on most of the steeper bits.

Paradoxically, we found snow conditions on easy-angled slopes the hardest to judge. From time to time such places emitted sudden and loud booming noises that seemed to radiate from the startled skier in a way that provoked anxious reactions out of all proportions to the actual risk – run first and ask questions later! The effect was very marked in the Tunnelev Valley; at first I thought it was due to the low temperatures contracting a brittle suncrust but later came to the opinion that depth hoar was the culprit. A phenomenon that could be a common result of the shallow snowpacks and sustained low temperatures of the Arctic winter. The retreat from the first attempt at Beaumaris was another example.

We made some use of improvised shear tests; on Harlech a freely releasing slab confirmed the unsuitability of a sun warmed south face, whilst on the west face of Glamis deep drifts of powder stuck resolutely and surprisingly well to the underlying slope of steep hard ice and persuaded us to continue.

Higher up on the summit ridge of Glamis bottomless temperature grains were encountered, which in the absence of the correct swimming stroke totally defeated upward progress. I had never seen anything like this but had read of Willi Unsoeld meeting something similar in presumably like conditions on the lower Alaskan peaks.

Windslab was rarely seen and the major hazard is likely to be very large climax avalanches running on TG crystals (depth hoar). A very large slab, possibly of this type, had released above the Dunottar Glacier.

Greenland in May gave a fascinating insight into the natural history of snow in the wildest place one could wish for.

THE GAFFER, A GILLIE, AND SOME GRANITE

By Brian Hill

TWENTY-FIVE years later, I do not recall what sparked the outburst, just that the sanity of certain parts of my anatomy were called into question, and that my response, pontificating proof to the opposite, sounded petulant, as indeed it probably was. We sat around our base camp in silence, Graham, Willie, Roger, Tony and myself, having just moved from the east side of Alpefjord beside the snout of Gully Gletscher to the west side of the fiord on the north side of the Trekant Gletscher, East Greenland. The weather for the last few days had taken a turn for the worse, interrupting two weeks of perfect weather, and maybe that had something to do with it.

As evening approached, and with the overcast sky appearing less threatening, Tiso turned to me again and snapped, 'Grab your gear, we're going up there,' as he pointed to the adjacent ridge overlooking the Alpefjord and rising over a succession of minor peaks to its culmination marked on the map as Point 1904m. 'What, now?' I queried, it being almost 5p.m. 'Yes! We'll bivouac,' he replied.

Willie, Roger and Tony had long been eyeing a magnificent thumb of granite at the terminus of the ridge on the south side of the Trekant. That was their plan for the morrow. Graham and I were ready within minutes and trudged up the boulder strewn slope to the first peak, arriving there about 10.30p.m. We then looked for a bivouac site which we found in the upper reaches of a precipitous gully overlooking a hanging glacier above the Trekant Gletscher.

We slept fitfully for a few hours, I tucked up in my duvet and immersed in the Tiso Karrimor. We were up and away by 2.30a.m., our final goal the 1904m peak, a tor topped steep scree hill, a long way off in the distance with several intervening tops and rocky pinnacles along the way.

The going was easy down to the first col and for the first part of the next rise where the ridge narrowed and steepened into a succession of slabby walls of fragmented rock leading over a series of ill-defined pinnacles. These were serious enough to warrant roping up, I thought, and paused to wait for Graham, not far behind. He came up and went straight on through and up with rope and all, and I followed without a word. The climbing, however, was delightful. I do not remember it as being particularly difficult but as the ridge narrowed further I do recall some airy situations.

It was late in the afternoon by the time we cleared the difficult section and commenced the final trudge up the 1904m peak, first on a snow crest then

up boulders and scree towards the summit tor, reminiscent of those rocky protuberances in the Cairngorms and about 40ft high. With the tor on our right we contoured around looking, at this lateness of the day, for the line of least resistance. We passed by an obvious chimney-like cleft and nearing the end of the tor, I moved up the scree and broken rock at the back edge of the tor just following my nose. The rock steepened, forcing me round left on a series of snow covered narrow ledges; a few steep steps, not particularly difficult and we were up – 6.30p.m. Graham looked a little disturbed and agitated. The weather was threatening, it had been a long day and the steep scree slope to the south, though easy enough, was going to be a grind. After a summit puff, to my surprise, Graham took out and uncoiled the rope. Looping it round a summit boulder as big as his Porsche, he tossed the ends down the 40ft chimney we had bypassed. 'Surely, Graham,' I exclaimed, 'We don't have to abseil. It wasn't that difficult getting up, and besides, the rope will never run round that.' My words disappeared into empty space as he launched himself over the edge.

Once down, I yelled to him to try pulling on the rope to see if it would run, which he did and it didn't. Unconcerned, I unlooped the rope from round the Porsche and tossed it down to him, confident of my ability to reverse the pitch. As I moved to the top of the wall where we came up, I began to falter and simultaneously realised Graham's unease. I mean, there wasn't anything there, just the top of the wall and space, space, space for 4000-6000ft, I know not which, except it was a long, long way down. I had been so intent on the initial route finding that I had been unaware of the steps leading over that incredible drop. I hesitated and went back to look at the chimney. It was definitely more difficult but not exposed. Rationalising that the exposure had nothing to do with the difficulty of the climb, and that my original intention was to reverse the climb, I returned to the top of the wall and gingerly lowered myself down the snow covered ledges. Graham appeared at the base of the tor, below and to the right, rope slung about his shoulder. 'Come on! What's keeping you?'

We trudged down the steep scree and boulder slopes to the hanging glacier below and then down to the Trekant. I remember parts of it well – slipping, slithering over unstable boulders, unstable moraines, boulders and scree skiting over underlying ice, under tired and weary feet.

Graham was undaunted. We, in our early twenties, regarded him as the old man, though perhaps he was 10 years our elder. But he surprised me that day. For one who climbed then but rarely, his ability over the rocky sections of the ridge was such that I was pushed to keep up with him and now over this most trying of terrains, he could still maintain a goodly pace. We arrived back at base camp around midnight, exhausted, almost 30 hours since we set out. Willie, Roger and Tony also had a successful day.

I underwent some kind of metamorphosis during that trip. Nothing was ever the same again. Back in Scotland, while the love for the hills was the

same, the allure or fascination was missing. I knew that no new experience in these hills could equal the uniqueness I had experienced in Greenland. Old favourite routes, and ones that I had long intended to do had lost their appeal, and interestingly, my climbing diary which had recorded every climb, now went into limbo.

I recall thinking that perhaps if I did some really long route then that might restore some of the old enthusiasm and to that end we planned a weekend in Torridon, with the intent of climbing on the Triple Buttress of Beinn Eighe, which offered some of the longest routes in the Highlands.

I think we did the Central Buttress, walking in from the Loch Maree side, and what I remember most is not the details of the climb but of the walk in. I could now see where the glaciers had once flowed. Glacial features which a couple of months previously I was oblivious to, were now obvious, and as the path meandered through and along the ancient moraines, now long overgrown with heather, I tried to imagine how the scenery would have looked 10,000 years ago.

The Polar Bug had bitten. From then on the polar regions, and ice, have been at the centre of my career. First, to the Antarctic and then to the Arctic, for the first 17 years I was a regular visitor, if not, indeed, an inhabitant. During one of my Arctic trips, on an excursion to Yellowknife, I met my future wife, and in 1984 we moved with our two young children to near St. John's in Newfoundland, that other Polar Region, for in what other city can you watch icebergs sail by as you drive to work in mid-summer?

Several times in recent years I had thought of dropping Graham a line, just to let him know how I was getting on, and with a word of thanks – thanks for giving me that once in a lifetime opportunity. As the years slip past, most of us, I suppose, look back and try to identify that key point which dictates the course of future events.

For me, of course, it was the trip to Greenland, or the Edinburgh East Greenland Expedition 1968, as it was then known, which Graham had totally funded and which had been part of a charter flight to Greenland organised by Malcolm Slessor. Perhaps, denied this opportunity, events may have turned out the same – who knows? – or perhaps I may have turned out as a fighter pilot, or an astronaut, but then, that would have been a different story altogether and you wouldn't be reading it here. At any rate, the letter never did get written. In Edinburgh, on vacation last year, I stopped by his store to enquire of him in person, and received the stunning news of his death, barely three short weeks before.

I cannot say that I knew him well, and except for a weekend in the Cairngorms trying out ice techniques before our departure to Greenland, the only time I climbed with him was on the trip. But, instrumentally, he influenced my future more than anyone else – and with no regrets.

Thanks, Graham.

PRESIDENTIAL PERORATION

By I.H.M. Smart

Some members asked the retiring President if he would write up his notes of the last part of his address as they were unable to follow it at the time due to being taken with drink. He can't remember what he actually said but here is what he thinks he said or, at any rate, meant to say. It includes some footnotes swept up from under the table by the hotel staff.

I WOULD LIKE to end my valedictory address as President by bringing to the Club messages from four distinguished people. They are Genghis Khan, J.R. Tolkien, Vladimir Ilyitch Lenin and Quintus Horatius Flaccus. What message can Genghis Khan possibly have for this Club? The one I would like to suggest to you this evening is contained in the following story. It must have been well told when I first heard it for I feel that I was actually there; I can remember it all so vividly.

One night we were camped on the high steppes of central Asia after a campaign of razing cities to the ground. I can remember the cold wind from the grasslands sighing in the guy ropes, the stars twinkling above like diamonds on black velvet, the sweet aromatic smoke from the brazier, the plaintive sound of a one string fiddle and a girl singing. After a bit of reminiscing someone (who must have been far from blate) asked him this question, 'Genghis, why do you always make us raze to the ground all these cities we overrun? Would it not be better to settle in one of them and keep the palaces, harems and pleasure gardens for our enjoyment instead of destroying them?' The great Khan replied, fingering the sharp edge of his sword and looking quizzically at his interlocutor, 'Because if we did we would lose our inner dynamic' (I am translating here fairly freely from the original Mongolian). 'We would lose our roots in the Steppes and become preoccupied with trivialities and as soft as the people we have just defeated; then it would be our turn to be dispossessed.'

I remember thinking at the time that the old boy had a point and that if ever I became President of the SMC I would bear this thought in mind. As a minimum I would increase the annual subscription from a mere fifteen quid to a requirement for all members to spend one night each year alone on a remote mountain. Such an annual vigil would be a reminder that the

home of the Club is on windy summer rock faces and inhospitable winter buttresses. It would serve as a counter to the constant attrition we are subjected to by mountaineering politics, the publication of our wilderness-destroying guide books and the wear and tear of that branch of the hotel trade we carry out in the administration of our huts.

I have often thought what a good idea it would be to raze all these activities to the ground as Genghis would have advised. As you will have noticed none of this has been done. Why? Because one role of your committee is to keep a very close watch on the President to make sure he doesn't get away with anything; I would never have got any of these proposals through either the Committee or the AGM. Genghis Khan never had much trouble with his committees. I suppose Graham Tiso is the nearest we ever had to a Great Khan in the Club. Maybe in the future we will have a strong President who can carry through these desirable reforms.

What then is the message from J.R. Tolkien? His tale 'Lord of the Rings' records a mighty conflict between the 'goodies' and the 'baddies'. Looking at the map of the supposed landscape in which this epic fantasy is enacted it is easy to see in which psychological territory the action is located. The land of Mordor where the shadows are coincides with the London-Birmingham megalopolis, the Great River is more or less in the location of the Severn, Mirkwood is the old Sherwood Forest, the Misty Mountain are the Pennines. The Shire, Rohan and Lorien are the surviving areas of England where the true genius of the land and people still survives.¹

The underlying horror of the tale is that the megalopolis of Mordor will burst like an abscess inundating good land and good people, a cataclysm in which 'good nature' in both senses of that term will be destroyed. In Tolkien's tale the goodies won more or less comprehensively. Mordor was eliminated. The physical and intellectual environment was saved. In real life no such Utopian solution is possible.² The best we can expect is that Greater Londomancunobirmingham will be contained. At home if we get a grip of ourselves we have the possibility of something better for the environment of Scotland.³

One great asset possessed by the goodies in Lord of the Rings which was instrumental in their victory was a tradition of written lore that gave them a set of standards and a sense of past and future and, most importantly, an understanding of how Mordor worked. Without such historical and predictive wisdom and the loremasters to interpret it none of the goodies would have known what was going on or where the danger lay. Which brings me to our equivalent – the Club Journal.

The Journal has a circulation of about 1350. It is my impression that it is actually read by less than 50 people and properly studied by a mere handful of loremasters (not all of whom are members of the Club). This small readership is a pity but in one way may be a good thing. It means that

our Journal is a safe place to publish important information. Material appearing in the Journal will only reach an elite who can be trusted with potentially dangerous knowledge. To be on the safe side if you have such material publish it in the small print section.⁴ If you have something really important to say I am sure the Editor would allow you to write it in Gaelic which in its ancient script is as beautiful and arcane as Elvish. Even within its present protective obscurity the contents of the Journal are far from secure. Remember Munro-bagging was once a harmless eccentricity that people indulged in rather shamefacedly. We even used to make fun of it. Somehow the whole absurd concept escaped from the great 100-year-wilderness of poetry, prose and polemic that is our Journal. That particular roebuck was somehow identified and put in a zoo.⁵

We must give thought on how our wild ideas can roam freely through the pages of the Journal yet escape the notice of the market economy. For members of the club the reading of one particular Journal article I would make a compulsory condition of membership and that is Robin Campbell's 'One Man's Meet'.⁶ It was this article that enabled me to overcome my schoolboy aversion to the older members of the Club. As a consequence I gritted my teeth and with great condescension attended a meet. In so doing I met a generation that is now gone; in spite of their limitations they were actually quite interesting, well-mannered people and to my disquiet they (well, most of them) were better men than I was, something that I would never have thought possible.

I am not actually encouraging members to attend meets. I am just suggesting that in your own thrawn and uncooperative way you keep in the back of your mind the idea that maybe one day you too will, possibly, condescend to perhaps attend one. Speaking of thrawn individuals leads me on to the message from Vladimir Ilyitch Lenin, a ruthless romantic who thought he could bludgeon the world into the way he wanted it to be. Those of you who were around at the time will remember how he used to go on and on in these interminable discussions in that coffee shop in Zurich. The slogan of his I would like to draw your attention to is the one that goes: 'The capitalists will sell us the rope we'll hang them with.' As with many others he got the wrong end of this particular rope, too. It is rather that we give them the rope with which they hang us, indeed, we inevitably become 'them' and do our own hanging.⁷

It is we mountaineers who have commercialised our pastime and created the industrial age of mountaineering. We, the SMC, have profited from the outdoor leisure industry as much as anyone. We are as compromised and commercialised as the people we affect to despise. Can we really complain if the paths to the mountains get churned up and the summits look like hairbrushes? We, too, are caught in the mud. If we don't continue to publish better and better material, alas, someone else will. Something

compels us to catalogue every piece of steepish rock in the fair land of Scotland in case strangers do it for us. If we don't run huts, publish, and wield what little skill we have we will lose status as players in the poker game of environmental politics.

In the real world the hard fact is if we do not enter the game there are plenty of eager refugees from less fortunate, but more self possessed, communities than our own who would be keen to play our hand for us. So we must grit our teeth and, as intelligently as we can, play our bright quality cards on top of the heavy concrete trumps of the serious developers and the inelegant cardboard of their followers. In the process we too will become dirty. This is tough luck, but a lesser hardship than leaving the table entirely to the professional cardplayers.

How can we resolve all this conflicting advice? Genghis recommends radical surgery, a Utopian solution for which we have neither the means nor the resolve, Gandalf tells us we must join battle but use our heads to understand the global situation (mountains are only one of the chips we're playing for) and so evolve suitable strategies and tactics, yet there are a 100 things we'd rather be doing, Vladimir Ilyitch says we are going to get dirty and maybe become as bad as the rest of them and real life is so confusing you don't know where the front of battle lours, who exactly proud Edward is and what form the chains and slavery will take.⁸

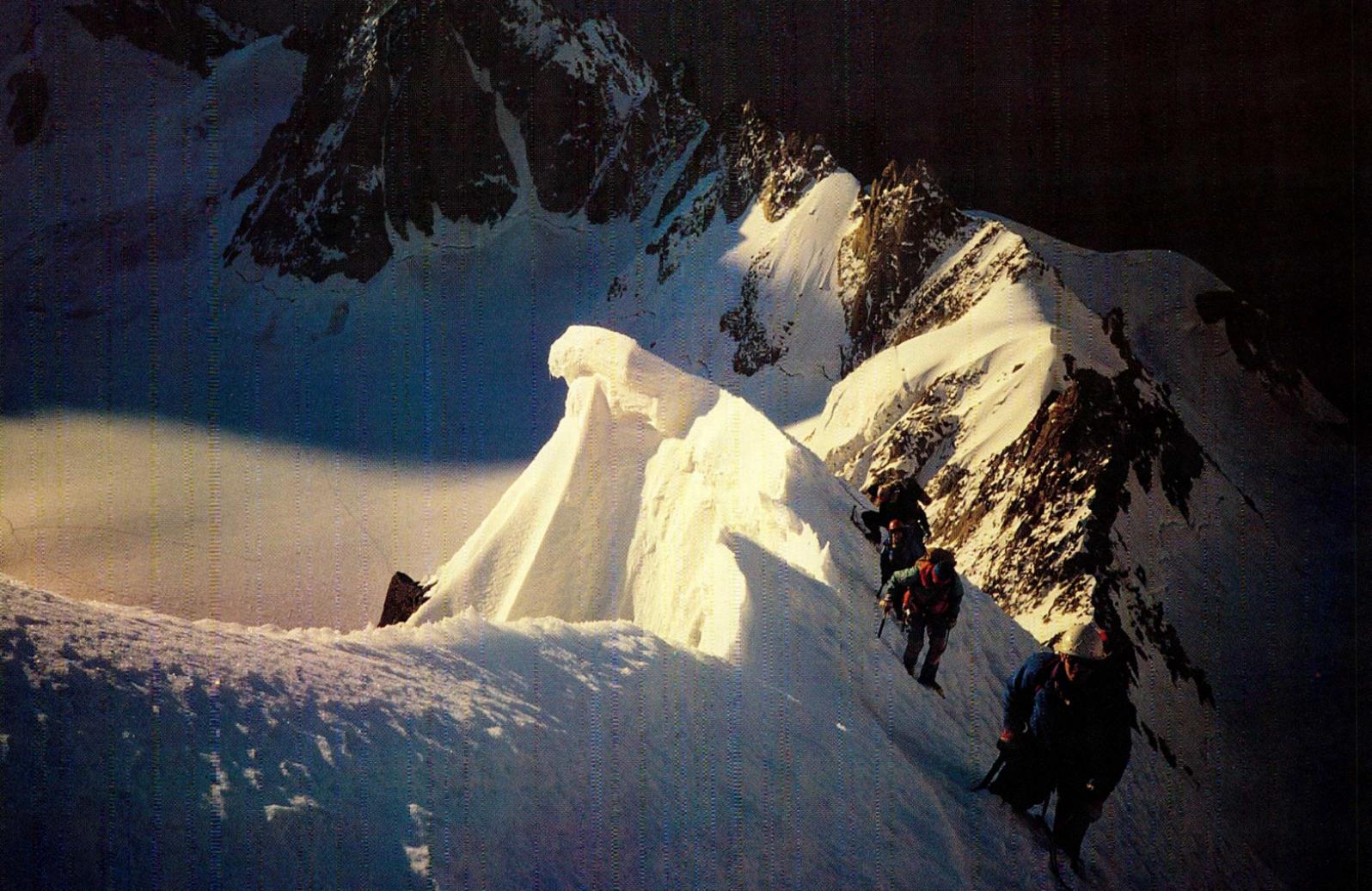
Which brings me to Quintus Horatius Flaccus for the resolution of these conflicting messages. This Roman poet lived from 65BC to 8BC. He was an idealist, a supporter of a return to the high standards and high ideals of the Old Republic. He came out with such perennially goodie phrases as 'much communal wealth, little private means'.

He fought at the battle of Philippi against the move towards a centralising dictatorship with Brutus, Cinna, Metullus Cimber, the lean and hungry Cassius and all the others from Shakespeare's play. His side was defeated; he fled leaving behind his shield and spear on the field.⁹

Eventually he compromised, accepted that the world is the way it is and gained amnesty. His poetry, nevertheless, carries the message that it is incumbent on us all, however wearily, to do what we can to raise whatever standards we can; a flower growing among the rubbish is better than no flower at all.

He faced the fact that if you base your attitudes objectively you will be a pessimist but as far as day to day living is concerned it is better to grit your teeth and be an optimist. The disillusioned, after all, make the most effective idealists as they are aware of the realities of the world.¹⁰ For us as a Club of winter mountaineers Horace is of particular interest as the author of the earliest surviving poem in praise of a winter mountain.¹¹

He may, in fact be the father of the bothy ballad.¹² He certainly had a bothy of his own in the Sabine hills which our first President, George





Gilbert Ramsay referred to approvingly in the first Presidential Address ever made to the Club.¹³

If it were possible to confer posthumous membership of the Club on someone I would propose Horace as a worthy candidate but the Committee would never let me get away with that one either. The specific message from Horace I would like to leave you with is in a couple of lines spoken by a group of men exiled from their city of Salamis because of a disagreement about certain events in the Trojan War and the low standards of the incumbent administrators.¹⁴

They sail off to found a better city and after storm and adversity at last find a temporary harbour on a rocky coastline. They gather round a fire on the beach. The roar of the waiting wine-dark sea can be heard in the granite teeth at the harbour entrance. Darkness is falling. The slow moon climbs, the deep moans round with many voices and all the rest of it. The leader proposes the following toast as they share a flagon of wine:

*'Brave comrades, we have endured much together,
And in the future worse may be in store,
So tonight let us drive away our cares with wine,
For we take the huge seas on again tomorrow.'*

I would like to offer you the same toast of determined realism tonight altering the last line to read: 'For we take the great climbs on again tomorrow.' Comrades,¹⁵ I ask you to rise and drink to the health of our Club. Long may we remain a crew of creative individualists, and at the same time may we be able to accommodate normal, stable personalities even if by our standards they rank as engaging eccentrics. May we continue to have the good sense to co-operate sufficiently to keep our vessel seaworthy and competently navigated and long may we refrain from jumping ship by sending in those pungent letters of resignation we all have already written somewhere in the back of our minds.

May we continue to make harbour each year on some congenial beach like the one we are assembled on tonight. May our annual dinner continue to be a harbour from which we emerge restored and confident to take on the great climbs of the future.

NOTES:

¹ The equivalent scene in Scotland would be the Central Belt, the Great Wood of Caledon and the rural lands within our borders. Megapolitan Glasgedinburgh is a formidable enough problem (everyone will be familiar with MacDermaid's antiheroic epic poems on Edinburgh and Glasgow) but minor compared to the effect on Scotland of the demographic collapse of our southern neighbour.

² For those interested in the details: Elrond, the last friendly house, became a timeshare residential complex; the great north-south motorway, all six lanes of it, ran past its gates taking the traffic to and from somewhere or other. Lorien became a Disneyland, Rohan a dormitory suburb and Mirkwood was felled and put under Sitka spruce by private forestry. The Shire fortunately was bought by the National Trust and became something like the Lake District. The Misty Mountains were comprehensively explored and the climbs were written up in great detail in numerous first-rate guide books the most notable of which were published by the local equivalent of the SMC. They became a region of visitor centres, heritage centres, adventure centres, trekking organisations, climbing schools, goblin theme parks and purpose built resorts. It wasn't all bad; it did generate employment for decent people and retained a fantasy replica of the original wildness without the original discomfort and danger. Mordor also adapted to the prevailing circumstances and spread beyond its boundaries. The orcs became the eager beavers who eroded the community by trying to run it with the minimum number of people; the dark riders developed the crime industry and expanded the drug trade; annoyingly they created the only community offering full employment to its people and thrive correspondingly. The dark lord himself did important work in laundering the proceeds into legitimate business and became too dangerous to annoy and so immune to investigative journalism. There were so many ugly and unacceptable faces of the system to enjoy that he really was glad his own alternative of spreading a rather pedestrian intellectual degradation had not prevailed after all. He even became trendy and advanced the doctrine of 'sustainable destruction' which, renamed 'efficiency', was found to be a profitable political philosophy. He became a successful politician, then a Lord of the Realm, if not of the Ring, and ended up as president of the Rivendell Golf and Country Club which he extended to twice five miles of fertile ground with walls and razor wire engirdled round. This was the first of the secure living areas where the hyperaffluent could enjoy their luxury in security. It did take in a couple of mountains which were proclaimed an animal sanctuary open only to residents – in effect these hills were privatised – but astutely so. With the skills of his calling he bent all the planning authorities. He won the test case as he hired better lawyers than the local objectors. The press which he largely owned hailed it as a triumph of common sense which brought jobs to rural areas. His private mansion 'Elfland' became the social hub and think tank for dubious land speculators, shady entrepreneurs, tacky fixers and other orcs and bolrogs.

³ See, for example, *Slesser's Politics of the Environment*, Allen & Unwin, 1972.

⁴ The small print is consequently the best part of the Journal. Can I commend to your attention the book reviews and SMC Abroad?. The book reviews are usually very perceptively written. As you can't read every book published this section gives you the gist of the matter along with an informed commentary. In this way you get double the entertainment and twice the instruction in half the time. SMC Abroad is also a source of pleasure and instruction for the aficionados of this section; Geoff Cohen's account of a year-long stravaig through India is a classic of Himalayan mountaineering painted in the wide context of greater India; A.L. Cram's notes about his travels in various odd corners of the world are collectable prose cameos. Dutton's prophetic writings in the small print of the Journals of the Sixties are of historical interest – a pity he now appears only in the ostentatious large print.

⁵ For further information see Robert Graves' *The White Goddess*, Chapter 3, pages 53 & 54. Faber, 1971.

⁶ SMCJ 1971, xxix, 351-355.

⁷ SMCJ 1991, xxxiv, 593-596.

⁸ Bruce and the spider is relevant here; the last thing we should do is give up.

⁹ Ode II, vii. There is an interesting parallel here between Horace and Duncan Ban MacIntyre. Donnachaidh Ban also got involved in a war in which there were two wrong sides. He fought at Falkirk and like Horace, left the field prior to the final whistle, discarding the sword he had been lent for the occasion. Duncan Ban's great song '*In Praise of Ben Dobhrain*' should of course be known to every schoolchild in Scotland. Every Munroist should be required to

memorise its 500 odd lines before being admitted to the inner list of the fully compleat. We must be thankful that both Horace and Duncan Ban were prudent, if not frankly incompetent, warriors.

¹⁰ Mao Tse Tung (you may remember the discussions round the campfires during the Long March) used to go on about the importance of objective thinking. Another thing he used to stress was understanding the mindset of the opposition and then changing the rules so as to invalidate their guiding concepts. The trouble here is that the exploiters seem to be much better at doing this to us than we to them.

¹¹ Horace's celebrated Soracte Ode, I, ix, verse 1. Freely translated and substituting Ben Nevis for the original Soracte it runs thus:

*'See how the snow lies deep on white Ben Nevis,
The old woods sag beneath their heavy burden,
The frozen waters of the Allt a' Mhuillin,
Now run in silence past the distillery door'.*

¹² *ibid*, verse 2.

*'Dispel the cold with amber fire from logs,
Piled tinder dry upon the bothy hearth,
And pour the twelve year-old Glenlivet,
O Callum Mor, in generous drams from an ample jar.'*

¹³ SMCJ, 1890-91, i, 9.

¹⁴ Ode I, vii.

¹⁵ This is okay; 'comrade' is a common noun and includes both our worthy lady members.



NEW CLIMBS SECTION

OUTER ISLES

LEWIS, Tahaval, South West Ridge:

C. Rumsey notes that it is the south west ridge of Tahaval which offers climbing, not the south east ridge, and sends the following route on the west side of the ridge.

All About Lewis – 90m M. Severe. C. Rumsey. June, 1990.

1. 45m. Climb the slab just right of the prominent corner (on the lower right side of the face). 2. 45m. Trend leftwards and up short walls to the summit.

HARRIS, Creag Dubh Dhibadail:

Cold Start – 180m E1. A. Macfarlane, J. Norgrove. 28th April, 1991.

Start 20m left of Via Valtos. 1. 5a. Up and slightly right to a faint crack/groove. Ascend this to a belay stance below a smallish roof. 2. 5c. Step right into a corner and up to the right hand side of a large sloping shelf. 3. 4c. Re belay at the left side of the shelf. Traverse left 5m and up slabby rock to belay left of a long roof. 4. 5b. Up and left to an obvious corner/crack system. Climb this to belay. 5. 6. 4a, 4b. Trend right and up.

Sgurr Scaladale:

Sideshow – 105m HVS. A. Macfarlane, D. McGimpsey. July, 1990.

Takes the rock face to the right of the deep cut Eastern Gully. 1. 40m 5a. Break through a small roof and up. 2. 25m 4c. Up to a quartz vein and move right. 3. 40m 4c. Move right to a continuous line of rock. Up this to finish.

Note: Borealis, reported in SM CJ, 1991 as being on Creag Dubh Dhibadail, is in fact on Strone Ulladale.

Gillaval Glas:

Black Face Gully – 200m I. A. Macfarlane. 1991.

The mountain has five gullies on the face above the Ardhasaig/Clisham bridge. This is the middle gully.

Clisham, Aonaig Mhor Crag:

Numerous possibilities for Grade II-III routes exist of length 60 -110m. At least two routes have been climbed.

Pairc – 90m III. A. Macfarlane. December, 1989.

The obvious icefall on the right hand side of the crag

Leodhas – 110m III. A. Macfarlane, P. Macfarlane. 13th March, 1992.

The right hand buttress, immediately right of Pairc.

SOUTH UIST, Leac Shleamhuinn (NF 775 147):

An area of discontinuous granitic gneiss slabs on the southern slopes of Easaval on the very south of South Uist. Approach from near the jetty at Ludag and walk up to the slabs in 10 minutes. They stretch across the hillside and unfortunately the majority of the longer lines are too easy angled to afford anything but climbs of Diff. and below. The one area that is distinctly steeper is a diamond shaped slab well seen on the approach and roughly centrally placed in the slab mass. The rock belies the Gaelic name slippery and is of first quality. Not worth a special visit but easily accessible for short routes whilst waiting for ferries. Protection is entirely lacking on most lines.

Slippery Slab – 24m HVS 5b. J.R. Mackenzie (solo). 29th July, 1992.

A fine climb with an intimidating initial section. Start in the centre of the diamond shaped slab 2m left of a slanting crack. Step over an overlap and continue straight up.

Eriskay Crack – 20m Diff. J.R. Mackenzie (solo). 29th July, 1992.

Climb the pleasant slanting crack right of Slippery Slab.

Ludag Slab – 24m V. Diff. J.R. Mackenzie (solo). 29th July, 1992.

Climb the slab right of Eriskay Crack.

Saltavik Slab – 22m V. Diff. J.R. Mackenzie (solo). 29th July, 1992.

Near to the left of Slippery Slab is another slab set lower down. Climb this with an interesting middle section. A much longer slab lies to the right of the diamond shaped slab but apart from an interesting overlap at the start, the friction is such that the rest can be walked up.

RUM, Coire nan Grundd:

The crag lies below Coire nan Grundd and is not shown on OS sheet 39 although the contours are phased out. It faces north of east and is between the two main burns that drain the coire. Approaching the crag from the Kinloch to Dibidil path, along the Allt na h-Uamha, the most notable feature is a big blank slab. At the extreme northern end of the crag is a short wall (with an interesting hard route), then a grassy gully. On the left of this is a north facing wall which is taken by the following route.

Pineapple Wall – 30m Severe. M. Beetham, C. Smart, M. Wakeman, R. Weare. 16th July, 1991.

Start at the base of a wide greasy oblique crack. Once off the ground, traverse left a few feet to the next crack where it widens into a scoop. Climb the wall following the crack. On reaching broken ground, step right and continue up the arete.

Rum and Pineapple – 20m Severe. M. Beetham, C. Smart, M. Wakeman, R. Weare. 16th July, 1991.

Start about 8m left of the end of the wall below a skyline boulder and a vague groove. Climb the groove, then step right to follow the obvious thin crack to the top.

MULL, Scoor:

White Thing (SMCJ 1992, p84) is VS 4c.

SKYE

COIR' A' GHRUNNDA:

S. Kennedy and D. Ritchie climbed a V. Diff route (45m) up the small buttress just beyond a small gully to the right of The Whet. Start up a short corner on the left.

SRON NA CICHE, Eastern Buttress:

Pocks – 85m E2. G. Szuca, C. Moody. 13th June, 1988 (first pitch). C. Moody, N. Smith. 7th June, 1992 (complete).

Fine varied climbing. 1. 35m 5b. Start up Creag Dubh Grooves, then climb a crack on the left to an overlap (Dilemma goes over the overlap here). Move right to a ledge, step right, then boldly climb the overlap. Move up right to CDG belay. 2. 50m 5c. Climb a steep crack just right of CDG to a slab. Follow the slab right to an arete, then continue up right to reach a crack (or Enigma) and the top.

Mistral Buttress – 105m VS. N. Horn, C. Moody. 16th June, 1992.

Good climbing up the buttress right of Shangri-La. Start approx. 15m right of Shangri-La. 1. 40m 4c. Follow a crack in a ramp up right, step right and follow a corner up to an overhang. Move right to belay at a block (the corner can be gained by moving left from the abseil point in Eastern Gully). 2. 50m 4b. Stand on the block and step left on to a slab. Move left to a dyke which is followed left to the buttress crest. Climb this to a ledge. 3. 15m 4c. The left hand corner above is taken by Shangri-La. Left of the right hand corner are twin cracks. Climb the right crack to an overhang, step left and follow both cracks to the top.

SGURR MHICCOINNICH:

King Cobra Direct – 140m E3. B. Davison, H. Day. 28th June, 1992.

1. 45m 5b. The first two pitches of King Cobra. 2. 45m 5c. As for pitch 3 up the rib to the shelf at the left end of the big overhang. Go through the left end of the overhang into a groove (crux) and follow this to a ledge with a chockstone in a wide corner crack. 3. 50m 4c. Climb the corner and chimney to a large ledge, then up a corner at the back of the ledge to belay on easy ground a few feet short of the top, gained by scrambling.

CARN LIATH (Trotternish):

Carn Liath is a recently developed cliff in the Trotternish area of North Skye. The cliff is situated on a spur leading northwards from the summit of the Storr on the Trotternish Ridge, and is named on the OS map (sheet 23, 495 560). The main section consists of a compact steep face about 60m high in an open situation facing north. Its top is about 450m above sea level. At its foot is a hidden valley leading northwards, whose floor consists of giant blocks which lie jumbled below the cliff as if spilled from a sack. The whole presents an awesome spectacle and has been described by Derek Cooper as 'possibly the wildest carn in the Scottish Highlands'. The east side of the valley is an inward facing escarpment of about 20m height featuring the sensational Blade pinnacle, visible from the road as a curious church shaped feature (with blade as spire).

The rock is a rough dolerite, reminiscent of Kilt Rock in quality and texture, though lacking the columnar structure. The friction is good and there is very little vegetation on most routes. Several lines of seepage seem to flow all year round, the most notable being the repellent Snoozing Crack which splits the cliff in two, resembling the Black Cleft of Cloggy. Approach the cliff on the A855 road from Portree towards Staffin and park about eight miles from Portree (S12 562), where the Rigg burn goes underneath the road. Walk due west (inland) and after the first rise, the top of the cliff can be seen directly ahead on the skyline, across steepening ground, reachable in about 40 minutes from the road.

Blade Area:

Below the church feature on its eastern side are three obvious catacomb entrances, easily found as one approaches the cliff from the road. These are what Murdo Campbell, the Rigg shepherd referred to when he spoke of 'stone steps hewn out of these rocks which led to an underground chamber'. The following route starts in the central of these catacombs.

Mummy's Church, Crypt Start – 25m V.Diff. M. Hudson, D. Hudson. 7th May, 1990.

A unique expedition, at least half the climb is underground, and requires headtorches. Enter the narrow cleft and follow the passage as it deepens. Turning right at the end and descending sharply brings one into an earthen floored chamber 10m underground, below a skylight. The climbing begins here, at the far end of the chamber. Bridge up the crypt,

past a lateral shaft of light, and emerge on to ledges. The pinnacle above is gained directly by further bridging and wedging up an open ended chimney, or by the columns on either side.

The Thirteenth – 25m Severe. M. Hudson, A. Holden, R. Brown. 26th May, 1992.

A second slightly more sustained underground climb, following a crack in the west wall of the 'crypt'. Start below ground as for the previous route but 3m further south. Back and foot up the well protected crackline to a constricted exit between boulders. The leaning corner above provides a reachy finish on to the top of the church.

The Blade – 25m HVS 4c. M. Hudson, R. Brown. 21st October, 1991.

Climbs the western edge of the Blade, serious and exposed. Start below the Blade on its right hand side. Move up the gully over a protruding lip till moves leftwards up the wall gain shattered ledges. A difficult mantelshelf gains a smaller sloping ledge leading on to the Blade proper. The last protection for 10m is here. Gain the knife edged arete which is climbed to a visible notch at 20m (runners). Layback to the top.

Sixties Special – 20m Severe M. Hudson, D. Hudson. 7th May, 1990.

Takes the gently overhanging chimney-crack which forms the corner left of the Blade. Finish either inside or outside the massive jammed block at the top.

Variant – 20m Severe. M. Hudson, R. Brown. 21st October, 1991.

Take the wall left of the chimney by a diagonal crack.

Main Cliff:

The White Criterion – 40m VS 4c. M. Hudson, R. Brown, P. Brown. 2nd August, 1991.

Takes the obvious corner chimney and the wall above, at the extreme east end of the main cliff. Climb the corner chimney to an awkward exit at 15m (possible escape). Continue straight up the wall above to grass ledges at 30m. Continue up the undercut wall and over ledges to a stake belay 2m back from the edge.

Staffin Cowboy – 50m HVS 5a. M. Hudson, R. Brown. 1st August, 1991.

Start at a system of shattered grooves 5m left of the eastern arete (right end of the face). Climb the lower grooves, moving into the left hand groove, to a spike on the right at 20m. Carry on up the shattered corner past two bulging sections (second as crux) and from its top, swing right on to the arete and up a ramp to a grass ledge. Continue rightwards up the wall to the same stake belay.

Hearts Highway – 60m HVS M. Hudson, A. Holden (alt). 26th May, 1992.

The system of grooves up the eastern arete. Start from a pedestal at the toe of the arete. 1. 30m 5b. Climb the grooves until a step left can be made on to a small shelf at 12m. Continue left and up a shattered chimney. Step delicately back right and continue in a rising traverse. Surmount overlaps at their right hand end (crux) and continue up the groove above to a stance on a small ledge. 2. 30m 4b. Up the crack behind the stance, moving delicately right to gain a rising ramp. Finish up a wall on the arete to the stake belay.

The Prospect of Rona – 60m HVS. M. Hudson, R. Brown. 8th August, 1991.

The north face contains the Snoozing Crack and a huge fallen slab just right of it. The route takes the line of least resistance up this face, trending leftwards through the overhangs and across the undercut headwall. Start at the toe of a subsidiary buttress halfway up the steep scree between the fallen slab and the western arete.

1. 25m 4b. Climb easy initial rocks to a swing left at 12m. A groove above leads to spacious ledges. 2. 35m 5b. Move left up the wall to the obvious weakness in the overhangs. Pull over to a nest and traverse left on to a curious pocketed wall. Move up to a leftwards traverse on footledges making for a large notch on the skyline. Climb the corner 5m before the notch to an overhanging finish to block belays.

Direct Start – Starting higher up the scree (i.e. on the right), climb a direct crack line to the belay ledge. Better but 5a. An aged Moac was found.

Western Arete – 40m VS. M. Hudson, D. Hudson, R. Brown. 6th August, 1991.

1. 20m 4c. Start at the foot of the western arete and traverse in to an obvious jutting block. Zig-zag up the wall above and passing a small diamond overlap (crux) to reach a ledge. 2. 20m 4b. Climb the right hand of two grooves above, pass a roof and move into the left groove. Move back right to finish on the vertical blocky arete.

The Notch – 30m H. Severe 4b. M. Hudson, R. Brown. 8th August, 1991.

Start in the western gully 6m right of the arete below a crack system. Climb the crack system through the initial bulges, heading for the obvious notch on the skyline. Avoid grassy sections to finish up a bulging jam crack (crux) below the easier overhanging notch.

Cracked Rib and Slab – 35m Diff. R. Brown, D. Hudson. 24th May, 1992.

The obvious rib on the west side of the gully. Start 6m right of the jutting block. Climb the rib to a large stance. Climb the slab above, trending left then right to finish directly up the right edge of the slab.

NEIST POINT, Upper Crag:

Myopic – 30m E2 5c. G. Szuca, A. Wren. 21st May, 1992.

Start just right of Seagulls and climb straight up the arete to a bulge. Go up the finger crack above, then continue up the arete finishing as for Seagulls.

Panorama – 30m E2 5c. A. Wren, G. Szuca. 21st May, 1992.

Start as for Myopic but move straight into the middle of the buttress as soon as possible. Go straight up to the top, finishing as for Seagulls.

Primeline – 30m E2 5b. G. Szuca, A. Wren. 21st May, 1992.

The arete just left of Temptation. The following route is 15m right of Temptation. It goes up the obvious slabby arete, just left of a green corner/chimney crack.

Gruinard Mutant – 35m E1 5b. G. Szuca, A. Wren, D. Gregg. 21st May, 1992.

Follow the cracks in the arete and finish up the obvious crack.

Eastern Crag:

Heavenly's Pleasure – 45m E4 6b. M. Garthwaite, D. Gregg. 21st May, 1992.

The superb crack on the Fin mentioned in the Anderson/Latter book. Probably 6c for the short.

Sheep Tick – 40m HVS 5a. D. Gregg, G. Szuca, A. Wren. 20th May, 1992.

Straight across from the Fin, on the main face, is a chimney/corner crack in the back of a groove. There is a black stake above this route (backed up with pegs for an abseil). Start 10m up from the toe of the corner on a big ledge. Climb the groove to a big ledge and finish up the layback crack above.

Route with a View – 35m E3 6a. M. Garthwaite, G. Szuca. 20th May, 1992.

Lies on the superb wall 30m right of Temptation. The shallow corner 5m left is Monkey Hanger (HVS 5a). Start at a small block lying against the wall. Go straight up, moving slightly left at 8m, then sharp right to good holds. Go straight up to an inverted V-slot, pull into this (crux) and pull through the roof rightwards. Finish straight up.

Neist Bay 3, South Face:

Tinderbox – 30m HVS 5a. N. Horn, C. Moody. 18th June, 1992.

Climb the face left of Jotul to gain a crack which finishes left of the square nose.

Jotul – 30m VS 4c. N. Horn, C. Moody. 18th June, 1992.

Follow grooves left of Lushious slightly leftwards to finish right of the square nose.

Disturbing the Wildlife – 30m HVS 5a. M. McLeod, C. Moody. 20th June, 1992.

The wide crack right of Lushious. Either start directly up the chimney or move up right from the start of Lushious. The crack leads to a slab, then a short wall.

Solar Furnace – 30m VS 4b. N. Horn, C. Moody. 18th June, 1992.

Start up a shallow corner right of Disturbing the Wildlife, step left and continue up cracks to the slab and short wall.

KILT ROCK:

The unnamed route in SMCJ 1991, p664 is called Ask Fire-Eater.

SGEIR BHAN, Staffin Slip Buttress:

At the right side of the right buttress is a short wide chimney. Left of this are two wide cracks. The right crack has been climbed (J. Mackenzie).

Post Marital Blues – 25m E2 5b. N. Horn, C. Moody. 15th June, 1992.

The left crack.

The Swelling – 30m E1 5b. N. Horn, C. Moody. 15th June, 1992.

Further left the crag changes direction on an arete. Climb the crack right of the arete.

MACLEOD'S MAIDENS, IDRIGILL POINT:

The largest of these three prominent stacks (The Old Lady) can be approached at low tide after abseiling 75m down the cliffs on the south side of the headland. The original, and only route (70m, Severe), first climbed by Ian Clough in 1959, is very loose at the top and possibly merits E1. The outer two stacks can be reached by a 50m swim. The middle stack can be climbed by a variety of routes at about V. Diff in standard. The outer stack, an impressive slender finger of basalt, showed evidence of a prior attempt that had been defeated by loose rock just below the top.

The Outer Maiden – 30m E2 5b G. Muhlemann, E. Grindley, S. Richardson. 30th May, 1992.

Follow a line of cracks on the south face to enter the prominent final clean-cut corner. Climb this steeply to a very loose finish, and pull out right at the top.

RUBHA HUINISH, Bodha Hunish:

Eilean Groove – 35m E1 5b. S. Richardson, G. Muhlemann. 31st May, 1992.

A sustained climb up the well defined north facing corner on the central of the three prominent stacks. The rock is a little loose, but it should improve with more traffic! Approach by abseiling down the cliffs north of a prominent corner to a small platform, followed by a 20m swim.

UIG, The Mitre:

Mitre Groove – 30m E2 5b. S. Richardson, G. Muhlemann. 1st June, 1992.

There is a prominent square cut corner on the north corner of the stack. Gain it from the right and climb it to its top. Move right on to a ledge and continue up the crack above to the rickety summit.

NORTHERN HIGHLANDS**SOUTH AND WEST (VOLUME ONE):**

The guide has now been published. Routes in the guide have not been duplicated here. The following were too late for the guide's main text.

AN TEALLACH, Coire a' Ghlas Thuill:

The Magnificent Seven – 200m III. N. Kekus, A. Andrew, D. Taylor, C. Brook, T. Wagg, I. Forth, P. Buck. 25th March, 1993.

The leftmost of the narrow buttresses left of Major Rib (third buttress left of Fourth Prong). Takes the obvious line up the buttress, with an easy first pitch on to the buttress proper, leading to a narrow rock chimney and vertical corner on the penultimate pitch.

BEINN EIGHE, Coire Mhic Fhearchair, Far East Wall:

Nightcap Groove – VI,7. G. Ertle, A. Nisbet. 24th October, 1992.

Short and well protected, suited to the conditions of deep powder covering unfrozen ground.

Central Wall:

Assegai – 120m V,6 M. Moran, A. Nisbet. 29th January, 1993.

Based on the summer route. Start 5m right of Cool Cleft. Climb a wide steep chimney, then go rightwards to belay below the summer chimney (35m). Move left into a corner, then cracks just to the right, before returning right to the summer route above its chimney (40m). Finish up the summer route (15m, 30m).

West Buttress:

Note: The Upper Girdle across West Buttress consists of two parallel ledges. The Girdle route uses parts of both ledges but the newer route descriptions in the recent guide refer only to the upper ledge. The following route description refers to both. Also there is a mistake in the description of Maelstrom in the new guide. It starts from the Second Terrace, not from either of the Girdle ledges.

Blood, Sweat and Frozen Tears – 100m VII,8. M. Moran, A. Nisbet. 26th March, 1993.

An outstanding and very sustained mixed route up the big vegetated groove right of Earth, Wind and Fire. Above the Upper Girdle, the groove continues between the inset slab of Earth, Wind and Fire and the arete of Shoot the Breeze. The route can be

approached via West Central Gully at easy II, or by two abseils using 50m ropes. The abseil line can be seen from the top of Central Buttress although the groove is less obvious face on than from below. The first abseil point is 6m right of a big perched block and the second is a block which is also the belay below pitch 3. The groove occasionally fills with ice (easier?) but this time was heavily verglassed.

1. 30m Up the groove, at times on its right wall, to belay on the lower ledge of the Upper Girdle. 2. 20m Continue up the groove. Move left on to a steep slab to gain the upper ledge of the Upper Girdle. Pull through the capping overhangs above the ledge, at the same point as Earth, Wind and Fire, but immediately swing into the continuation groove on the right. Climb this and move left to a block belay (abseil point). 3. 50m Earth, Wind and Fire crosses here and climbs the chimney above. Instead, go left and climb a big left facing corner past a difficult overhang (which would be easier with more ice).

LIATHACH, Coire na Caime, Am Fasarinen:

The Shining Path – 160m IV,6. M. Moran, S. Birch. 3rd March, 1993.

A big icefall forms right of Toll Dubh Chimney close to the left edge of Twisting (No 6) Gully. Start just left of the gully at a slanting groove. The groove proved thinly iced and awkward. Easier climbing trended left up iced steps, then a short steep ice corner led to the foot of the main fall. This was split by a diagonal weakness running from left to right and gave a fine 40m pitch. Two pitches in turfy corners gave access to the summit ridge.

Note: Andes Couloir was repeated by S. Birch, C. Collin and M. Moran on 1st March, 1993 by a new line right of the original. V,6. Two icefalls, the second one short but vertical, and a right facing turfy corner led to the upper couloir which was found to be a 100m ribbon of grade II ice.

Fat Man's Folly – 200m IV. D. Broadhead, D. Rubens. 30th January, 1993.

Start about 40m left of Valentine Buttress at a deep gully. The climb breaks right out of the gully and follows a line of weakness via a short slot and a slanting corner. Go easily up the gully for about 40m and start below an obvious short slot. Climb fairly directly to belay at the slot (30m). Climb the slot and the pitch above (30m). Easier for 60m to the slanting pitch of 10m.

BEINN ALLIGIN, Eag Dubh:

Hatchet Man – 80m III. A. Nisbet, S. Chiles, H. Davis, P. Worthington. 27th January, 1993.

Midway up the long right wall of the Eag Dubh is the only easy break, a slabby ramp which gave three ice pitches.

Under the Hammer – 110m V,6. A. Nisbet, G. Ollerhead. 27th February, 1993.

The left side of the final gully of the Eag Dubh is a buttress which is steeper and larger than it looks. The route is based on a central corner system but with frequent deviations on to its right wall. Climbed in five short pitches using one rope doubled to save weight on the rough approach under the right wall of the Eag Dubh. In better conditions a shallow gully on the left leads to the route (easy II).

FUAR THOLL, South East Cliff:

Sandstorm – 170m VII,7 (1PA). M. Moran, A. Nisbet. 23rd March, 1993.

Aims direct for the steep groove cutting the walls mid-way between Tholl Gate and The Fuhrer. Steep compact rock makes this a demanding climb which requires liberal snowfall as well as frost. Start 20m left of Tholl Gate.

1. 45m Follow a vague left trending ramp, then back right to an easement. Continue direct until stopped by a blank 5m wall just below an obvious cracked corner. An 8m dogleg to the right gained good crack belays at the corner. 2. 30m Climb the corner to a ledge, then go direct up a very steep groove (1PA) and swing left on to moss ledges. Further strenuous moves lead up and right to a small stance just left of the main groove. 3. 45m Swing up to the exit of the groove, then go direct up the walls to a stance in a right facing corner where the cliff steepens. 4. 30m Go up right on flakes, then back left to the crest of the buttress and a hard exit to easier ground. 5. 20m Short steps to the top. **Note:** A. Nisbet and G. Ollerhead repeated Cold Hole in one long pitch, then moved left to finish up an easier icefall (III, January, 1993). VI,6 confirmed.

BEINN BHAN, Coire na Feola:

Indigenous – 170m IV,6. P. Mnych, M. Moran. 14th January, 1993.

The obvious diagonal line rising rightwards from the bottom of Y- Gully. Start up an easy chimney, then follow mixed ground up to the foot of the ramp (In XS must go straight up from here). The ramp gave one turf and one iced pitch, and an evil chockstoned slit to finish. Easier steps then led to the top of the A' Chioch ridge.

Note: In XS is almost certainly wrongly located in the guide. It goes up a well concealed corner line to the right of Y-Gully, not the left as described.

SGURR a' CHAORACHAIN, The North Buttresses:

Totem – 150m IV,5. A. Nisbet, D. Coburn, R. McFadden, R. Peak. 3rd March, 1993. A series of pitches up steep blocky grooves just left of the crest, finishing past the right side of the Totem pinnacle. Easier options were possible further left.

Note: No.3 Gully is a scramble in summer and easy II in winter. No.5 Gully is grade I by its right branch and II by its left. The above party reached Totem by descending No. 5 Gully left branch which reaches the crest of A' Cioch Ridge at the first col. A better descent would have been from two cols further on, the top of No. 3 Gully.

MEALL GORM:

Gorm Gully – 150m II.

The narrow deep gully left of the three tiered buttress (third gully left of Blue Pillar). Easy snow leads to a final ice pitch which can be up to 40m in cold but lean conditions. Climbed several times (the first known at present by M. Moran and party) but recorded as a good wee route and the best snow holding gully on the mountain. The obvious 25m icefall below Meall Gorm and to the left of the hairpins has also been climbed (grade IV).

NORTHERN HIGHLANDS NORTH AND EAST (Volume Two)

SHETLAND:

Orkney and Shetland are to be included in the forthcoming guide, Northern Highlands volume two. Several Shetland sea stacks and 3 sea cliff routes were climbed in May, 1992 by combinations of N. Dugan, M. Fowler, C. Jones, J. Lincoln and A. Nisbet. Descriptions have been submitted to the guide but are available if required. One other route has been recorded.

St Ninian's Isle (HU 359 210):

Stack of the Ship – 80m V. Diff. G.E. Little. 7th July, 1992.

On the west coast of St Ninian's Isle, opposite the island of Hich Home, lies a stack linked to the coast by a knife edged rock arete. An ascent of the stack via the arete provided an exposed traverse and short steep wall with the odd fulmar providing additional interest.

FAR NORTH EAST COAST:

About 50 routes on this coast were described in last year's Journal. A mini-guide with over 180 routes, including these, has been supplied. The information has been passed to the Editor of Northern Highlands volume two, but with apologies to the obviously keen Caithness climbers, there is not room to reproduce here. As a summary:

MID CLYTH. (ND 286 358):

Lighthouse Wall. 100m north of the lighthouse. Three routes, 15-25m.

The Shelf. Just south of the lighthouse. One route, 20m.

The Stack Area. 16 routes, 12-20m.

South Bay. 13 routes, 10-16m.

Overhanging Wall Section. Nine routes, 10m.

LATHERONWHEEL (ND 187 317):

Pinnacle Area (nearest the harbour). Five routes, 10-14m.

Big Flat Wall. Nine routes, 12-20m.

Little Flat Wall. Five routes, 14m.

The Stack. 13 routes, 8-15m.

Bedrock (just south of The Stack). Eight routes, 12m.

South Corner (South Bay). Nine routes, 8-14m.

OCCUMSTER (ND 268 352):

Main Buttress. Seven routes, 15-20m.

East facing wall south of Main Buttress. Seven routes, 10-20m.

The Gully. North of Main Buttress. Two routes, 10-12m.

Sabbath Wall. Wall above ledge just north of Main Buttress. 13 routes, 5-15m. Also four routes to south, 15m.

Lower Wall. Next area north. 17 routes, 10m.

Cave Area. Just south of headland 200m north of Main Buttress. Six routes, 8-15m.

The Ramp. Above ledge south of Main Buttress. Nine routes, 6-10m.

Roof Area. Sea level wall south of The Ramp. Five routes, 8-10m.

SKIRZA (ND 399 698):

Two routes, 40-45m.

NOSS HEAD:

The headland two miles north of Wick. Climbing is south of the car park for Noss Lighthouse. 26 routes, 5-10m.

Also three routes to north.

STAC POLLAIDH, No. 2 Buttress:

Calum the Clansman – 45m HVS. I. Hartley, J. Lyall. 8th August, 1992.

A line to the right of Nosferatu but starting on the rightside of a rocky ridge next to the big scree filled gully. 1. 15m 5b. Climb a curving layback crack up a slab, then a narrow rock ridge to belay in a small gully (a short way above Nosferatu chimney). 2. 30m 4c. A right slanting crack is followed until moves left gain another crack at an overlap. Follow this and slab to large ledge. Traverse right into gully to descend, or finish by Vlad.

ULLAPOOL, Creag nam Broc (NH 147958):

This unusual gneiss crag, standing on a limestone platform, lies to the north of the Ullapool River opposite a deep limestone quarry. It faces south west and the rock is predominantly clean and solid, offering superb friction. The crag's main feature is a huge central roof, the debris from its creating rockfall lying below. The easiest access is from a bridge (private road) at 154 953. A pleasant walk of under 1km leads to the crag. Routes were climbed by G.E. Little and J.M.G. Finlay on 30th March, 1991 except Very Gneiss Wall on 29th March.

Very Gneiss Wall – 25m Severe.

This route climbs a wedge of clean red rock between a sapling filled groove and a tree sprouting crack. Start on a limestone plinth by a brier. Climb directly up the centre of the red slabby wall on good holds.

One Armed Bandit – 40m HVS.

A largely amiable route with a sensational and strenuous crux. Start at the same point as Very Gneiss Wall below a sapling filled groove. 1. 22m. Climb up and left to gain a cracked slab leading to a detached block on an exposed edge (at the left end of the huge roof). 2. 18m 5b. Round the corner, above a small roof, a horizontal horn of rock is just out of reach. Gain the horn (crux), then move left to a small ledge. Climb directly to the top on superb rough rock.

Dancer in the Fire – 20m E3 5c.

On the left flank of the crag two obvious lines of weakness break a steep multi-coloured wall. The left takes the form of a diagonal fault running up to a slim corner, the right is an open overhanging groove leading to a thin crack. Climb the deceptively overhanging glassy groove by a series of very strenuous moves (reasonable protection). Finish up the much easier thin continuation crack. An excellent route.

Head to Head – 25m E2 5b.

Start just to the right of the left end of the diagonal fault. Go up the wall to gain the fault. Move right on sidepulls to gain the slim corner (protection difficult to arrange). Climb the corner to below the capping block (of dubious stability). Pull left on to the edge to finish. A fine route.

Short and Sweet – 12m VS 5a.

Start at a rounded flake on the left flank of the crag, just left of the diagonal right trending fault. Ascend bulging red rock to better holds on the wall above. Climb to below a shallow groove cutting through overhanging rock. Up the groove (strenuous) to belay on a ledge right of a sapling.

FANNICHS, Creag a' Mhadaidh (see SMCJ 1991):*Into the Groove – 95m IV. J.M.G. Finlay, G.E. Little. 21st December, 1991.*

Lying on the lower right hand wall (rising directly above the loch), this route ascends the groove left of centre, demarcating steeper cleaner rock on the right from slabby, more vegetated rock on the left. Climb the groove in three pitches, the final pitch taking the right hand exit up a shallow blocky slot. The left hand exit is a deeper chimney blocked by several large roofs. Descend to the left down the obvious ramp dividing the upper and lower crags.

A Saucer Full of Secrets – 240m IV. J. Finlay, G.E. Little (alt). 31st January, 1993.

A surprisingly good route starting at an obvious icefall half way up the ramp that divides the main crag from the lower right hand wall, then continuing up an open groove above on the same general alignment. Climb the initial icefall by a zigzagging line to belay on the left (45m). Continue up to gain a wide snow ramp. Up this to belay at a short rock wall on its upper side (40m). A short distance further on an open icy groove runs up to the right from a snow bay. Gain and climb up this belaying on the left (45m). Continue up the groove, belaying on the right (40m). Continue up and out of the groove on to a small snowfield, belaying on the right (45m). Easy snow leads to the top (25m).

BEN WYVIS, Creag Coire na Feola (NH 470 668):

Approach: From Newhouse (NH 501 602), which lies off the Achterneed road, the Forestry Commission track (with permission) can be taken through the plantations, taking the first right, for 2.7 miles to a small car park. This track is usually blocked in snowy weather. Cross straight across the moor to the second fire break and follow this through trees and then diagonally across more moor to join a track, exiting at a gate which is diagonally to the north east from the car park. Contour up the slopes of point 890m to the east, rounding the shoulder into Coire na Feola. The crag is on the east wall above some small lochans. Two hours in good conditions. In poor light, the forestry track is extremely hard to find on the return. The Forestry Commission gate is directly below the shallow gully that splits the southern slopes left of point 890m. Avoid the temptation to swing too far right once on the moor, but cross directly to small trees opposite and follow the moor to the narrow fire break. The crag is remote and in some conditions it may be quickest to head over the summit from the usual Garbat approach.

Layout: The crag faces north east, is 200m in height with a base at 650m. It is a large wedge of rock tapering to a snow arete, flanked by icefalls on the left and right. Extensive cornices run the length of the coire and exits in some conditions may entail much traversing or lengthy tunneling.

Descent: There are no foolproof descents apart from the contour in at the mouth of the coire due to the considerable avalanche potential of open slopes either side of the crag. If descending from the summit, beware the potentially dangerous slope that falls south. An often safer alternative is the slopes of An Socach opposite the crag.

Discovery Buttress – 255m III/IV. D. Broadhead, J.R. Mackenzie. 29th December, 1992.

Start left of the toe of the buttress at the apex of a bay and climb a right trending groove to a snow patch (30m). Move right and climb a steepening groove to below an icefall, move left to a well positioned belay stance (30m). Depending on conditions, either climb the icefall above or traverse right and climb iced rocks (30m). Climb a narrow icefall above with a steep exit on to mixed ground, traverse left round a rock nose and gain easier ground above a short corner (45m). Climb up a snowfield and belay below a rock tower (60m). Climb the left hand runnel through the tower and gain a fine snow arete which steepens to a corniced exit (60m). A good mountaineering route.

Gael Force Grooves – 225m III. J.R. Mackenzie, M. Hind. 31st January, 1993.

The broad icefall to the left of Discovery Buttress varies with build-up; in full conditions a fine plume forms centrally. Climb the plume to traverse left to belay (35m). Climb up to the icefall above, taken on the right side, to enter a shallow gully, ice screw belays (50m). Climb a fine ice pitch up left and continue up more open ground to a central rock bay (50m). Climb the open slopes, then steepening snow to a massive cornice, penetrated by a deep crevasse. Without this feature, traverse right from the bay and finish at the snow arete of Discovery Buttress?

Walking on Air – 190m IV/V. G. Cullen, J.R. Mackenzie. 28th February, 1993.

Towards the right end of the main buttress is a hanging corner which forms an icefall; this is to the left of a much shorter icy corner. Climb up the steepening corner to a recess on the left. Step up right to a ramp which is followed right (40m). Climb the steepening icefall above to rock belays on the right below a watertight cave (55m). Climb past the cave on ice to a shelf below a steep barrier wall and traverse left to a slanting crack which lies left of centre on this wall. Climb the crack and ice groove above to the crest (35m). Climb the snowfield to the summit rocks and belay near a groove at the right end (35m). Climb the groove to the plateau (30m). A very fine route but pitch 2 was unprotected thin ice (grade V but IV expected in full conditions).

SGURR A' MHUILLIN (Strathconon), Creag Ghlas, West Buttress:

Evening Arete – 90m VS. R. Brown, J. R. Mackenzie. 20th May, 1992.

To the left of Spare Rib is a fine-looking clean cut edge that appears to form the right hand boundary of the cliff when approaching from below. Scramble up broken slabs to the base. 1. 30m 4b. Climb the edge awkwardly to a heathery groove. Move up this to a prominent bollard on the arete. Climb the slab direct to the bollard and belay. 2. 40m 4c. Climb the imposing edge above, initially up a crack, then by thin cracks just right, until possible to climb the bold arete directly but quite easily to level with the leaning overhang on the left. Follow shallow grooves that cut up left above the overhang to an awkward landing above (4 Friend belay back in the corner). 3. 20m. Scramble up the easy gully above which has a traditional but avoidable wide crack. Descend the steep heather gully which runs down behind Spare Rib.

Wandering Minstrel – 70m VS. M. Hind. 7th June, 1992.

A pleasantly indirect line taking the easiest climbing on the face. There is little protection. Start as for Spare Rib and climb the broken slabs up and left to a terrace (35m). Above is a pale slab; climb cracks slanting up right which run left of two shallow corners. Traverse up and left across the right hand corner and continue traversing above the second corner to reach a square-cut sentry box on the left of the buttress. Finish up this (35m, 4b).

Glass Slipper – 85m HVS. R. Brown, J. R. Mackenzie, M. Hind. 7th June, 1992.

A very fine route taking an implausible line for the grade. To the left of Evening Arete is a steep slab with a prominent curving overlap running up its right side. Start below the introductory slab which has a central crack. 1. 10m 4c. Climb the slab by the crack to a flake below the curved overlap. Alternatively, climb the right edge of the initial slabs at 5a to the same point. 2. 20m 5a. Gain the overlapped corner above by the crack and follow this tenuously to an easing and traverse left along the handrail to a narrow stance. 3. 35m 4c. Climb the steepening cracks above which are well protected to a stepped ledge. Climb the spike on the right and traverse left below the top slab avoiding heather to a wide crack (optional belay). Finish up this easily and belay back in the corner. 4. 20m. Scramble up the gully with the option of the short traditional crack to finish.

EASTER ROSS OUTCROPS, STRATHCONON CRAGS, Scoop Crag (NH 374 565).

Approach: Take the minor road either along Strathconon and cross the Meig dam to the first large layby on the left opposite a Forestry Commission gate or drive along the minor road that leads to Glenmarksie which leads the A832 beyond Contin and marked Loch Achilty, to the same layby. Walk through the gate and follow the forest track which

zigzags through the trees to exit by a gate up on the right; Scoop Crag lies up right, allow 15 minutes. The crag faces south and is a suntrap, drying quickly and climbing is possible for much of the year.

Layout: A sinuous curving scoop is the obvious feature with a steep headwall above, steep rock to the left and a sharp arete to the right. A shorter section of crag lies to the left of a slanting corner. The crag is quite narrow but gives routes up to 24m. The rock is a particularly smooth schist. A line of metal fenceposts above provide good belays. The routes are described left to right.

The Spike – 20m VS 4c. R. Brown, J.R. Mackenzie. 23rd February, 1993.

A good line on the left of the main crag. Start below a lobe of slab right of a tree and right of the slanting corner. Climb the lobe and gain the scoop. Follow a left slanting break on hidden holds and climb the left arete to the top.

Fleetstreet Hack – 20m E1 5b. R. Brown, J.R. Mackenzie, R. Scott. 7th March, 1993.

To the left of The Scoop is a short steep wall. Climb the wall via an inset corner and then more easily to the headwall. Step right to its centre and climb the thin wall to a recess and the top. A high side runner in The Scoop's crack provides the only protection until the recess. Some fine climbing.

The Scoop – 24m HVS 5a. J.R. Mackenzie, R. Scott, R. Brown. 7th March, 1993.

A fine delicate climb of considerable interest. The obvious scoop provides the line and is initially delicate padding to a horizontal break. Traverse left along this to the easier slab above and follow this up left to below a crack. Climb up to the crack and finish up it.

Brass Monkey – 20m E3 6a. M. Hind, R. Scott. 14th March, 1993.

The very bold and thinly protected wall to the right of Fleetstreet Hack. Climb the scoop of The Scoop and then ever thinly up the slab to the wall. A scattering of small RP's provides the only protection; probably better not to fall off. The adjectival grade assumes prior knowledge of the obscure gear placements.

Confectionary Arete – 20m V. Diff.

The attractive right arete of the crag has that weighty E number look about it. In fact it is a piece of for the grade. Start at the break a few metres up level with the top of the lower scoop; for an unprotected slither, climb the arete from the base.

Hidden Crag (NH 372 562):

Approach: As for Scoop Crag to exit by gate up on right. Hidden Crag lies down to the left; allow 10 minutes.

Layout: The crag is quite unlike anything else in the glen. It is a long smooth black wall set at 80 degrees, split by several striking left slanting crack lines and covered in small positive holds giving fingery yet delicate climbing. The crag is 13m in height by 40m in length. Having a flat grassy base and facing south the crag has a pleasant feel about it. A smaller outcrop adjoins the main crag to the right. There are two in situ belay spikes in the heather, one near the centre and one nearer the right hand end of the main crag. The crag takes drainage from the hillside and takes a day or two to dry out. The route are described from right to left.

Hoist by one's Own Bullshit – 13m HVS 5b. R. Brown, J.R. Mackenzie, G. Cullen (all led). 7th February, 1993.

Towards the right end of the main crag is a flat topped pedestal below a left slanting crack. Start immediately right of the pedestal and climb straight up fingery flakes, step right to a ledge, finishing up the pleasant rocks above. A well protected crux and quick drying.

Chinese Eyes – 24m E1 5b. R. Brown, J.R. Mackenzie. 7th March, 1993.

A fingery climb taking the prominent left slanting crack. Start as for Hoist and climb to the crack, making initially difficult moves along it. The crack eases with height and then exits up the wall. A good climb but slow to dry.

Shield Bug – 13m E1 5b. M. Hind. 9th February, 1993.

To the left of the left slanting crack is a shield of flakes. Climb these and the wall above.

The Barker – 13m E2 5c. J.R. Mackenzie, R. Scott, R. Brown. 7th March, 1993.

A climb with considerable bite. To the left of the flakes of Shield Bug is a narrow crack. The crack provides most of the protection and some of the holds whilst the wall to the left provides most of the holds and some of the protection. The best climb on the crag with constantly sustained and interesting climbing.

The Pledge – 13m E1 5b. M. Hind. 9th February, 1993.

Well to the left of The Barker is a smooth wall with a small overlap and ledge above at about one third height. Climb up the smooth wall to the ledge and finish directly above; a sustained route.

Creepy-Crawly – 12m E1 5b. M. Hind. 9th February, 1993.

Near the left end of the crag is a slanting crack. Climb the wall to its right direct.

Aspen Crag:

Sloshed in Action – 20m E2 5c. J.R. Mackenzie, M. Hind, R. Brown. 29th April, 1992.

An exciting excursion over the overhang right of Shadow Grasper. Start at the tree belay at Meridian's start and climb up to the roof, PR. Surmount this on the left, strenuously, then continue more easily up a groove and slab to finish up a short groove.

Gobstopper – 20m E3 6a. R. Brown, J.R. Mackenzie. 16th May, 1992.

Climbs the big roof between Sloshed in Action and Licking the Lip; a most unlikely looking line for the grade giving the most exciting and serious climbing here. Start at the tree as for Meridian and climb straight up to the roof, poor PR above. Commit yourself to the unknown and gain the lip, cut loose, swing round to jugs (1 Fr runner above) and pull up and over. Straight up the slab to the big tree and have a rest.

Licking the Lip – 16m HVS 5a. R. Brown, J.R. Mackenzie (both led). 29th April, 1992.

A very unlikely looking climb for the grade. Start to the right of Meridian's tree directly below a block beneath the roof. Climb delicately to it, step right, then swing through the overhang on the largest holds on the crag to finish up the slab above.

Meig Crag:

Gabbro Slab – 22m VS 5a. J.R. Mackenzie, G. Cullen. 11th June, 1992.

Probably the best of the easier lines, being on excellent rock with more than ample protection. Climb the centre crack of the slab to a fault and step right to the crack's continuation to pull up to a small tree and heather.

The Rake – 18m V. Diff. M. Hind (solo). Summer, 1991.

The obvious slabby rake at the right end of Gabbro Slab.

The Promenade – 20m VS 4c. M. Hind (solo). 2nd July, 1992.

Climb *The Rake* to a stance below a steep headwall which has a left slanting break to its left. From the stance, climb a cracked wall and move left to gain the break which is followed to the top.

Dancing in the Rain – 20m E3 5c. M. Hind, J.R. Mackenzie. 3rd July, 1992.

A bold poorly protected pitch up the steep headwall. Start up *The Rake* to the stance. Climb the initial crack of *The Promenade* but continue straight up on underclings to reach the tempting but oh-so-far away crack above.

Sidewinder – 20m VS 4b. M. Hind (solo). 13th May, 1992.

Lies up the buttress bounding the left of *Limited Liability*. Start below the corner and scramble left over the blocks. Climb up and trend right towards the edge before traversing left below the final wall to finish on the grass ledge below the short top rocks. Either abseil off or traverse right to the end of the crag at this level. The bay behind has a couple of obvious finishes, the left bounding corner being V. Diff and the chimney being Severe.

The Wee Nibble – 10m HVS 5b. M. Hind, J.R. Mackenzie (both led). 14th June, 1992.

Start from the ledge above the blocks of *Sidewinder* and climb the wall direct via a crack to the finish of *Sidewinder*. Only a few moves but in a good position.

Yellow Streak – 22m E3 5b. M. Hind, R. Brown. 10th June, 1992.

Between the corners of *Limited Liability* and *Meig Corner* are a central groove and a yellow streaked one to the right, both overhanging considerably. Climb the yellow streaked groove which gives serious but technically reasonable climbing (vital 3 rock runner) to a strenuous pull over the bulge to a rest. Continue straight up the bulging top wall which has better protection. As good as any climb here but needing a positive attitude.

Angst Arete – (new description, more direct).

Right of *The Birch* is an overhanging arete with a horizontal gash at three quarters height. Start left of the birch tree and climb flakes left and up to a big hold. Climb the thin but well protected crack above to below the overhang and climb this on positive holds to finish up a glacia. An elegantly strenuous route packing in much interest.

The Go-Between – 10m VS 5a. M. Hind, R. Scott. 13th May, 1992.

The short wall just right of *Angst Arete*. Start at the birch and climb the wall to a sapling. Continue straight up to finish.

CAIRNGORMS

LOCHNAGAR:

Sunset Buttress – 75m III,4. J. Ashbridge, S. Richardson (AL). 21st November, 1992. A short winter route based on the summer line. Easier than it looks from below. Start directly below the prominent right facing corner in the upper half of the buttress. This is a few metres right of the summer start.

1. 35m Climb a shallow right facing turf fault (1PR) to a ledge. Move up and left to a belay at the foot of the corner. 2. 45m Climb the corner, at first on the right, to reach the top of the buttress. An easy ridge leads to the plateau.

Shadow Rib, Direct Start – 70m V, 5. G. Strange, W. Church. 31st January, 1993.

Start at the foot of the slabby rib just right of Shallow Gully. Climb twin left facing grooves overlooking Shallow Gully and continue directly up the crest to join Shadow Rib Ordinary.

Moonshadow – 225m V, 5. S. Richardson, J. Ashbridge (AL). 21st November, 1992.

The well defined buttress between Shadow Chimney and Giant's Head Chimney Direct. Start at the foot of Giant's Head Chimney.

1. 40m Climb diagonally up and left for 15m to enter a steep right facing corner. Climb this and exit left on turf. Continue behind a large boulder to a belay in Shadow Chimney. 2. 25m Immediately leave the chimney by climbing an awkward wall on the right which leads to a hidden ramp which cuts back right on to the crest of the buttress. Pull over the small roof above to reach a good ledge. 3. 40m Continue easily for 15m to reach a steep slabby wall cut by parallel cracks. Climb the right side of the wall up a left facing corner and finish up easier ground to reach a ledge. 4. 40m The steep 5m corner behind the belay leads to a right trending line of weakness. 5,6. Continue up mixed ground to reach Shadow Buttress A below the final steep step. Climb this to the plateau.

The Pinnacle:

White Mischief – 120m VI,8. A. Nisbet, J. Preston. 24th December, 1992.

An unclimbed feature but close to Pinnacle Face at times. During the third pitch, it merges with Winter Face but all the routes are interchangeable here. A little thin ice was present. Start 10m down from Pinnacle Face, at the same point as Katsalana, which goes out diagonally left.

1. 20m. Climb straight up a shallow right facing corner. Just before reaching Pinnacle Face, swing out left into the start of a left slanting corner line. 2. 20m. Pull out above the corner and climb cracks in the rib next to Pinnacle Face, then move back into the corner above a step and follow it past a bigger step to belay. 3. 45m. Climb straight up on thin ice (on this occasion) to join and follow Winter Face. 4. 35m. Winter Face was followed and a short descent made to the Springboard, from where an abseil descent was made.

Note: A free ascent of Pinnacle Grooves by S. Richardson and J. Ashbridge on 23rd January, 1993. A superb line climbed under very snowy conditions. VII,7 on the day, but the grade could drop to VI,7 with less ice in the crack and therefore better protection.

West Buttress:

Bell's Pillar – 120m V,5. B. Findlay, G. Strange. 25th October, 1992.

This is the old Gargoyle Chimney Variation with an independant start. It climbs the narrow rib between Gargoyle Chimney and the shallow gully of Gargoyle Direct. Start

just right of Gargoyle Chimney and climb a shallow left facing corner until possible to swing right on to the crest. Follow the line of least resistance for three pitches to below the Radar Wall. Skirt left below this and finish up the fault just right of Gargoyle Chimney's central depression.

BROAD CAIRN BLUFFS:

Two's Company – 40m E3. S. Richardson, J. Ashbridge. 5th September, 1992.

A technical route up the wall and arete right of Solitaire. Start 3m up and right of the toe of the buttress below a prominent corner.

1. 15m 5a. Bridge up the corner to a good jug on the right and continue up past the block to belay as for Solitaire. 2. 25m 6a. The wall right of Solitaire is cut by a small discontinuous crack system. Climb the crack past a peg to a good hold on the right (crucial rock 3 runner in crack on left). Continue to a small niche, step right (crux), and climb the arete above on good but hidden holds to the top.

CREAG AN DUBH LOCH:

The Last Oasis. The obvious direct finish up steep ice was climbed by D. Hawthorn and F.R. Malcolm in January, 1993.

Broad Terrace Wall:

The Sting – VII,6? D. Dinwoodie, D. Hawthorn. January, 1993.

A very steep icefall forms near the summer route and was climbed straight up to finish at the same point on the plateau as Bower Buttress.

Central Slabs:

Dragon Slayer, alternative finish – V,5? D. Hawthorn, C. Ord. January, 1993.

The great pink diedre above the Terrace often fills with ice. Its relevance to Dragon Slayer is even less in winter.

BEINN A' BHUIRD, Garbh Choire:

The Sacrement – 175m E2. S. Helmore, S. Richardson. 13th September, 1992.

A traditional mountaineering route between Mitre Ridge Direct and Cumming-Crofton Route.

1. 30m -. As for Cumming-Crofton Route pitch 1. 2. 25m 4c. Climb the wall above the belay to enter the corner which leads to a ledge on the crest. 3. 15m 4a. Straight up the edge (as for the Archbold/Towler variation) to the foot of the first tower. 4. 25m 5b. Climb the right hand of twin cracks to the top of the tower – a strenuous and serious pitch. 5. 20m Scramble along the ridge to the notch below the second tower. 6. 20m 4c. Climb the crest of the ridge to the left of Bell's Variation. Delicate to start. 7. 40m Scrambling leads to the plateau.

COIRE SPUTAN DEARG:

Zircon – 120m E2. S. Richardson, J. Ashbridge (VL). 7th June, 1992.

A good line to the left of Amethyst Pillar. Excellent sustained climbing. Start 10m below the chimney of Amethyst Wall.

1. 10m 4c. Step on to the slab on the right and climb up to a large ledge. 2. 35m 5c. Follow Amethyst Pillar for a few metres and then take the crack system trending left. Pass below a long narrow rectangular roof, climb the steep crack system 3m to its left and make a strenuous exit on large holds to reach a ledge. 3. 25m 5a. Continue up the left facing chimney groove directly above, which is left of the flake pitch on Amethyst Wall. 4. 20m

5c. The next pitch climbs the steep wall between the crux pitch of Amethyst Wall and McCartney's Variation. Gain a small sloping triangular ledge from the right and follow a line of flakes diagonally left across the wall to a steep finish on the left arete. 5. 30m
4a. Easy cracks and grooves lead to the top.

Joker's Buttress – 40m HVS 4c. S. Richardson, J. Ashbridge. 7th June, 1992.

Between Flake Buttress and Spider Buttress is a three tiered triangular slabby wall. A fun route on perfect granite, but considerably harder than it looks. Start in the centre of the buttress and climb a chimney formed by a large flake. Continue up the crack on the left and make an awkward mantelshelf on to a ledge. Surmount the next wall by a fierce layback (crux - Friend 2). Climb the final tier by a ramp which trends from right to left leading to the apex of the buttress. Scrambling (40m) leads to the plateau.

CREAGAN A' CHOIRE ETCHACHAN, The Bastion:

Original Route Direct – 150m V,6. J. Ashbridge, S. Richardson (AL). 29th November, 1992.

Follow the summer route exactly. A good winter line, perhaps the most logical on the face. The V-groove on the second pitch was the crux, but may ice to become easier. The Red Slab was banked out and exit on the right wall gave a good ice pitch.

Pioneer Buttress:

Cambridge Route Direct – 180m IV,5. S. Richardson, S. Helmore (AL). 6th December, 1992.

This mixed climb is a more direct version of Cambridge Route. It starts up the original summer line, which was the first recorded route on the cliff, but continues directly where the original escapes left to join the easier angled edge overlooking Square Cut Gully. Start just left of the initial gully of Pioneer Buttress Direct.

1. 45m Climb a slab to gain a large groove which slants up left. Follow this for 10m to reach the base of a wall (the original route escaped left from here). Climb the wall and continue directly up a series of steep grooves to a snow shelf beneath a steep cracked wall. 2. 15m Traverse right beneath the wall and move up to join the left facing corner system of Pioneer Buttress Direct. 3-5. 120m Follow the corner to the top of the crag.

The Red Snake – 90m V,4. A. Nisbet, G. Ollerhead. 28th December, 1992.

A line of ice which passes the left edge of the big overhangs above the upper meadow. Gain the upper meadow (60m) and belay as for The Serpent/Umslopogaas ie. just right of Carmine Groove.

1. 50m. Climb ice just right of a corner (start of Umslopogaas) but continue direct towards the overhangs. Step left on to the top of Serpent's initial V-groove, then go diagonally left up a slab past the left edge of the overhang into a shallow groove. Up this to belay. 2. 40m. The groove soon becomes easier and is followed to snow.

Umslopogaas – 95m V,7. A. Nisbet, G. Ollerhead. 29th December, 1992.

Serpentine variations on the summer route to avoid the slabby base of the big corner. Start as for summer, at the same place as The Red Snake.

1. 30m. Climb ice overlaying the summer route, then break out right on thinner ice to a short wall below Serpent corner. With no ice, a line further right could be taken. Climb the wall strenuously into the base of the corner. 2. 10m. Climb the corner to Serpent's traverse into Red Chimney, then make an improbable pull out left on to the 'nook' on Umslopogaas's right arete. The belay here is optional. 3. 10m. Cracks in the slab led to a big ledge above the corner. 4. 45m. Step left and follow grooves parallel to Red Chimney to the top.

Djibooty – 140m V,3. A. Nisbet, G. Ollerhead. 28th December, 1992.

In good conditions (and these were excellent), there are twin icefalls in the Djibangi area. One forms down Djibangi and its direct start. The other (this route) forms down the summer route In The Pink (named after pink water-washed rock) and continues down the normal summer start to Djibangi. It has often been used in winter to start Djibangi. It gave three long ice pitches, deviating to take a belay at the base of Djibangi corner, then moving back left for 30m of superb but unprotected climbing up the slab (hence the unusual grade) to iced grooves leading to the top.

STAG ROCKS:

Monarch of the Glen – 160m VS. E. Lawther, J. Lyall. 16th September, 1992.

As for the winter line, except on pitch 2 where the swing left is avoided by going straight up the initial groove, finishing by steep blocky rocks to gain the first ledge. 5a,4b,-.

CARN ETCHACHAN, Upper Tier:

Solstice – 90m VI,8. A. Nisbet, J. Preston. 22nd December, 1992.

Climbs the crackline in the wall between Time Traveller and Equinox. Start about 10m right of Equinox.

1. 35m. Climb a turf fault to a huge ledge. Go left along the ledge to belay on Equinox.
2. 20m. Climb the crackline with a very thin start, then sustained to a good ledge.
3. 35m. Continue more easily up the crackline, then step right and up a corner leading to steep snow and the cornice.

Apogee – 90m V,7. G. Ertle, J. Finlay, A. Nisbet. 4th January, 1993.

Climbs the right side of the Equinox fault. Start as for Solstice and belay at the right side of the huge ledge (30m). Continue in the same line with a hard start, then a chimney about 5m right of Equinox to belay below a bigger chimney (35m). Climb this constricted chimney (as for Equinox) but finish direct (25m). Finish out left as for Equinox if there is a big cornice.

STAC AN FHARAIDH:

Pushover – 140m IV. C. Steer, S. Steer. December, 1992.

The crux was the overlap, climbed by an icicle and thinly iced wall.

Note: S. Steer and J.J. also climbed Pippet Slab at II/III the same month.

COIRE AN t-SNEACHDA, Aladdin's Buttress:

The Third Wish – 60m V,7. G. Ertle, J. Finlay. 26th January, 1993.

A line between The Lamp and Prodigal Principle. Start 5m right of The Lamp.

1. 30m. Climb through very steep scrappy ground (crux) to grooves which lead on to the diagonal ramp of The Lamp.
2. 30m. Follow The Lamp up right to where you can see its top pitch. Step left into an obvious wide crack which leads to easy ground.

Kuryakin's Corner – 45m VI,7. N. Main, J. Preston. 21st November, 1992.

Start 5m left of Honour Among Thieves (near Mirror Direct) at a corner with two right leading roofs. Climb the corner and round the roofs. Continue up the corner, gain the arete just below where the corner merges with the slab, then finish up the slab.

Fluted Buttress:

Piccolo – 70m V,6. S. Aisthorpe, J. Lyall. 30th March, 1992.

Eliminate, but good climbing with a bold crux. The main feature of the route is a groove line running up the right side of the Fluted Buttress chimney. Easy short walls lead to

a belay before a slab which blocks the foot of the groove. Gain the slab and cross it leftwards (crux) to the groove. Climb this surprisingly steep line to belay at the top of Sax Appeal (40m). Climb the steep rocky crest above and finish by Cruising.

Note: G. Ettle and J. Lyall note the following finishes to Spiral Gully, climbed on 31st March, 1993.

Where Spiral Gully bends right, the original direct finish goes straight up through the upper rocks (III). The first groove right of this leads to a ledge on the left (20m). A blocky wall on the right, then a finish up the arete (25m). Grade V,7. The next groove right of this is steep but very helpful, 35m,IV,5.

Note: Smokestack Lightning was repeated by climbing the steep corner to the right of the aid point. Very strenuous, 1 rest (G. Ettle, J. Finlay, N. Hitchins).

Note: Two routes have been submitted from the more broken buttresses in Coire an t-Sneachda. These have been climbed before, probably several times by Glenmore Lodge parties and certainly by the Editor. The next Cairngorms guide will be more specific but for now, the following have been climbed at low grades.

Mess of Pottage, right section. Four routes. Buttress right of Jacob's Ladder. Several lines left of Aladdin's Couloir. Slabby lines right of Aladdin's Mirror. Buttress between Central Gully and The Runnel. Buttress between The Runnel and Crotched Gully. Several lines on Fiacail Buttress right of The Seam.

COIRE AN LOCHAIN, No. 2 Buttress:

The Inquisition – 80m HVS. J. Lyall, D. Bulmer. 20th June, 1992.

A surprisingly worthwhile summer route despite the reputation of No. 2 Buttress for loose rock and vegetation. Pitch 2 is different from the winter line.

1. 50m 5a. The superb smooth corner followed by easy ledges to below a steep prow just left of the cul de sac gully. 2. 20m 4c. A steep crack up the prow, followed by moves left to a ledge. Go leftwards up the wall and on to the higher of two platforms. 3. 10m 5a. Overhanging crack and flake to plateau.

Snow Bunting – 90m III. R. Anderson, G. Ettle. 26th January, 1992.

Climbs the easy ground between Central Crack Route and Crow's Nest Crack. Start in The Couloir, beneath the short dead-end left branch.

1. 45m. Climb the left branch of The Couloir and move up left to a ledge as for Crow's Nest Crack. Belay at the left end of the ledge. 2. 45m. Step left and climb the easy angled snow bay until a wide stepped crack on the left can be climbed. Move right under a roof and then up to easier broken ground leading to the top.

No. 3 Buttress:

Nocando Crack – 80m VII,8. A. Nisbet, J. Preston. 9th December, 1992.

A superb and sensational route; gravity defied previous attempts.

1. 25m. As for The Vicar/Nocando summer route, with precarious moves exiting from the initial overhanging corner, to belay on the first ledge after moving right below a jutting block capping a short overhanging corner. 2. 15m. Continue up the summer route to belay below the huge flake. Strenuous but safe. 3. 40m. The free summer version goes up the right side of the flake. The original summer line was taken, aiding directly up the 5m wall just left of the roof formed by the base of the flake. Poor pegs initially, then good nuts, and the second half might go free in daylight. From the subsequent ledge, traverse left to avoid a wide crack and return right to finish at the top of the gully of Ewen Buttress.

Note: The subsequent ascent of The Vicar proves that the wall right of the flake is possible, probably free but certainly with only 1PA and future ascensionists are recommended to try that way.

The Vicar – VII,8. G. Ertle, A. Nisbet. 20th December, 1992.

An even more sensational route, perhaps harder than Nocando Crack but climbed in better conditions.

1. 20m. As for summer but belaying below the jutting block. 2. 10m. The rest of summer pitch 1. 3. 40m. Strenuously up the corner using the wall on the left to where the corner crack becomes blind. Move out on to the left wall and climb cracks which lead close to Nocando Crack summer route. The chokestone at the top of the Nocando flake was lassoed with slings, then thin moves made back to The Vicar summer route. This was followed to the top.

Overseer Direct – 60m IV,6 N. Main, A. Nisbet. 28th November, 1992.

A direct and independent finish to Overseer which should become the normal route. After the two corners, climb direct to the base of a capped chimney. Pull out left and climb a vertical corner to emerge on easier ground. The grade applies to both the finish and the complete route.

No. 4 Buttress:

Prore – VII,8. G. Ertle, R. Milne. November, 1992.

By the summer route. The crux is moving up the wall near the arete after the initial traverse out right. This is very thin and protection hard to arrange. Unsure of grade.

Torquing West – 115m. VI,7. A. Nisbet, J. Preston. 2nd December, 1992.

Climbs the front face of the buttress, right of Western Route. Direct but escapable. Short hard sections, with good protection though not always obvious. Start just left of Torquing Heads.

1. 15m. Work up and a little left on ledges (thin, some ice will assist) to the base of a short right leaning corner. Climb this strenuously to belay on the ledge above. 2. 15m. Climb the steep wall above and right of the corner and pull strenuously into the easier angled fault above. 3. 40m. Continue up the fault and where it leads into the top chimney of Western Route, move right and belay below a steep band. 4. 25m. Go right towards Torquing Heads, then climb blocks which give access to a ledge leading precariously back left. Pull over a bulge and climb a short chimney to easy ground. Scramble to the top (20m).

Western Slant – 120m III/IV. R. Anderson, C. Anderson. 1st December, 1990.

Start up right from Torquing Heads at the right hand end of the crag where an obvious short chimney is visible up on the left.

1. 30m. Traverse left to gain the chimney which is climbed over a chokestone to a fault leading left to a belay beside the groove of Torquing Heads. 2. 30m. Traverse left across Torquing Heads, climb up then left to drop down into the wide gully fault of Western Route. Move up to belay. 3,4. 60m. Continue up the fault to the top.

SRON NA LAIRIG:

Sinclair's Last Stand – 150m III. B. Findlay, G. Strange. 15th March, 1992.

Climbs the central grooves on the face immediately right of Lairig Ridge. Start about 30m up right from the lowest rocks at an ice smear. Climb the smear and the groove above to belay below a short wall (50m). Turn the wall on the left, then go up slightly right and climb the next groove (40m). The smooth final groove is very thin so traverse left to a big flake on the edge and climb to the crest of the ridge (20m). Continue up the ridge to the top (40m).

Note: The right groove is Gormless, Grade III.

HIGHLAND OUTCROPS

Another guidebook in production. A large number of routes have been climbed but space limits their reproduction here. The guide will include the crags in the Creag Dubh and Creag a' Barns guide (Cuthbertson) plus crags near Polldubh, Binnein Shuas (summer), Strathspey and Inverness (south of Great Glen). Scheduled for mid 1994.

CENTRAL HIGHLANDS

BEN LAWERS, Creag Loisgte (NN 632412):

This small crag lies on the south flank of the south west ridge of Ben Lawers and is well seen when approaching Ben Lawers from Beinn Ghlas. The main feature is a narrow crested rib right of a snow bay, delineating the west side of the crag.

Balcony Rib – 80m III. G.E. Little. 4th April, 1992.

A delightful little route climbing the tower-like front face of the rib to gain the perfect knife-edged snow arete above.

Front Stalls Gully – 80m II. G.E. Little. 4th April, 1992.

The gully immediately right of Balcony Rib with one ice pitch.

Back Stalls Gully – 70m II. G.E. Little. 4th April, 1992.

The second gully to the right of Balcony Rib with one short pitch near the start (may bank out).

Aisle Gully – 60m III. G.E. Little. 4th April, 1992.

Steeper and narrower than the previous two gullies with a difficult constriction at half height.

BEN NEVIS

East Face of Tower Ridge:

Chimney Groove – 90m IV.6. D.F. Lang, A.C. Stead. 27th February, 1993.

There is no record of a winter ascent of this route, although it frequently sports an abseil sling. The groove was gained by a traverse from the foot of The Great Chimney and climbed to a flake belay below a bulge (old peg on left wall). Climb the bulge (crux) and easy ground to the ridge crest. The route is mostly grade II, with a short crux which could be avoided by the slabs on the right in a good build-up, with a subsequent drop in grade.

The Comb :

The Good Groove – 140m VII.7. S. Richardson, R. Everett (AL). VII.7.

This excellent icy mixed climb takes the striking curving groove which cuts the triangular headwall of The Comb. Start by climbing Comb Gully for 70m to the beginning of Hesperides Ledge.

1. 40m The only line of weakness cutting the steep wall above Hesperides Ledge is a tiered ramp which slants up right, then left. Climb delicately up to the start of the ramp, then move left with difficulty along the second narrow ramp which leads to a corner. Follow this to a belay at the left end of the curving groove, just to the right of the icfall of The Comb, Left Flank. 2. 25m Follow the groove up and right to a small stance below a steep tapering corner. 3. 25m Move up into the corner and climb it with increasing difficulty to its top (crux, 1 rest). Continue up the continuation corner and step left at its top to reach a good platform. 4. 50m Climb the wall above the belay to reach a sharp horizontal ridge which leads to the plateau.

South Trident Buttress:

Kellet's Groove Climb – 80m V,6. A. Clarke, J. Main. 22nd December, 1992.

Above the left end of the snow slope under the middle tier is a deep chimney groove identified by a small pinnacle at its exit. Follows the thinly iced groove to a deep cave chimney with an awkward exit over a capping chockstone to easier ground. The summer line follows easy cracked slabs right here; the winter line follows a leftward slanting iced ramp.

Carn Dearg, North Wall:

The Shroud – 200m VI,6. A. Clarke, J. Main. 2nd February, 1993.

Climbs the impressive overhung icefall left of Harrison's Climb Direct.

1. 50m Climb an ice gully and slope above to belay at the right side of the icefall. 2. 25m Climb the centre of the icefall to belay on a narrow ice ledge right of the free hanging fang. 3. 25m Follow the free hanging fang to reach the upper ice wall. Semi-hanging belay on ice screws. The icicle was 1m short of connecting with the ledge. 4. 50m Continue up the ice wall to reach easier angled ice. Belay below an ice wall. 5. 50m Climb the ice step above to easy ice leading into the hanging snow coire.

AONACH MOR, Coire an Lochain:

The Ribbed Walls area. Between Muddy Waters and the deep cleft of Temperance Union Blues is a small recess defined on the right by a sharp narrow arete and on the left by a broad buttress.

Barrel Buttress – 60m IV,4. S. Kennedy, S. Thirgood. 7th February, 1993.

Climbs the broad buttress on the left of the recess. Start just right of the foot of the buttress and climb the buttress direct, avoiding a steep rock wall near the top on the left. Climbed entirely on ice in unusual conditions.

Nid Arete – 90m IV, 5. S. Kennedy, S. Thirgood. 7th February, 1993.

A good well protected route following a groove line just to the left of the narrow arete mentioned above. Climb the grooveline throughout, finishing up the rightmost groove at the top (overlooking the final section of Temperance Union Blues).

AONACH BEAG, Stob Coire Bhealaich, East Face (SMCJ 1989, p291):

Helter Skelter – 240m IV,4. S. Kennedy, D. Ritchie. 21st February, 1993.

A serious route following a wandering line up the steep face between The Ramp and Sideslip. Frozen turf essential as is some route finding ability. Start a short distance left of The Ramp and take the first feasible looking line leading out rightwards on to the face. Climb up and rightwards aiming for a prominent rocky beak projecting from the middle of the face. Belay on top of the beak. Follow a vague grooveline above the beak to a shallow cave. Climb up to a rockband running across the face and follow a hidden ramp back up left. Climb back up rightwards below another rock band before pulling out left above by a narrow shelf. Continue up broken mixed ground to reach the ridge. A grassy shelf on the left of the ridge was followed to finish by the narrow exposed ridge above.

North Face:

Camilla – 230m V, 5. S. Richardson, R. Everett (AL). 31st January, 1993.

To the right of Royal Pardon are twin icicles which hang down the overhanging wall at mid height on the face. This serious ice route, which takes a direct line up to and past the icicles, was climbed under exceptionally icy conditions and could be harder in leaner winters. Start at the toe of the buttress about 25m right of Royal Pardon.

1. 45m Climb snow, then steep ice to reach the crest of the buttress.
2. 50m Continue up the snow slope above and climb ice to below the twin icicles. Belay on the right.
3. 50m Climb the right hand icicle and continue up easier angled ice to the crest of the buttress.
4. 50m Continue up ice on the left to reach a snowfield.
5. 40m Climb this to the top.

West Face:

Aonacrack – 150m IV, 5. J. Ashbridge, S. Richardson (AL). 21st March, 1993.

A good mixed climb taking the prominent crack on the right side of Broken Axe Buttress. Start near the top of the snow bay to the right of Axeless.

1. 15m Pull awkwardly on to a ramp which leads left to the base of the crack.
2. 25m Climb the crack, passing a steep bulge after 15m, to reach a ledge below a huge perched upright block. Climb a crack on the left and belay on top of the block.
3. 40m Continue up the crack and exit by a steep bulging groove to reach a ledge.
4. 40m Climb easily along the broken ridge to reach the snow arete of Axeless.
5. 30m Follow the arete to where it merges with the summit slopes.

GLEN COE

BUACHAILLE ETIVE MOR, Stob Coire Altruim:

Traverse of the Dogs – 95m II/III. G.E. Little, D. Saddler. 21st March, 1992.

Start at a large spike belay just right of Huandoy Revisited on the east flank of the main buttress. Follow an obvious narrow exposed ledge curving out to the right, with one difficult step, to reach a ledge with blocks (45m). Climb an easy angled groove to blocks (30m). Ascend snow to the summit (20m). NOTE: Stob Coire Altruim. G.E. Little notes a mistake in the new Glen Coe guide. The excellent if short route Huandoy Revisited does not share ground with Dream Topping but is on the opposite side of the Central Couloir i.e. on the left side of the main buttress (page 44).

Creag a'Bhancair:

Vaguely Vegan – 20m E2 5b. R. Anderson, J. May. 31st May, 1992.

The cleaned streak left of Carnivore, the only route on the crag not to touch meat! Starting just left of Carnivore, climb to a hole, then reach jugs above (runners) and move right across a groove on to a ledge. Reach a jug up on the left and move up to a break (Friend 4 and good wire). Continue up, then rightwards on ledges to stretch directly over a bulge and go through the breach in the turf cornice to a ledge and nut belays.

Creag na Tulaich:

Colon Therapy – 40m E2 5c. M. Garthwaite, D. Greig. 5th September, 1992.

Starts up the shallow corner 5m right of Easy Going. Climb to the corner and move up and slightly left to gain a line of good handholds. Follow these a few feet right, then finish straight up climbing several short walls on the way to the top.

Fergie's Flush – 40m E3 6a. M. Garthwaite, D. Greig. 5th September, 1992.

Starts 3m right of the previous route at a jammed block on the terrace. Climb straight up the bubbly brown rock passing a small overlap on its right side to a rest. Move up and slightly right to better holds and gear before finishing straight up over several short walls.

BIDEAN NAM BIAN, Stob Coire nan Lochain:

Nessie – 120m IV. D. Jarvis, B. Ottewell. 27th January, 1993.

Takes a groove line up the centre of the side wall right of Innuendo and overlooking Broad Gully, starting at the same place as Innuendo.

1. 55m. Follow the broken groove line up right, with a step left leading to the base of a blank wall. Continue up rightwards to easy snow and a large block beneath the hanging chimney of Innuendo. 2. 45m. Move up just right of the hanging chimney and take a direct line through the steep ice wall above. Easy snow to the top. Alternative Finish. 2a. 50m. From the block, move up diagonally right for 10m to a corner (passing under a capped chimney). Climb the corner, moving up left to finish above the chimney. Diagram supplied.

West Face of Beinn Fhada:

V. Ross notes a direct start to Eugallt, pulling through the initial roofs, and thinks the route is of good quality though undergraded (very serious).

Church Door Buttress:

The Last Crusade – 60m E3. R. Anderson, J. May. 30th May, 1992.

The obvious V-groove and wall right of Temple of Doom. Start just below the huge block at the base of the crag, beneath a wide crack in a shallow corner.

1. 10m 5a. Climb the corner-crack, pull out left to ledges and move out left to the foot of an open corner. 2. 30m 5c. Move right, then up to the foot of the V-groove. Climb the groove to its top, swing out left, then move across to climb steeply up the left side of a small roof (Friend 4 useful though not essential) and pull on to a small ledge. 3. 20m 5c. Climb the cracks in the wall above.

Stob Coire nam Beith:

Pharaoh's Rib – 150m III.4. J. Main, A. Clarke. 19th December, 1992.

Follows the crest of the buttress immediately right of Deep Cut Chimney. 1. Start up a steep off-width crack (short and hard). Go up easier ground to belay below a wide groove. 2. Go up the groove and a small step to belay overlooking Deep Cut Chimney. 3. Follow the arete to easier ground. 4. Go up an easy gully to the crest of No.4 Buttress.

The Mummy – 60m IV, 5. A. Clarke, J. Main. 20th December, 1992.

The steep obelisk of rock splitting the right branch of North West Gully. Follows the summer line in two 30m pitches.

GARBH BHEINN OF ARDGOUR, South Wall of Great Ridge, Upper Tier:

Cutlass – 60m E4. R. Anderson. 6th May, 1992.

Climbs the leftmost crackline on the big smooth leaning wall immediately to the right of The Peeler. Good climbing, though a bit close to The Peeler at times. Start beneath the corner of Sgian Dubh.

1. 40m 6b. Climb the awkward short groove in the arete just left of Sgian Dubh to gain ledges. The crux above is protected by two wires (Rock 1 high in the vague crack and Rock 4 down to its left in a horizontal placement). Climb to beneath the roof, pull round left, then move up and right to follow the obvious left slanting crack to a junction with The Peeler. Either belay here or move up and right to grass ledge. 2. 20m. Easy ground to top.

Sabre – 60m E5. R. Anderson, C. Anderson. 6th May, 1992.

Excellent climbing up the thin crack in the centre of the big smooth leaning wall; gained by a traverse from Sgian Dubh.

1. 40m 6b. Climb the corner of Sgian Dubh to the ledge. Place the high runners on

Cutlass and extend them, then hand traverse out right for 3m and attain a standing position below the crack. Climb the crack to beneath a small roof, step up left and pull up to easier ground. Move up and climb the cracks in the wall to the right of Cutlass to reach a grass ledge. 2. 20m. Easy ground to the top.

BEINN NA SEILG (Western Ardnamurchan), Hebrides Wall:

Identity Crisis – 45m VS 4b/c. C. Stead, B. Chrystal. 14th August, 1992.

Start at the very prominent thin crack between Trident Climb and Faradh Dubh. Climb the crack to a flake overlap and move left to a stance (35m). Climb easily to the top. It would be surprising if this had not been climbed before.

Happy Return – 35m MVS 4b. C. Stead, B. Chrystal. 14th August, 1992.

Start at the foot of Trident Climb where a thin fault line strikes up and left. Climb the fault over several bulges to a stance (30m). Climb easily to the top.

SOUTHERN HIGHLANDS

BEINN AN DOTHAI DH, North East Coire:

Coup de Grace – 120m V.7. A. Robertson, S. Richardson (AL). 28th February, 1993.

This good technical mixed route takes the bulging groove line to the left of the prominent right facing corner of Menage a Trois. Start directly below the groove. 1. 40m Climb a short wall and continue up turf and snow to a belay at the top of the first chimney of Far West Buttress. 2. 20m Climb the crack above, pull round the bulge, and move up a turf depression to belay below the second bulge. 3. 20m Make a difficult series of moves up the smooth vertical wall above, step right on to the arete and bridge up the impending corner. A fine pitch. 4. Traverse left for 10m to the foot of a right slanting turf ramp. Follow this to the top.

BEINN UDLAIDH:

Suspended Animation – 90m III/IV. J. McLaughlin, J. Stevenson. 27th December, 1992.

The line of icefalls between Sunshine Gully and Antiques Roadshow. Start from a large shelf right of Sunshine Gully. 1. Climb a vertical icefall direct to an ice screw belay at the foot of a steep iced slab. 2. Climb the slab to a sloping platform. Continue on up the icefall to gain easier ground. Traverse left to belay behind a rock toadstool overlooking Sunshine Gully. 3. Return to the original line and climb direct to the plateau.

SUB STATION CRAG:

C. Moody thinks White Meter is E4 5c.

LOCH SLOY CRAGS, Floating Buttress:

The Ascent of Yan – 15m E3/4 5c. I. Taylor, G. Stanworth. October, 1992.

Lies on the left side of the front face. Climb a slab to a quartz scoop, then move right to gain a flake (RP's). Move back left to gain another flake and finish through a break in the overhangs.

Note: Connoisseurs of the Journal have observed that Rock Sculpture at Glen Croe has been mentioned in the last three journals and tradition requires a continuation.

ARRAN

CIR MHOR, Lower North East Face:

Crystal – 140m VS 4c. G. Szuca. 27th May, 1992.

Start below a clean white slab at an obvious deep pocket (small cairn). Go straight up the slab to a grass ledge (30m). Go down the ledge for 15m to another slab (small cairn).

Go up this for 35m to a belay at a circular depression. Traverse 10m rightwards to an overlap, pull through this on pockets and continue up and rightwards through a couple of small laps to belay at a block (35m). Finish straight up via some thin cracks to a grassy recess. Good climbing, poor belays.

BEINN BHARRAIN, North West Ridge:

A. Fraser notes that the routes in the Arran guide are of very poor quality (Route 1 and Route 2) and only 50m long. The north east side of the ridge has three buttresses, the two existing routes being on the left hand one. The following route is on the steeper central buttress, has much grass, but is better than the existing routes.

Grimly Fiendish – 65m VS. A. Fraser, S. Figget. 7th October, 1992.

Start 5m right of the right toe of the central buttress.

1. 35m 4c. Climb 3 short walls directly to a steeper wall which is turned on the left with difficulty to a grass ledge. Follow the ledge left, then climb a crack to further ledges which are followed rightwards to belay on a large moss ledge beneath a detached block adjacent to the prominent upper corner of the crag. 2. 30m 4b. Move right into the corner and climb it for 4m to a ledge. Move left along the ledge, climb a layback crack, then continue up short walls to the top.

GLEN SANNOX, Coire na h-Uamha, Lower Slabs:

Slapstick Wall, variation start – VS 4c. G. Szuca. 27th May, 1992.

The steep little east facing slab mentioned in the guide is climbed close to its left edge.

LOWLAND OUTCROPS

Dalmahoy Hill:

The Lemming – 18m HVS 4c. J.D. Inglis, D. Buchanan, J.C. Eilbeck. 20th May, 1992.

The rib and shallow groove 2m to the left of Cleaned Sweep. Sustained, steepening to a bulge at the top where a long step right joins the exit of Cleaned Sweep. Little protection.

Note: Transcription (SMCJ 1992) is the same as an older route Frustration.

Rosyth Quarry:

The Rust Bucket – 7m E2 6a. I. Taylor. June, 1992.

Right of Matinee Cracks is a tree. The route climbs the cleaned wall behind the tree without using the right hand wall.

Auchinstarry Quarry:

The Seven Year Plan – 10m E2 5c. I. Taylor, S. Munro. 29th May, 1992.

Left of Block Pillar is a hanging ramp. Gain the ramp (old peg), then climb it finishing directly over an overhang.

Note: Dream Machine has lost a good hold at the base of the crack, making it harder 6b.

Cowden Hill Quarry:

Earth Summit – 30m E4 6a. M. Garthwaite, A. Wren. 18th August, 1992.

The route follows the obvious flake up the black wall at the back of the quarry, passing two pegs. Move right below a small roof to the top of a small pinnacle. Finish direct up the wall above passing another peg.

GALLOWAY

A. Fraser and Kyle MC members have climbed about 80 routes in Galloway. As the new Lowland Outcrops guide is scheduled for this year, they have not been duplicated here.

MISCELLANEOUS NOTES

CURRENT TRENDS IN SCOTTISH ROCK CLIMBING

Andy Tibbs reproduces below his seminar given before the SMC Annual Dinner.

Over the last 10 years rock climbing standards have rocketed and the quantity of people heading to the Scottish hills has soared. Climbing walls are springing up throughout Scotland and rock climbing is no longer for the keen fanatics – it is accepted as the norm.

So, with higher standards and more climbers, are we starting to run out of unclimbed rock in Scotland? Without trying to predict quite what the future holds we can analyse some trends over the last decade. Climbs certainly have been getting shorter and harder, and are likely to continue to do so – the graph 'New Routes (Rock) 1992' shows a dramatic peak of 76 new routes between 10m and 19m.

The second graph 'New Routes (Rock) 1992 vs 1983' compares route lengths in 1992 with 1983 when a large number of mountain new routes were climbed (the peak at 120m-139m is due to development of Creag an Dubh Loch, Lochnagar and the Shelterstone). Clearly, there is a sharp contrast between 1983 and 1992 with a definite trend towards shorter routes in 1992 – other years illustrate this same trend throughout the last decade.

Notes:-

1. All information is from the SMC Journals and does not include the many outcrop routes not recorded in the Journal.
2. Is it now more common to lead E5 than complete the Munros?
3. Thanks to A. Matthewson (SMC) for graphics.

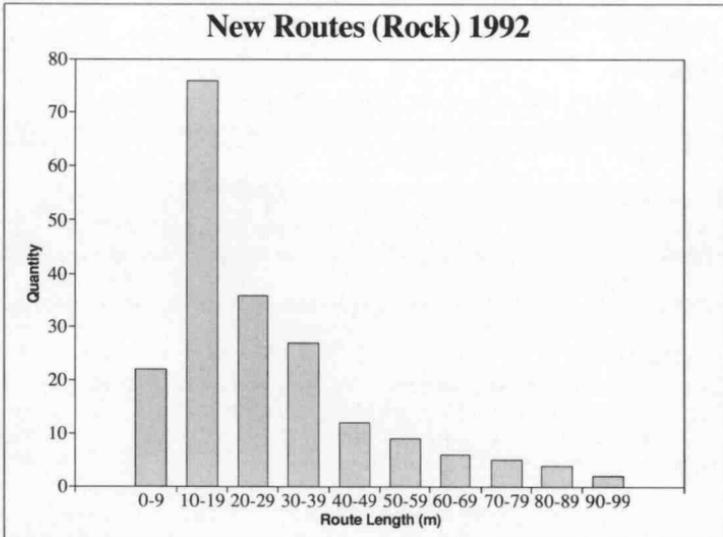


Fig. 1

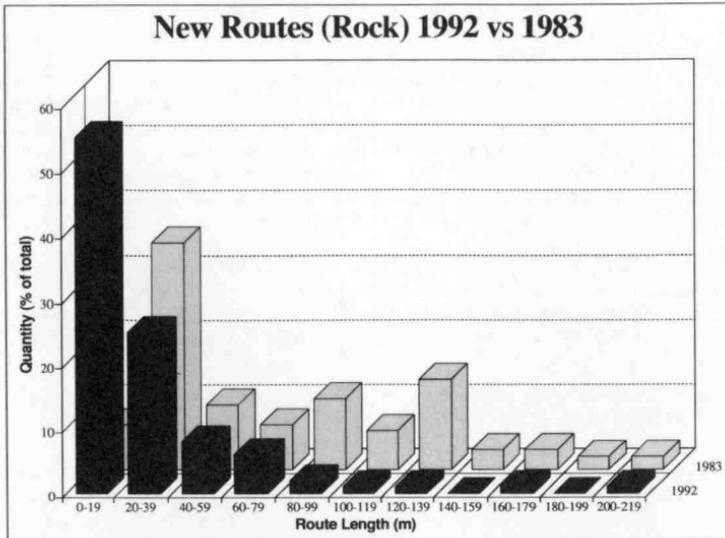


Fig. 2

CLUB ARCHIVES

The Club's known Archives are divided, somewhat arbitrarily, between the National Library of Scotland and the Club Library in Glasgow. I would appreciate hearing from you if you know of Club property elsewhere that might be considered part of our Archives,

The Club Archives include such items as Minute books, hut and hotel climbing books, texts of lectures, personal diaries, correspondence, and photographs taken on Meets. Material of this sort is often destroyed when it might have been kept for the interest of members in future years. Members wishing to entrust their climbing notes to the Club should remember that their value is much increased if they (The notes, not the member!) are clearly identified and dated.

Donald B. McIntyre.

MUNRO MATTERS

By W.D. Brooker (Clerk of the List)

Over the Hill?—This year there are only 123 new names, more than 40 fewer than last year, so that the peak may have been reached at last and Munro-bagging is now in decline. To judge by the number of people on the hills this seems unlikely but if there are fewer of the head-down, get to the top as fast as possible, tick the Table and on to the next one brigade, then most of us will not be unhappy. The letters from Compleaters indicate that the actual collection of Munro summits is only one aspect of a much more extensive interest in mountains and only a tiny minority see it as an end in itself. It is from these letters and their occasionally unguarded contents that the List is put together and these notes compiled.

AMENDMENTS to the existing List begin with 14 corrections to last year's entries. These were the unfortunate result of the Editor's sophisticated computer being too high-brow to accept simple communications from the low-grade (and cheap) word processor which is all that the Clerk of the List can afford. Apologies are offered to these victims of misrepresentation.

As usual three columns refer to Munros – Tops – Furths.

(354) Borland George 1984 1984 (451) Caldwell Craig 1984
and 1989 and 1985

Should be as shown here, while (361) Kenneth Deas, (518) John Wyllie, (623) Maurice Watson, (634) Bill Miller, (662) John Barker, (663) Ruth Barker, (780) Eddie Sutherland, (781) Norma Sutherland, (857) Peter Hughill, (862) Tom Anderson, (876) Elsa Yates, (877) Robert Yates, (880) David Rhodes and (882) Irene Cook have all completed the Furths and not the Tops as shown in the last issue of the Journal.

Other AMENDMENTS are as follows; multiple rounds showing only latest year:-

(23) *Hutchison Miles	x2 1955 1970	(463) *Morrison William	x2 1986
	1992		1992
(76) Moulton Matthew	x5 1982 1982	(514) Purser David	x2 1987
	1982		1991
(260) Howie Geraldine	x5 x3 1987	(555) Howie Robin	x5 x3 1987
	1992 1992		1992 1992
(321) Sword Alister	1984 1988 1991	(791) Steele Bethan	1990 1990 1992
(327) Logan R Stewart	x6 x5 x3	(792) Steele David	1990 1990 1992
	1992 1990 1987	(833) Groves Jonathan	1990 1992
(337) Rae Margaret	x2	(847) Hansford John	x2 1991 1992
	1992		1992
(338) Rae Robert	x2	(867) Gott Alan	1989 1991 1992
	1992	(910) Drew FS	1991 1992
(364) Dick Brian	x2	(911) Snowdon Derek	1991 1992
	1992	(999) Robertson Robert	1988 1991 1993
(375) MacDonald Robert	x4		
	1992		

Discovery of a double entry has allowed the posthumous insertion of the late *H.H. Mills at (971) while (919) Michael Garey points out that his many world-wide admirers may be unable to identify him correctly as a Compleater since his name was mistakenly spelled Gairey!

ADDITIONS TO THE LIST received during the last year to April:-

1020 Wainwright Jane	1992	1026 Platts William	1992
1021 Thomson Haydn	1992	1027 Taylor Gordon	1992
1022 Taylor T Kenneth	1989	1028 Redford Barbara	1992
1023 Fortune W Alan	1992	1029 Naylor Andrew	1992
1024 Kydd Martin Douglas	1992	1030 Halkett James G	1992
1025 Buck Peter Douglas	1992	1031 *MacLeod Iain A	1992

1032 Ivison Eric	1992	1088 Dignall James	1992 1992
1033 Goodyear Fred	1992	1089 Barron Penny	1992
1034 Henderson Cyril	1986	1090 Morton Christina B	1992
1035 Child Paul M	1992	1091 Chappell John C	1992
1036 Biggin Mick	1992	1092 Fielding Alan	1992
1037 Morrison Elda	1992	1093 Barclay Terry	1992 1992
1038 Sim Alexander J	1992	1094 White Calum N	1992 1992
1039 Mitchell Iain K	1992	1095 Hamill Brendan J	1992
1040 Gordon James	1992	1096 Barnett Margaret	1992
1041 Park Dave	1992	1097 Barclay Christopher	1992
1042 Harrison Rod	1992 1992	1098 Angwin Christopher J	
1043 Douglas Mark	1992 1992		1992
1044 Bailey Peter	1992	1099 Thomson Nancy	1992
1045 Fallon Steve	1992	1100 Bantoft Christopher	1992
1046 Todd David	1992	1101 Harris David I	1992
1047 Watters G	1992 1992	1102 Wiles Richard	1992 1992
1048 Kelly John C B	1992 1992 1992	1103 Rigby Mark	1992
1049 Gatehouse Richard	1992	1104 Reynolds Peter	1992
1050 Mellor Frank A	1992 1992	1105 Hunter Duncan	1992
1051 Mellor Jennifer	1992 1992	1106 Clark Pamela L	1992
1052 Sievwright David C	1992	1107 Hall Margaret	1992
1053 Glover Matthew	1991	1108 Deas George S	1992
1054 Hoyle David	1992 1992	1109 Benny Graham	1992
1055 Coates Smith Roger	1992	1110 Butcher Christopher G	
1056 Bolam Simon	1992		1992
1057 McKenzie William A		1111 Ewing Brian	1992
	1992	1112 Pidgeon Denis A	1992
1058 Brooks A G	1991 1991	1113 Oliver Kenneth	1989 1991
1059 Taylor Alexander R B		1114 McNab Colin H	1992
	1992	1115 Shaw Raymond	1992
1060 Williamson Paul K	1985	1116 Geddes Nettie	1992
1061 Fairmaner Bill	1992	1117 Cunningham Jim	1992
1062 Miller Susan M	1992	1118 Riley Margaret	1992
1063 Jones John B	1992	1119 MacGregor Ronald H	1992
1064 Nuttal John	1992	1120 Murphy Andy	1992
1065 Gray Veronica	1992	1121 Smith W H	1992
1066 Peel John	1992	1122 Sword Callum	1992
1067 Malloy Frank	1992	1123 Langmuir Marjorie	1992
1068 Mitchell John B	1992	1124 Newlyn Geraldine	1992
1069 Montgomery Alistair J	1992	1125 Hendry John	1992
1070 *Dawson Dave	1992	1126 Hendry Margaret	1992
1071 Horsler Hedley	1992	1127 Clarke Herbert S	1992
1072 Horsler Valerie	1992	1128 Clarke Marion K W	1992
1073 Pyper Ian B	1992	1129 Hamer Betty	1992
1074 Poznanski M J	1992	1130 Hamer John	1992
1075 Wood Sandy	1992	1131 Howard Susan	1989
1076 Ridler A W	1992	1132 Howard Paul	1990
1077 Murray David	1992	1133 Ramage Wattie	1992
1078 Brodie Patricia A	1992	1134 Kernohan Allan	1992
1079 Temporal Patrick J	1992 1992	1135 Ashby James C	1992
1080 Stone Jeffrey C	1992	1136 Dickson Ian	1992
1081 Wright Jim	1992	1137 Weedon Mike	1989
1082 McKeown John B	1992	1138 O'Brien Terence M	1992 1992 1992
1083 Marshall James W	1992	1139 Bruce Gordon McI	1992
1084 **Marshall Meryl M	1992	1140 Hazelton Norman F	1992
1085 Evans C D	1992 1992	1141 Gibson Rory	1992
1086 Fenner James Anthony		1142 Johnston Andrew	1992
	1992	1143 Evans Stephen P	1993
1087 Pickles Tom	1992	1144 Dyos Christopher	1993

A Posthumous Completion.—R. N. Campbell, who in recent years has become a close companion of the late H. T. Munro, sends an account of how the Great Man's incomplete round of the Munros and Tops was finally finished.

'The shade of Sir Hugh Munro, in the form of a full sized effigy, compleated his round of the 538 Tops listed in the original Tables of 1891 with an ascent of the Inaccessible Pinnacle of Sgurr Dearg on 10th July, 1992. An attempt had been made on the 9th in the company of Robin Campbell, (300)Derek Pyper and Helen Ross but was frustrated by unexpected bad weather. The following day offered better conditions and in the early afternoon Campbell and Ross set off for the summit with Munro. A passing climber, Mr James Kenyon, of Accrington, was roped in for the final attack. Campbell, Munro and Kenyon reached the summit of the Pinnacle by its East Ridge, while Ross took photographs from below. After descending the party celebrated with champagne before returning to Glen Brittle.

Sir Hugh began his round with Ben Lawers in 1870 and at the time of his death in 1919, 535 Tops had been visited, and only three remained to be done. In the company of Campbell, Carn an Fhidleir and Carn Cloich-mhuilinn were ascended in 1991 leaving only The Inaccessible Pinnacle. This round has therefore occupied a period of 122 years and must surely rank as the Slowest Completion on record!

Largo.—Without being in the same class as the above, the most leisurely round remains with (646)*Iain Ogilvie who took 62 years but this year's list has two fine examples of *Munros longus* in (1038)Sandy Sim and (1119)Ronald MacGregor at 57 and 50 years respectively. (1057)William McKenzie also took his time with 46 years and most of the additional Compleaters listed above took 20 years or more to finish their rounds.

Allegro.—At the other extreme is the 52 days taken for a televised and media-reported run over the Munros by (1141)Rory Gibson and (1142)Andrew Johnston. This was done using bicycles for connecting travel and even with the support provided of food and other aspects it remains a remarkable achievement. At 14 days fewer than the 66 taken by (607)Mark Elsegood in 1988 it is the fastest round on record. Whether these speed records have anything to do with normal Munro-bagging, as an aspect of the hillwalking and mountaineering which we all love so well, is another matter. These are such individualistic activities that obviously people collect Munros for many different reasons. However, these are usually to do with personal fulfilment and rarely with competitive objectives or even charitable fund raising. There are no practical proofs of having Compleated and names are accepted for inclusion on the List on the cognizance of those who submit them. These days nobody is impressed by someone being Compleat so in the unlikely event of a fraudulent Compleater it is a case of self-deception. Similarly, there are Compleat Munroists who are not on the List, and have no intention of registering, which is why (277) is reserved for The Unknown Munroist. Who knows what feats of extraordinary endurance or pace lurk out there unrecorded. Such is the Mystery and long may it remain.

'The Best Laid Plans.....'—However high minded or mundane the original intentions of some Munroists, they usually end up like the rest of us, doing them for the pleasure and satisfaction it gives. (1061)Bill Fairmaner admits that when he started 17 years ago it was to keep one up on his younger brothers but that ignoble motive was soon left behind. (1122)Callum Sword began by reaching the summit of Beinn Alligin sitting in a back-chair carried by his father, (321)Alister Sword. However, in spite of this unworthy paternal stimulus, he went on in later years with his feet firmly on the ground and ascended the same Beinn Alligin as his final Munro.

(1111)Brian Ewing began on a much higher plane in 1983 when he proposed to his girlfriend on Cairngorm, their first summit. Subsequently he and his wife went on collecting together, aiming for *M. maritalis* with the additional condition of *clarivistitis* being required by the lady. Alas, after five years she chose to start a family instead and

he was left to get on with the hills on his own. In 1985 (1056) Simon Bolam thought it would be good for social and fitness reasons for his office staff to have a camping weekend with an ascent of Ben Nevis. Even though the weather was foul the venture was a great success so the following year he organised a repeat of the exercise and they climbed Ben Macdui. This time the weather was perfect. The next year they did Braeriach, Simon began climbing hills frequently on his own account, and this developed into him finishing all the Munros.

Many describe innocent beginnings which gradually developed into increasing addiction. (1129 and 1130) Betty and John Hamer, one of the six examples of *M. maritalis* this year found it so. Betty took to having the odd day out in the Lake District hills and these escapes from the kitchen sink were the start of the rot that was to come later. A couple of visits to the Highlands were to seal her fate. Although at first she had no intention of trying to do all the Munros, only the best ones – she ‘would never be found on some dreary hill above Drumochter!’ Husband John, who enthusiastically writes of ‘so many highlights it’s hard to know which to pick out’, was already well on his way and provided just the motive for his wife to do as well as he. Eventually, her weekends in the Highlands were extending from Thursdays to Tuesdays and they finished together on Bidean nam Bian.

‘I Did it My Way’.—Individual and even idiosyncratic themes abound. (514) David Purser is engaged on his third round and is not only attempting *M. incrementalis* by starting with Beinn Teallach and finishing with Nevis but he is also doing them one at a time to achieve that most distinctive form, *M. yoyoensis*.

The second round by (847) John Hansford, done in 60 hill days spread over 13 months, was an example of *M. soloensis* – not, he assures us, for misanthropic reasons but because he was often out midweek and favoured long days, so he found he was doing everything on his own. He further feels that he is now cured of *Munrositis* and is content with the odd Corbett. He has no intention of starting a third round – at least not until his son is old enough to carry the rucksack!

(1104) Peter Reynolds did all the hills in the current tables and included all those that Munro originally named. ‘The only merit in altering the Tables is to provide us with a subject for long, boring discussions in hut or bothy.’

(1049) Richard Gatehouse sensibly took 23 years to allow spells of rock climbing, snow and ice climbing, hill running, alpine trips, and other things. With his uncle he discovered a novel way of doing so called ‘boring Munros’. Immediately after New Year (which is probably significant), they would travel from home in Edinburgh entirely by public transport. Fionn Bheinn at Achnasheen was an all-night epic, including an early hours shuttle bus from Inverness when a rail bridge was down. Beinn na Lap of course, was a delightful easy day.

Poor (1112) Denis Pidgeon did it the hard way over 30 years, mostly with hangovers and two stone overweight. As a final act of self-destruction he went off to finish on Beinn Sgritheall, abandoning his wife on their 23rd wedding anniversary. His present condition is unknown.

Individuality can be carried to extremes and may well have overtones of misanthropy or even masochism. (375) Robert H MacDonald finished his fourth round on Beinn Fhionnlaidh. In the pursuit of some obscure principle he had used this mountain for his last summit before. He has now been alone on every Munro summit. On this particular occasion he was alone again, except for two dogs. It was Christmas Day but Robert did not indulge himself with a celebratory dram as he is a teetotaler. He must certainly be the first to have completed four Munro rounds entirely without the use of alcohol. It might be said that there are some records for which the price is too high!

That Final Occasion.—Fewer than usual chose Ben More in Mull this year. The Cairnwell was chosen by (1057) William A. McKenzie as the easiest to ascend, just in

case he was reduced to progressing on hands and knees after 46 years. (1088)James Dignall chose it for the same quality but this was so that his wife could be present, she being unused to walking except around places like Marks and Spencer. (1048)John Kelly selected Buachaille Etive Mor because it was the closest to the Kingshouse, once his favourite bar.

(1071 and 1072) Hedley and Valerie Horsler had a double celebration on Ben Lomond, the conclusion of their *M. maritalis* and also their Silver Wedding.

(1075)Sandy Wood had a final Munro gathering on Meall nan Tarmachan including his mother and his daughter. Three generations were thus present to celebrate the end of 28 years of neglect of his family responsibilities. (1031)*Iain MacLeod had a final Munro party with 70 people on Beinn Fhionnlaidh. It will be no surprise to those familiar with the highly individualistic navigation often practised in the SMC, to hear that 15 latecomers went up Sgurr na h-Ulaidh by mistake.

(1053)Matthew Glover is another who has climbed the wrong hill in his day, just as so many of us have done. However, after 10 years of assorted climbing he had contracted *Munrositis* and was to spend another 10 years coping with the condition. He succeeded in his aim of finishing by his 40th birthday and the Centenary of the Tables. Among his vivid memories were cloud inversions with resultant Glories seen variously on Ben Lui, Aonach Eagach and especially on Ben Attow where the phenomenon lasted for over half an hour. Perhaps the finest experience was in November 1991 when he was treated to a four-hour display of the Northern Lights followed the next morning by his final Munro summit – Ben Alder, with its snows pink in the sunrise flush, the appreciation of their colour enriched by a bottle of 30-year-old Strathisla.

The Aftermath.—(1094)Calum White apologises for sending me yet another letter from a Compleater but excuses it by explaining it as part of the ‘cold turkey’ he has to endure after six years of addiction. Just as his was a classic case of incubation and development – the equipment fetish fostered by visits to climbing shops, the slippery slope with a local hill walking club, SMC Guidebooks, the Munro chart, the lot. His attempts at withdrawal are also classic, with a healthier interest in things like photography, botany, ornithology, the Mountain Bothies Association, etc. At present he is trying to resist beginning another round by arousing memories of whiteouts, hurricanes and downpours but glorious spring days, soaring and wheeling peregrines and magnificent mountain views keep intruding.

After Completion, (1131 and 1132) Susan and Paul Howard had intended to go on to finish the Tops but with only a few remaining they have discovered a new life beyond the Munros in the form of sea kayaking. Paddling to remote camping spots from which new hills can be climbed offers new delights – and another kind of addiction?

International Corner.—Bill Shipway from Edinburgh was with (509)Alex Drummond in the Struy Inn, Strath Glass, when they noticed a paper flag with the letters DBMA. When asked what it stood for, the proprietor replied: ‘The Dutch Munro Bagger’s Association.’ Apparently a group of Dutch hill walkers visit the area every year and mean business. On the back of the flag was a cartoon with a couple of figures, one wearing a vest with the words: ‘Ben Nevis or Bust!’

Snippet.—(791)David Steele has worn his tie so often that he has had to buy a replacement!

Tailpiece.—The Clerk of the List receives so many reports of canine Munroing activity that he suggests The Kennel Club should be asked to start a special List for dogs.

POSSIBLE DEVELOPMENTS FOR THE FUTURE?

For health reasons The Clerk of the List will have to hand over this august section of the Journal (a promoted section since 1993 only) to his successor. Bill Brooker took over the editing of the Journal in 1976, by which time the list was a mere 120 or so. He, like the rest of us, could not predict the future epidemic of *Munrositis*, but luckily for his successor he continued to deal with its correspondence after passing on the Editorial chair. The section monitored the rise of the epidemic, helping to allay panic in countries unused to such frenzies of collection (a condition not solely, but certainly mostly British). Organisation of the annual list, computers, graphs, and biological standardisation of the many subsets of *Munrositis* followed apace, but always with both of his Aberdonian feet firmly on the ground. The hobby has never, we hope, been allowed to become too serious within these pages.

Over the last seven Journals, it has been my privilege to work closely with The Clerk of the List. Despite many tactless barbs from me, he has always been a paragon of patience, humour and, of course, has continually sought to minimise costs. Between us, we took the art of postage stamp steaming to rare heights, while the continual re-use of envelopes must have reduced envelope manufacturers to tears. We wish him well in his retirement and immediately follow with the announcement of his successor, a Compleater himself. Notice of Completions should be sent, enclosing a stamped, addressed envelope, to:— (993)*Dr Chris Huntley, Old Medwin, Carnworth, ML11 8LY.

An Association of Compleat Munroists? - Compleat Munroists are distributed widely over the country. Many are not members of any club and some would welcome more opportunity to contact fellow Compleaters. It is clear from correspondence that there is a number who regretted being unable to attend the Centenary Dinner last year and would welcome another get-together. A suggestion is that a fairly informal organisation, let us call it an 'Association of Compleat Munroists' might be established. There are probably about 900 Munroists still around who would be eligible but only a minority are likely to wish to join. It would require only a few honorary officials – a Secretary to issue a list of names and addresses to allow members to contact each other and a Treasurer to collect subscriptions to cover the small costs involved. A function of an Association would be to hold an annual meeting of members to appoint the officials, and provide the opportunity for a meet, dinner, or whatever form of occasion seemed appropriate.

The SMC sees The List and The Tables as part of its own remit within its Journal and Guidebook publishing activities. However, close liaison between the Club and an Association could be maintained by the Journal Editor, the Master of the Tables and the Clerk of the List.

If an Association of Compleat Munroists is to be formed this might be done at a meeting held at some place in Central Scotland such as Glasgow, Stirling or Perth on a date in the autumn – perhaps a Saturday in the middle of November. If you are interested keep your eye on the Mountaineering Council of Scotland Newsletter, Climber and Hillwalker, etc.

SCOTTISH MOUNTAIN ACCIDENTS

REGIONAL DISTRIBUTION

(Geographical Divisions are those used in SMC District Guidebooks)

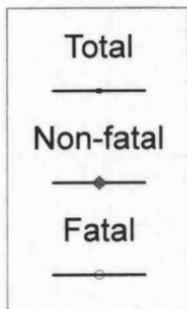
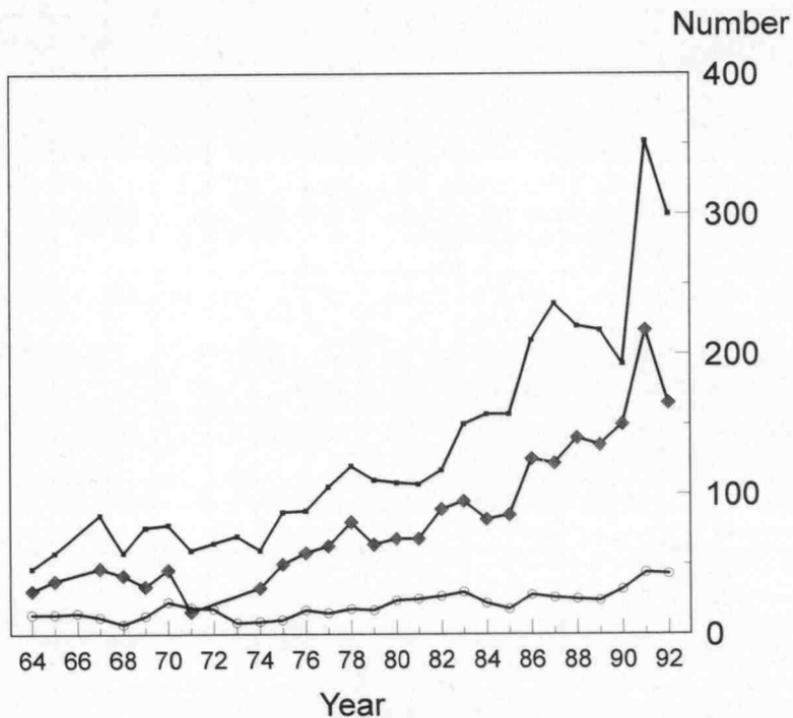
REGION	CASUALTIES (of which fatalities are bracketed)				INCIDENTS							Non-Mountaineering	
	Injuries	Exhaustion/Exposure Hypothermia, Hyperthermia	Illness	TOTAL CASUALTIES	Actual Rescues	Incidents with Casualties	Cragfast	Separated	Lost	Overdue or Benighted	False Alarms	TOTAL INCIDENTS	Animal Rescues
All Regions 1990	132 (23)	36 (1)	13 (6)	181 (30)	161	20	15	16	56	23	191	–	20
Northern Highlands 91	13 (4)	1 (1)	1 (1)	15 (6)	15	1	1	3	4	–	24	–	–
Western Highlands 91	9 (1)	1 –	–	10 (1)	9	1	1	4	6	2	23	–	–
Ben Nevis 91	24 (2)	4 –	4 (3)	32 (5)	30	–	1	–	2	1	34	–	–
Glen Coe (inc. Buachaille) 91	26 (2)	1 –	–	27 (2)	24	4	–	–	8	–	36	–	–
Other Central Highlands 91	36 (10)	9 –	7 (3)	52 (13)	41	4	4	4	3	3	59	–	–
Cairngorms 91	43 (7)	3 –	2 –	48 (7)	44	7	1	8	11	1	72	–	–
Southern Highlands 91	26 (2)	–	4 (2)	30 (4)	29	3	2	4	3	3	44	–	–
Skye 91	16 (5)	1 –	1 –	18 (5)	17	1	1	1	–	–	20	1	–
Islands (other than Skye) 91	12 –	1 –	–	13 –	13	–	–	2	7	–	22	–	1
Southern Uplands 91	12 (1)	2 –	1 –	15 (1)	13	1	2	2	2	–	20	–	9
All Regions 1991	217 (34)	23 (1)	20 (9)	260 (44)	235	22	13	28	46	10	354	1	10

REGIONAL DISTRIBUTION

(Geographical Divisions are those used in SMC District Guidebooks)

REGION	CASUALTIES (of which fatalities are bracketed)				INCIDENTS							Non- Mountain- eering	
	Injuries	Exhaustion/Exposure Hypothermia, Hyperthermia	Illness	TOTAL CASUALTIES	Incidents with Casualties	Cragfast	Separated	Lost	Overdue or Benighted	False Alarms	TOTAL INCIDENTS	Animal Rescues	Incidents
All Regions 1991	217 (34)	23 (1)	20 (9)	260 (44)	235	22	13	28	46	10	354	1	10
Northern Highlands 92	16 (3)	1 -	1 (1)	18 (4)	18	4	1	2	10	3	38	3	-
Western Highlands 92	9 -	1 -	(1) (1)	11 (1)	11	-	2	-	4	-	17	-	-
Ben Nevis 92	18 (6)	3 -	1 (1)	22 (7)	20	-	1	2	3	-	26	-	-
Glen Coe (inc. Buachaille) 92	19 (2)	2 (1)	2 (1)	23 (4)	23	3	-	-	7	3	36	-	-
Other Central Highlands 92	16 -	2 -	1 -	19 -	19	3	2	3	2	1	30	-	2
Cairngorms 92	28 (8)	4 -	2 (2)	34 (10)	33	4	3	3	6	4	53	1	2
Southern Highlands 92	29 (6)	1 -	5 (4)	35 (10)	35	3	1	1	4	1	45	-	2
Skye 92	16 (2)	12 -	- -	28 (2)	21	-	-	-	3	1	25	-	-
Islands (other than Skye) 92	7 (2)	- -	1 (1)	8 (3)	6	1	1	-	5	-	13	-	1
Southern Uplands 92	6 (2)	- -	2 -	8 (2)	8	2	-	2	1	1	14	-	-
All Regions 1992	164 (31)	26 (1)	16 (11)	206 (43)	194	20	11	13	45	14	297	4	7

**TOTAL MOUNTAIN RESCUE CALL-OUTS,
EXCLUDING AIRCRAFT, MARITIME AND
ROAD INCIDENTS, AND ANIMAL RESCUES.**



MOUNTAIN RESCUE COMMITTEE OF SCOTLAND**CONTRIBUTORY CAUSES OF SOME INJURIES**

(fatalities bracketed)

SUMMER

	1991	1992
Slips.....	88 (2)	85 (7)
Illness.....	18 (6)	15 (10)
Sea cliffs.....	16 (7)	10 (5)
Exposure, heat trauma, exhaustion.....	11 (2)	22 (1)
Rockfall.....	3	5 (1)
All-terrain vehicle accidents.....	4 (2)	1
Blown over.....	2	2 (2)
Loose rock/heather, hand/foohold fail.....	7 (3)	2
Pulled muscles, cramps, strains.....	3	3
Abseil point failure/misuse abseil gear.....	2	2
Wire broke when climbing deer fence.....	1	0
Duckboarded path failed.....	1	0
Burn injury.....	1	0
Suicide.....	1 (1)	1 (1)
Not known.....	1	2 (2)
Swinging on tree, fell through loop.....	0	1 (1)
'Friends' pulled out - rock climbing.....	0	1
Stuck in brambles.....	0	1
Drunk. Lost, presumed dead.....	0	1 (1)
Paragliding. Insufficient take-off speed.....	0	1
River crossing.....	0	1 (1)
Stumbled and fired gun.....	0	1 (1)
Mountain motor cycling.....	0	1

WINTER

(Snow, ice, frozen ground underfoot)

Slips.....	41 (9)	33 (7)
Avalanche.....	14 (3)	2 (1)
Exposure, exhaustion.....	9	7 (2)
Illness.....	4 (2)	0
Ice tools pulled out.....	5 (1)	0
Glissading without crampons.....	3 (1)	1
Glissading. Trip over crampons.....	2 (1)	0
Skied over cornice.....	2 (1)	0
Ski slips.....	9 (1)	0
Blown over.....	2	1
Walk over cornice.....	1	2
Fall through thin ice.....	1 (1)	0
Fell in bog.....	0	1

NUMBERS OF INJURIES

(Excluding sea cliff incidents, ski-ing, illnesses, hypothermia, mountain biking, suicide, etc., but including injuries from slips, avalanche, rockfall, abseiling, loose rock, equipment failures, glissading and cornice incidents.)

	1991	1992
Summer Hill Walking – non-fatal	79	85
Summer Hill Walking – fatalities	1	8
Summer Climbing – non-fatal	22	10
Summer Climbing – fatalities	4	2
Winter Hill Walking – non-fatal	30	25
Winter Hill Walking – fatalities	7	4
Winter Climbing – non-fatal	24	7
Winter Climbing – fatalities	9	5
	1991	1992
Totals (fatalities bracketed)	176 (21)	146 (19)
	1991	1992
<i>Percentage of winter injuries</i>	40%	28%
	1991	1992
<i>Percentage climbing of total injuries</i>	27%	16%

SCOTTISH MOUNTAIN ACCIDENTS 1992

Compiled by John Hinde

Some 1991 incidents are included for some regions.

NORTHERN HIGHLANDS

1991, SEPTEMBER – The body of Sarah Bishop (29), thought to have died of hypothermia, was found on February 21st, 1992 in a tent on Meall an Fheadain, between Portnacoon, Loch Eriboll and Sarsgrum on the Kyle of Durness. She had been missing since September 1991.

1992, JANUARY 1st – False alarm, due to a misunderstanding, for a walker at Clachtoll, near Lochinver. Assynt MRT, HMCG Helicopter, Ullapool Coastguard, Lochinver RNLI lifeboat. 40 man hours.

JANUARY 10th – Ian Coles (18) fell 80m down sea cliffs at Sutors of Cromarty and was injured. Airlift by RAF Sea King. Cromarty CG and Police.

JANUARY 13th – Ian Coles's golden retriever pup, Gemma, was found after the above accident in a gully known as The Kitchen. She had been scared off by the helicopter during the rescue. An Inverness Coastguard used Gemma's mother to scent out the cragfast pup then rescued her.

JANUARY 18th – Search for a senior citizen in hills north of Dingwall by Police and HMCG Helicopter using FLIR. Man found safe next day in a different area. 20.

- JANUARY 25th – Harvey MacDonald (57) hillwalking near his home in Scourie died of a heart attack.
- FEBRUARY 15th – Gael Watson (24) fell 100ft down a gully/slope when descending Beinn Dearg (of Inverlael) in a white-out. Uninjured, she climbed back up but did not find her companion, Chris Lane (44), so she got help thinking he had also fallen. He was OK but spent rest of daylight searching for Gael. Dundonnell MRT, Police dogs. 108.
- FEBRUARY 16th – Search north of Ullapool for a man (20) coastal walking to Achiltibuie and overdue. He walked in. Ullapool CG. HMCG Helo. 10.
- FEBRUARY 21st to 22nd – Torridon MRT leader reported two male hillwalkers overdue from Liathach. Turned up safe 01.15. Delayed by weather.
- APRIL 3rd – False alarm. Shouts between two pairs of separated hillwalkers on Suilven were mistaken by colleagues at Suileag Bothy as shouts for help. Assynt MRT. RAF Sea King. 63.
- APRIL 9th – In a party of four traversing Ruadh Stac Mor of Beinn Eithe, Belinda Graham-Marr (26) fell 12m over an outcrop, injuring head, back and hips. HMCG Helo lifted Torridon MRT in bad weather. RAF Sea King lifted casualty in better weather later. RAF Kinloss MRT. 240.
- APRIL 9th – One male cragfast during above rescue.
- APRIL 22nd – After separating from her companion on Knockfarrel Ridge, Strathpeffer, Audrey Wells slipped and broke a tibia and fibula. Inverness Air Ambulance rescue.
- APRIL 23rd – South shore of Loch Glencoul, 2 km from A894. Geologist Jane Randle (50) slipped on grass and injured her leg. Winched by HMCG Helicopter. Lochinver Coastguard. 5.
- APRIL 25th – Paul Crotty (26) rock climbing at Sandwood Bay, 8 km N. of Kinlochbervie (possibly Am Buachaille Sea Stack) broke a leg. Stretcher carried by Kinlochbervie CG for lift by HMCG Helo. 16.
- MAY 10th to 11th – Two walkers (both male 43 and 34) were delayed by snow and the pinnacles of A'Mhaighdean NW Ridge. They had used mountain bikes to get from Poolewe to beyond Kernsary and may have been further delayed because the wheels had been removed by a stalker since they had disobeyed signs against mountain bikes. Dundonnell and Kinloss MRTs, RAF Sea King. 58.
- MAY 14th – Dundonnell MRT rescued a bullock from Achtercairn Gorge. The major problem was to keep it in slings. A strong woven bag was used under it as a litter to carry it 25m down the gorge, to a point from which a hoist was achieved, using a reversing vehicle for power. Fortunately the beast was docile. 15.
- MAY 14th – Ms T. Galetzka (71) separated from her group on Spidean Coinich of Quinag and got cragfast looking for wild flowers. Found her own way down four hours overdue. Assynt MRT. 8.
- MAY 16th – Couple descending 'Stone Shoot' (on Cadhar Gobhlach of An Teallach) above L. Toll an Lochain, reached the top of a rock bar. Going further down to investigate, Arthur Sime (56) fell to his death. His wife, Margaret Sime, was left cragfast on a rock ledge. Dundonnell MRT, HMCG Helicopter. 75. (See incident of 30.6.92)
- MAY 24th – Dr. D Pearson (51) slipped on the path about 300m upstream of Falls of Kirkaig, injuring his back. Winched aboard HMCG helicopter. Lochinver Coastguard. Assynt MRT. 49.
- MAY 24th to 25th – Searches of Cul Mor by Assynt, Dundonnell and RAF Leuchars MRTs, and RAF Sea King were caused by two walkers separating and misunderstanding their DAY of rendezvous. 125.
- MAY 25th – Clayton Noble (27) separated from his party near Seana Braigh and was overdue returning via Rhidorrach to Ullapool. Police and Dundonnell MRT. 8.

- JUNE 12th – Sheila Foley slipped on dry rock at 880m on Sgurr Fiona, An Teallach, sustaining a serious head injury with injuries to chest and arm. A passer-by raised the alarm. The other three ladies in the party were very switched on, providing good ground ident, markings and valuable assistance to the winchman of a RAF Wessex. Dundonnell MRT. 5.
- JUNE 20th – Descending Coire Leith of Liathach at 450m Richard Hill (63) was exhausted and collapsed vomiting. Torridon MRT and Police, RAF Sea King. 43.
- JUNE 30th to JULY 1st – Two brothers were overdue for a golf appointment. Dundonnell MRT searched An Teallach. In Toll an Lochain their shouts gained a response. Graham Walker (39) was cragfast on the side of Cadha Gobhlach about 120m above where Ian Walker lay dead. While descending a gully on the coire side Ian Walker had faced inwards and tried to lower himself down onto a heather patch on a rock. He couldn't get his footing and was hanging over the rock. His brother tried to help him and lowered his right leg to which Ian Walker held. Ian Walker then lowered himself so that his stomach was over the heather patch on the sloping rock. He couldn't get a firm handhold or foothold. He slid down the rock, and fell vertically 30m then tumbled down a rock gully. As the mist was rising an RAF Sea King was called for winch-out. 168. (See incident 16.5.92)
- JULY 21st to 22nd – Martin Rodgers left a loch above Eas a'Chual Aluinn, Kylesku to walk 5 km. to the A894. He got lost in mist and was found next morning on the A837 having walked in circles all night. Assynt. 8.
- AUGUST 6th – Christopher Deacon (35) slipped on wet vegetation 100m behind his holiday home, breaking a tibia and fibula. The person calling Torridon MRT had failed to find a doctor. 9.
- AUGUST 17th to 18th – Kerstin Pane (20) slipped on wet rock on the path to Craig YH. damaging a knee cartilage. She went with a companion and spent the night in the hostel. Evacuated by fishing boat next morning. Torridon MRT and boat skipper. 12.
- AUGUST 18th – Glen Ballard (23) slipped on steep grass near Whaligoe Steps, which lead up from the harbour at Whaligoe, Caithness to village of Ulbster. Back injuries and broken leg. RAF Sea King. 8.
- AUGUST 20th to 21st – Descending Maol Chean-Dearg in mist, Peter Bibby (42) fell 12m, slipping on wet rock and grass. He broke an arm, dislocated a shoulder and cut his head so his wife went for help. RAF Sea King lifted Torridon MRT to 600m in poor weather. They found him at 01.00 and stretchered him down till Sea King could airlift him when weather improved. Also Kinloss and Kintail MRTs. 286.
- AUGUST 22nd – Problems of jammed ropes when abseiling caused benightment. Three climbers trapped on cliffs at the base of The Old Man of Stoer. Were found by HMCG Helicopter using infra-red camera. Helo. provided illumination for pick-up by Lochinver Lifeboat. 26.
- SEPTEMBER 22nd – Injured Joan Goddard (76) walked out unaided after treatment by doctor on Achiltibuie/Blughasary footpath. Dundonnell MRT stood down. 2.
- SEPTEMBER 26th – Three men slightly overdue on Stac Pollaidh. Assynt MRT alert. 2.
- OCTOBER 16th – Man was overdue from stalking on Sgurr an Fhidhleir because he failed to rendezvous with an 'Argo' but walked out. Assynt and Dundonnell MRTs. 15.
- OCTOBER 16th – RAF Sea King with six Kinloss MRT members on board went to Lochcarron, but missing persons had turned up.
- OCTOBER 26 – A couple with a young girl were late in bad weather, coast walking from Blughasary to Culnacraig, Coigach. They turned up safe. Assynt and Dundonnell MRTs. 11.
- NOVEMBER 8th – Mature pine forest near Mount Eagle, Black Isle. John English (13) had been cycling to and from the other four of his family out for a Sunday walk but went north instead of south. Found OK by Police Landrover. Dundonnell MRT, Civil Volunteers, SARDA. 68.

- NOVEMBER 21st to 24th – Beinn Alligin, Torridon. After large scale searches in bad weather, the body of William Haworth (24) was found at 600m at the foot of steep ground north of Sgurr Mhor (985m) by Kinloss MRT on the fourth day. He was well equipped and wore crampons when he fell. He had been attempting a solo traverse of Beinn Alligin, B. Dearg and B. Eighe. Stretchered down then airlifted by RAF Sea King. Leuchars, Dundonnell, Torridon MRTs, SARDA. Dundee University. 1512.
- DECEMBER 6th – Dundonnell MRT were able to herd out and lift over rocks three sheep stuck in a bay on South Headland of Little Loch Broom. 15.
- DECEMBER 28th – Wilma MacKay (53) broke her ankle on scree on Canisp in a party of four. Assynt MRT. Airlift by HMCG helicopter. 21.

WESTERN HIGHLANDS

- 1991, DECEMBER 31st – A number of independent reports of red flares being seen in Meall Bhanabhiie area near Corpach. Negative searches by Lochaber MRT and RAF Sea King. Kinloss and Leuchars teams alerted. It was early Hogmanay revellers on a boat in the Caledonian Canal. 100.
- 1992, FEBRUARY 16th – Ladhair Bheinn, Knoydart. Descending a snow traverse without crampons on Stob a' Chearcaill, Stuart McKeggie (19) slipped and fell 45m down a gully. With a companion he walked down to Barrisdale Bothy. Lifted by RAF Sea King with bruises and deep cuts. 16.
- MAY 3rd to 4th – Alone near the top of Sgurr a'Bealach Dheirg, not using crampons, Joseph Gormal (26) slipped on snow and fell a considerable distance with cuts and bruises. He lost his ice-axe in the fall and had a long detour to get into Gleann Lichd, but made his own way down. Kintail MRT. 2.
- MAY 17th to 18th – Helen Wilson (33) and Natasha Atkinson (24) left about lunchtime to climb Sgurr na Lapaich from L. Mullardoch but got benighted and bivouacked. Found by Kinloss MRT and made their own way down. Dundonnell MRT, RN Sea King. 94.
- JUNE 20th - Climbing (roped) the 2nd pitch of The Great Ridge, Garbh Bheinn of Ardgour, Hugh Munro (41) slipped and fell 30m with cuts, grazes and a compound ankle fracture. He was lowered and tended by his companion while a nearby climber went for aid. Winched off by RAF helicopter. Lochaber MRT on standby. 28.
- JULY 15th – Ardnish, Lochailort. After walking to Peanmeanach Bothy for lunch from Polnish, James Mathieson (60) died of coronary artery occlusion on the way back. Police and Air Ambulance. 18.
- AUGUST 10th to 11th – Wearing Wellingtons, poorly clad and equipped, Awnlot Koning (F34) went ahead of two companions descending from Sgurr na Sgine to Kinloch Hourm. She took the wrong route, got benighted and very cold. Kinloss, Kintail MRTs, SARDA. 143.
- AUGUST 15th – Galvy family of four underestimated time to walk Five Sisters of Kintail and turned back when daughter was sick. Kintail MRT. 3.
- AUGUST 20th – Frank Brauer (22) and Birgit Lang (21) overdue walking shore of Loch Morar beyond Bracorina. Rescue boat and Police. 5.
- AUGUST 31st to SEPTEMBER 3rd – Search of the head of Strathconon by RAF Sea King, Kinloss, Kintail and Torridon MRTs after Stanley Meachan (36) had been missing for three days. He was safe in Inverness, but had separated from his companion in bad weather and then walked off after a head injury from a fall.
- SEPTEMBER 10th – Tony Hallard (54) broke a leg slipping on grass on the Forcan Ridge, The Saddle. Strop-winchd by RAF Wessex. Kintail MRT. 20.
- SEPTEMBER 27th to 28th – Five Sisters of Kintail. John and Helen Scire (both 28) got lost and benighted on the tops in bad weather. Walked out as search was started by RAF Sea King, Kinloss and Kintail MRTs. 130.

- OCTOBER 11th – With two companions, Ross Gowans (40) was descending rock and grass very steeply from Carn nan Gobhar S. Ridge to Coire an t-Sith (Loch Mullardoch). Going down rock outcrops unmarked on map he slipped and fell 30m breaking an elbow and a kneecap. Dundonnell MRT and RAF Sea King. 11
- OCTOBER 14th – Walking from Glen Affric to Morvich (L. Shiel) Andreas Klein (19) separated from his companion and went back to Affric. Kintail MRT, SARDA, RAF Sea King on standby. 32.
- OCTOBER 18th – With others, James Macleod (16) was going down from the summit of Ben Hiant, Ardnamurchan Peninsula, when he slipped on grass and fell on to rocks, dislocating a shoulder. HM Coastguard and RN Sea King. Lochaber MRT on standby. 16.
- OCTOBER 22nd – Descending Garbh Bheinn of Ardgour, James Fielder (14) slipped on grass and fell forward into a burn, knocking himself unconscious and breaking his nose. Companions went to Glen Tarbert for help. With aid from Police and friends he managed to walk down but stayed in hospital for observation. 2.
- OCTOBER 31st – In a party retreating from Sgurr a' Bhealach Dheirg to Saileag in deteriorating weather, Gennista May (18) sitting glissaded on wet grass, but she lost control of her speed. She tumbled 150m down a very steep slope sustaining abdominal and chest injuries with internal bleeding. Kintail MRT, SARDA, RAF Sea King. 50.
- NOVEMBER 26th – John Ferguson (59) collecting sheep near Morar, fell into a bog. Found by Lochaber MRT and crofters unconscious from cold. 40.

BEN NEVIS

- JANUARY 13th to 16th – Climbing Observatory Ridge/Point Five Gully, Brian Meers (34) and Patrick Gray (25) were both killed by a 300m fall when the leader fell and pulled off his second. They were fully equipped with helmets, ice-axes and crampons. Stretchered from Observatory Gully by Lochaber MRT and evacuated by RAF Wessex. Kinloss MRT recalled en route. 123.
- JANUARY 19th – Two climbers in Comb Gully were showered with dislodged ice when Dennis Barrett (44) who had been climbing solo, fell past them and was killed. One of the pair was struck on the leg by Barrett, but uninjured. They absented and found his body, which was recovered by Lochaber MRT and RAF Wessex. 80.
- FEBRUARY 9th – Twenty-eight pupils (average age 14) and two male teachers overdue from Ben Nevis. Poorly equipped, some without ice-axes, they were unable to find the way down from the summit till found by two climbers who guided them. They arrived back at Glen Nevis over a period of 30 minutes in twos and threes, some showing distress. They had left without leaving route details and with little food. Northern Constabulary.
- FEBRUARY 15th – Taking alternate leads near the top of Comb Gully Buttress, Michael Laidlaw (29) belayed 3m from the top when he was 30m above his second. Both wore crampons and helmets. His second started to climb, slipped and fell a short way but managed to brake with his ice-axe. The second, Jonathon Wakefield (28) then felt a tug at his waist which appears to have been Laidlaw starting to fall. Wakefield was pulled off and fell 90m to land uninjured in soft snow in Number 2 Gully. Laidlaw landed 5m away from him and broke a leg. Because the avalanche risk was high he was stretchered out by Lochaber MRT to a safer place, from which he was winched off by RAF Sea King. 27.
- FEBRUARY 25th – An instructor from a Welsh Outdoor Education Centre was descending from the summit of Ben Nevis to the top of the abseil posts in mist with two students on a Winter Mountaincraft course. The bearing from the trig. point was 138° M. and the distance 400m. All three wore crampons but not helmets. The instructor moved ahead down the slope with Jaqueline Cawardine (30) directing her. About 250m from

- the summit Cawardine tripped/stumbled dropping her ice-axe and compass. Her actual trip was not witnessed by the other two but they did see her sliding down towards Coire Leis. The instructor grabbed her but Jaqueline was wrenched from her grasp. She slipped 30m then went over the edge. The fall had been witnessed by other climbers. The instructor found the body 200m below in Coire Leis. At the fatal accident inquiry it was suggested that alcohol might have contributed to the incident; also the difficulty of using an ice-axe for self arrest at the same time as using a compass for navigating. Recovered by Lochaber MRT and RAF Wessex. 100.
- FEBRUARY 28th to 29th – Leuchars and Lochaber MRTs and RAF Wessex searched for two climbers. Robert Oakey (25) and Anne Goudie (19) were found by Lochaber descending Tourist Path. After climbing Glover's Chimney they had been benighted at Tower Gap, completing Tower Ridge on 29th. 104.
- FEBRUARY 29th to MARCH 1st – Mike Thomas (35) cramponed and helmeted, but unroped, was above two others ice climbing to the right of Number 2 Gully. A large cornice forced them left to try and top out to the left of Number 2 Gully. The soft snow gave way and Thomas was unable to self-arrest with his ice-axe, falling 200m and breaking an ankle. He crawled to Coire na Ciste. Companion alerted SMC party in hut who made Thomas comfortable. Leuchars and Lochaber MRTs stretchered him down at night as low cloud prevented RAF Sea King lift. 192.
- MARCH 2nd to 3rd – Paul Bliss (39) was leading the Great Tower when he fell 20m seriously injuring both ankles. He and his companion awaited rescue on a ledge. CIC Radio Link was used at 19.40. Lochaber MRT lowered him 600m to the foot of Observatory Gully for airlift by RAF Sea King. 163.
- APRIL 4th to 5th – Benighted on Hadrian's Wall, Anthony Howard (45) and Terence Trundle (43) were too cold and tired to complete the climb next day. Three other climbers (SMC members) at CIC Hut heard their calls for help and assisted them to the plateau. They were walked to Halfway Lochan by Lochaber MRT, and airlifted by RAF Sea King. 163.
- MAY 11th to 12th – John Webster (23) became separated from his party of nine in a white-out on Nevis summit. He got down Coire Eoghainn alone and on to the path to the east of Glen Nevis Waterslide. Trying to cross the Waterslide he was killed by a fall on wet rock slabs. Leuchars and Lochaber MRTs. RAF Wessex. 222.
- MAY 25th – Descending Nevis Tourist Track with two friends, Barbara Baker (57) got heat exhaustion. Rescue was by Lochaber MRT and RAF Wessex. 20.
- JULY 8th – Going down Tourist Path with three others John McCormick (36) slightly strained his knee ligaments. Stretchered from second aluminium bridge by Lochaber MRT. 15.
- JULY 9th – William James got thigh cramp at 1200m on Nevis Path. Other walkers helped him down and alerted Lochaber MRT. Team Leader assisted. 4.
- JULY 31st – Descending Nevis Zig-Zags with her husband, Patricia Ottewell (49) fractured an ankle slipping on scree. Stretcher winched by RAF Wessex. Lochaber MRT. 16.
- AUGUST 6th – Marie France (43) slipped on the tourist path injuring an ankle. Companion alerted occupants of the CIC Hut. Lochaber MRT stretchered her from 200m. 18.
- AUGUST 16th – With 17 other people and six ponies on a sponsored ride up Ben Nevis, Leslie Bearcroft (60) was leading his Shetland pony at 1140m altitude when he collapsed and died of a heart condition. Lochaber MRT and RAF Sea King. 38.
- AUGUST 18th – Sheila Keane (39) was descending the Ben Path with her husband and three children when she stepped on a loose, wet boulder and broke her (R) ankle. Lochaber MRT carried her down on a stretcher. 16.
- SEPTEMBER 24th – Poorly equipped and wearing trainers, James Davis and Kevin Rozier (both 14) intended to walk only part way up the Ben Track. Yet they got close to Nevis summit and separated in mist, but both managed to get to Glen Nevis Road uninjured. Lochaber MRT. RAF helicopter scramble cancelled when they turned up. 10.

- OCTOBER 6th – Running down a very rocky slope at 1140m on the West Face of Carn Dearg NW, Damien Smith (18) stumbled and rolled 6m sustaining cuts, bruises, broken arm and dislocated shoulder. Two of his four companions went for help. Flying overhead at the time, an air ambulance lowered a paramedic, but for operational reasons could not uplift him. Casualty and paramedic were uplifted by RAF Wessex. Lochaber MRT. 24.
- OCTOBER 26th to 27th – Using avalanche transceivers, necessary in deep, new snow, Kinloss MRT were dropped by RAF Sea King in Five Finger Gully, helping Lochaber MRT in a search for a missing brother and sister. Found on S.side of the gully and winched out in cloudy conditions, cold but uninjured. John (30) and Karen Hughes (27). 338.
- NOVEMBER 21th to 22nd – Bryan Burns (32) and Ian Bell (25) lost on Ben Nevis. RAF Wessex recalled due to weather. Turned up uninjured. Lochaber MRT. 113.
- DECEMBER 5th – Leaving with four companions to climb Nevis by the tourist track, Toby Holland (20) got close to the top of Number 5 Gully of Carn Dearg NW in mist and fell through a cornice four hours after they had started. Repeat: Number 5 Gully. He fell 30m and was uninjured. He had crampons and ice-axe and took one or two further falls, then eventually walked out of the gully meeting Lochaber MRT on his descent. RAF Sea King. 60.
- DECEMBER 5th – Nick Kikus (34) presumably unroped, was avalanched on Observatory Buttress, and fell 200m into Observatory Gully suffering internal injuries and bruising. His companion abseiled down to him and dragged him to CIC Hut, whence he was airlifted by RAF Sea King. It was a windslab avalanche occurring during snowfall in a strong wind. 12.
- DECEMBER 21st – The body of Bruce Snodin (17) was found under one metre of snow in the Red Burn at 850m. In a party of three descending from summit of Ben Nevis. The front two had fallen (perhaps over a cornice). One fell 40m, was buried in the snow but dug himself out. Snodin fell 66m but started an avalanche in which he was buried. The third went for help. RAF Sea King airlifted one person but had to return to Lossiemouth with technical problems. Snodin was carried down by Lochaber and Leuchars MRTs. 163.
- DECEMBER 25th – Training on Ben Nevis, Kinloss MRT helped a number of lost hillwalkers who were ill-equipped for the weather and snow conditions. John Kindness (51) without ice-axe or crampons, twisted knee and was helped to below cloud base, then airlifted by RAF Sea King helicopter. 35.
- DECEMBER 29th – Walking from CIC Hut to Tourist Path without crampons, Martin Prestige (18) slipped on sheet ice near Halfway Lochan. He fell 8m, sprained an ankle and a knee and deeply cut a palm. Lochaber MRT and RAF Sea King. 14.

GLEN COE

(Including Buachaille Etive Mor)

- JANUARY 21st to 22nd – Due to mist, Frank Spence (43) and Andrew Logie (23) spent a night out on Bidean nam Bian. Found by RAF Sea King walking down next morning. Glencoe MRT. 25.
- FEBRUARY 28th to 29th – Another party, which got down at 22.00, raised the alarm for four university climbers benighted on Curved Ridge of Buachaille Etive Mor. Only two had crampons and there was bad weather overnight, but they retreated safely. Glencoe MRT. 40.
- FEBRUARY 29th – Possibly Bidean, Glencoe. SAC Merrick, a member of an RAF Leuchars hill party fell 200ft. with head and leg injuries. Team responded to a Ben Nevis callout.

- MARCH 1st to 2nd – Searches of the Bidean nam Bian massif by RN Sea King, SARDA, Glencoe, Kinloss, Leeming and Leuchars MRTs were in the wrong place because the pair of overdue climbers (M31, M25) were on the other side of Glencoe, traversing Aonach Eagach E to W. They got down safely in bad weather, although they had no helmets, crampons, ice-axes, spare clothing or adequate waterproofs. 354.
- MARCH 8th to 11th – See also MAY 30th. Large scale searches of the Bidean nam Bian Range for Samuel Stuart Bryan (43) drew a complete blank despite widening the search area to 30 sq. km of precipitous mountains. He went missing in excellent, dry, clear weather; but the search was in heavy rain, gales, snowstorms and sunshine by Glencoe, Kinloss, Leuchars and Lochaber MRTs, 12, SARDA dogs, RAF and RN Sea Kings, RAF Wessex. 23 hours flying time. 2029.
- MARCH 9th to 11th – During the above searches for S.S. Bryan, SAC Lavelle, descending over easy ground dislocated his kneecap and was airlifted.
- MARCH 17th – While S.S. Bryan was still missing, it was reported that the thawing snow had revealed a large volume of blood below SC Gully of Stob Coire nan Lochan. A full call-out revealed that the 'blood' was red dye from a helicopter flare.
- MARCH 31st – Two people descending NW from Stob Coire nan Lochan summit past the top of Broad Gully, were caught by a strong gust of wind. Alison Black (26) was blown down the gully, falling over 65m and injuring her ankle. A Glencoe MRT member happened to be in the gully and radioed. She was stretcher lowered to an easier spot for winching by RAF Wessex. The pilot had a 25-knot stable updraught for ideal hovering conditions. 64. How does this tie in with the 'blown over' report? Another report said she was climbing the gully with two axes.
- APRIL 11th – Mary Kerr (9) with eight other children and three care officers set out from Pipers' Layby to walk in the hills. She stumbled and rolled head over heels down a boulder slope for 16m sustaining serious head injuries.
- APRIL 16th to 17th – Robert Cox (26) and Ian Weaver (23) were benighted traversing Bidean nam Bian from Dalness, Glen Etive to Achnambeithach, but turned up safe at 01.15. Glencoe MRT on standby. 2.
- MAY 23rd – Lee Bott (28) was killed when standing at the foot of the final pitch of Clachaig Gully (VD) belaying his leader. From 20m above the stance the leader accidentally dislodged a rock which struck the second. There were four in the party. The leader climbed out and went for help. The two uninjured left below the top pitch in the above incident were pulled out on one rope, using another rope as a handrail. Then Lee Bott's body was removed on a stretcher cableway and carried down to the A82. RAF Sea King involved but not for evacuation. 100.
- MAY 30th – Joseph Drain (27) collapsed with heat trauma on the Coire na Tullaich Path, Buachaille Etive Mor. Kinloss MRT and RAF Sea King.
- MAY 30th – See March 8th The body of Samuel Stuart Bryan was found by two Corbett-baggers on the beach between Bidean nam Bian and Beinn Maol Chaluim; just outside the line limiting the search area. There was no obvious damage to the body. His rucksack was not found. Glencoe and Leuchars MRTs, RAF Sea King. 68.
- JUNE 6th – Searching of Stob Coire nan Lochan from Stob Coire nam Beith was sparked off because a woman did not tell her boyfriend that she was down from the hill. Glencoe MRT and RAF Sea King. 13.
- JUNE 12th – After traversing Aonach Eagach, Eileen Calderbank (47) collapsed from heat exhaustion descending the Clachaig Gully Path. First aid and stretcher lower by Glencoe MRT. Airlift from 780m by RAF Wessex. 35.
- JUNE 13th – When descending Sgor nam Fiannaidh with a companion, Joyce Mutch (29) was hit by a rock, dislodged by another party, which cut her head deeply. Airlift from 780m by RAF Wessex. Glencoe MRT. 36.
- JUNE 13th – Midway along Aonach Eagach, Robert Gratton (23) slipped on wet rock, fell 1m and cut his lower leg deeply on very sharp rock. Stretcher lift in poor visibility by RAF Wessex. Glencoe MRT. 43.

- JUNE 22nd – One of 20 students descending Lairig Eilde to Glen Etive, Natalie Cavar (18) slipped on dry rock/grass spraining her ankle. RAF Wessex and Glencoe MRT. 38.
- JUNE 27th – On Meall Dearg of Aonach Eagach, Gilbert Hennis (50) died of a heart attack. Winched off by RAF Wessex as mist came down. Glencoe MRT. 34.
- JUNE 27th – On the south slopes of Sgor nam Fiannaich at 600m a woman aged about 20 took fright and would not move. She was with a companion. She was strop-winched aboard an RAF Wessex and flown to the A82. She left before giving her name. Glencoe MRT. 16.
- JULY 4th to 5th – Descending Stob na Broige (of Buachaille Etive Mor) Douglas Hartley (27) was walking with a friend towards the dangerous Dalness Chasm but they separated. Hartley got caught between Central Gully and Right Fork Gully. He fell 18m cutting his head. He realised he must go back up; he fell again (not far) and broke his arm. His friend climbed back up to look for him and even climbed into a gully – the wrong one – but could find no trace. With great difficulty Glencoe MRT found him and climbed to within 10m but dare go no closer in case they knocked rocks on to him. They waited 30 minutes till Rescue 137 (RAF Sea King) arrived, and in a super piece of flying Hartley was winched out. 80.
- JULY 18 – Linel Freetz (M31) unroped, was descending Crowberry Ridge, Buachaille Etive Mor, with a friend when he slipped on wet rock and fell 55m into a deep, steep gully. He sustained bruised kidneys with blood in urine. Winched off by RAF Wessex which took Glencoe MRT member to site. 40.
- AUGUST 4th – Descending from Sgor nam Fiannaich after traversing Aonach Eagach, Charles Shearer (27) and Liz Brierley (30) went down the ‘wrong side’ of Clachaig Gully in mist. Dr. Shearer slipped on wet rock and vegetation and was killed by falling 50m into the gully. Dr Brierley became cragfast and suffered shock. Glencoe MRT stretcher carried the dead man and made the woman safe till both were winched out by RAF Leuchars Wessex helicopter using strop spacewalk and stretcher spacewalk. 50.
- AUGUST 18th to 19th – After separation from his companion, Alan Harding (33) climbed Sgor nam Fiannaich. Descending near Clachaig Gully West he slipped on wet rock, scree and vegetation and sustained minor cuts and bruises. He felt unable to continue. Glencoe, SARDA and RAF Kinloss MRTs carried out a large scale night search on dangerous ground. Winched out by RAF Sea King helicopter. 220.
- AUGUST 26th – Claire Hancock (18) was in a group of six Scouts and two instructors. In thick mist they came down Sgor nam Fiannaich on the ‘wrong side’ of Clachaig Gully. Miss Hancock tripped and fell into a small gully leading into Clachaig Gully. She smashed her brow onto a rock giving herself a depressed skull fracture. She was in a bad condition when Glencoe MRT arrived and administered oxygen at a high flow rate. RAF Wessex airlift to Belford Hospital; then by road to head injury consultant in Glasgow. 28.
- SEPTEMBER 10th – James Bevan (42) got minor injuries to his heel/ankle by a slip on scree descending the south side of Sgor nam Fiannaich. He walked part of the way down and was then stretchered by Glencoe MRT. 22.
- SEPTEMBER 13th – John Stewart (21) broke an ankle descending the Clachaig Gully Path. Stretchered down by Glencoe MRT. 26.
- SEPTEMBER 25th to 26th – James Johnson (37) and Pauline McKeown (25) set out late to traverse Aonach Eagach west to east. Near the Bad Step of Am Bodach mist came down which they decided to sit out and so got benighted. A motorist saw their flashing torch. Winched off by RAF Sea King. Glencoe MRT. 50.
- SEPTEMBER 26th to 27th – Flashing light seen by reliable witnesses in Clachaig Gully area. Large scale searches by Glencoe and RAF Leuchars MRTs, SARDA and RAF Sea King. Nothing found. 240.

- OCTOBER 3rd – Douglas Philips (12) suffered a deep head wound when he slipped on steep, wet rock descending the 'bad step' of Beinn Fhada (Ref: 165 545) in a party of six scouts and two leaders. Stretchered by Glencoe MRT, then winched off by RN Sea King. 70.
- OCTOBER 24th to 25th – Three men were caught out and slowed down by the first heavy snowfall of the year when traversing Aonach Eagach E to W. Benighted but evacuated themselves. Glencoe MRT. 4.
- NOVEMBER 7th – Three incidents in effect in Lower Coire nam Beithe at 1845. Martin Latter (20) slipped and hurt his back. Five people going for help got cragfast; then one of them, Leanie Safer (F20) slipped and injured her hand. Glencoe MRT lowered the cragfast five to safety and Leanie was then able to walk down. Martin was stretchered off. 58.
- DECEMBER 28th to 29th – Climbing Crowberry Gully (Grade III-IV) of Buachaille Etive Mor, Christine Campbell (41), Ron Walker (37) and Duncan Merrilees (32) were benighted on the last pitch. As none were sure of the climb they bivouacked till daybreak, then climbed to safety and walked out. Glencoe MRT assembling next afternoon. 8.

OTHER CENTRAL HIGHLANDS

- 1991, JULY 26th – RN Sea King took Oban Police MRT to cloud base at 300m below Belgian heart patient on Beinn Sgùlaird. Team confirmed a better landing area and helo. taxi/hovered up mountainside to uplift patient. Day/night rescue.
- OCTOBER 16th – Party of five walking Loch Rannoch to Prince Charlie's Cave, Loch Erich without waterproofs turned back in strong winds and sleet. Two went for aid. Lauren Matthews (F18), Shelley Masterton (F21) and Richard Houlton (M21) were rescued by local volunteers in 4WD vehicle. Treated for cold but not admitted. Tayside SARU. 3
- NOVEMBER 11th – A woman and her nephew were walking along a track in Glen Nevis when she slipped on gravel and broke an ankle. Stretcher carry by Lochaber MRT.
- 1992, FEBRUARY 3rd to 4th – Graham MacKay (39) got benighted and lost due to heavy snowfall walking from Strathossian to Torgulbin, Glen Spean. He made a shelter and bedded down. Traced by Police and returned to road.
- FEBRUARY 8th to 9th – Four men (32, 32, 25, 22) got benighted with only one torch between Ben Alder and Beinn Bheoil. Lost somewhere on B. Alder they walked out via Culra before the search started. Cairngorm MRT and RAF Sea King. 52.
- FEBRUARY 16th – Christina Junor (70) took a diversion over heather from the Glen Nevis Peat Track (Cow Hill), slipped and broke her ankle. Lochaber MRT. 6.
- FEBRUARY 23rd – Devil's Ridge, Mamores. Adrian Forde (30) fell on ice without crampons with major injuries to head, chest, arm, pelvis, femur, tibia and fibula. He had been moved by passers by. Neil Robertson stretcher winched (presumably only type available) by RAF Wessex. 1 Lochaber MRT on scene. 1 on ridge as linkman.
- APRIL 11th to 12th – Richard Matthews (28), William Millican (28) and Adrian Allan started late, and with only one rope, to climb Ardverikie Wall of Binnein Shuas. The leader got stuck on the crux with the others stranded in different locations below him. They were lowered down overnight by Cairngorm MRT. At any one time, one of the three was untied from the rope and hence in a precarious location. 121.
- APRIL 16th to 18th – Karina Andersen (15) and Helle Densen (14) were found by Glencoe MRT at the foot of Stob nan Losgann, Rannoch Moor, and rescued by RAF Sea King. From a party of 12 they had become separated on the second day of a three-day walk from Rannoch to Kinlochleven. Lost in mist they had pitched a tent. Teachers in charge did not go back to look for them. Two other missing girls, one with a sprained ankle, from the same group were found by a British Alcan worker. 82.

- APRIL 17th to 18th – Attempting to walk from Corroul to Glen Nevis, James Robertson (38) failed to cross Allt Coire a' Bhinnein (in flood) near Tom an Eite. Without rucksack, tent or sleeping bag he stayed overnight in a tin shack near Luib Eilt. Found by RAF Wessex and Lochaber MRT at Loch Eilde Mor. 14.
- MAY 2nd – Penelope Edwards (35) slipped in mud on Binnein Mor, Mamores hurting her ankle. Stretchered off by Glencoe MRT. 12.
- MAY 2nd – Descending the Coire a' Mhusgain Path, Mamores, Kenneth Stevenson (44) slipped on mud/scree and broke an ankle. Stretcher carry by Lochaber MRT. 12.
- MAY 2nd – Sylviana Bain (42) slipped off a wooden stile on the Peat Track between Cow Hill and Glen Nevis, breaking a leg. Stretcher carry by Lochaber MRT. 6.
- MAY 4th – In a large party walking the forest track from Glen Duror to Ballachulish, Sandra McCue (46) slipped in mud and injured an ankle. She was stretchered out by Glencoe MRT. 27.
- JUNE 6th to 7th – Fishing at Loch Ba, Rannoch Muir, William Knox (74) got heat exhaustion and became lost. Night search by Glencoe MRT. Found next day by RAF Sea King. Kinloss MRT and SARDA also used. 187.
- JUNE 20th to 21st – Carol Morrison (28) suffered food poisoning on an overnight sponsored walk from Glen Nevis to Corroul. She managed to walk to the head of Loch Treig where she was lifted by RAF Wessex. 12.
- JULY 1st to 3rd – Four girls (16, 16, 16, 15) got lost on an award hike from Corroul to Kinlochleven. Rescued by RAF Sea King. Lochaber and Glencoe. 32
- JULY 31st – Family reported cragfast above Steall Falls rescued themselves. Lochaber MRT and RAF Wessex. 12.
- AUGUST 4th – On an award scheme in Leanachan Forest, Spean Bridge, Nigel Davies (19) slipped on rough ground and sprained an ankle. Lochaber MRT. 3.
- AUGUST 16th – Karen Wolfstrain (34) got separated from her companion in mist on Meall Tarsuinn, Glen Ceitlein (Gl. Etive). Descended alone unharmed. Glencoe MRT called out. 7.
- SEPTEMBER – A ghillie stalking on Stob Coir' an Albannaich, Glen Etive, cut his hand badly with a sharp knife and so had to get down from the hill promptly. Descending he came across a woman hillwalker with a broken ankle. With various people helping he put the woman on to a stag pony and led the animal down to the road. (The Glencoe MRT accident recorder, Ronnie Roger, had not heard of other rescues by horse in the team's recent history. However, in early 1949, some if not most, of the 21 bodies from a USAF Super Fortress crash in the hills above Strachur, Loch Fyne, were carried down on ponies. JH)
- SEPTEMBER 5th – Meall nan Gobhar of Beinn Fhionnlaidh, Glen Etive. Margaret Peebles (47) slipped on dry vegetation and injured her ankle. Winched aboard RAF Wessex. Glencoe MRT. 38.
- SEPTEMBER 10 – Driving a 4WD All Terrain Vehicle directly up from Ballachulish Quarry to service a Police transmitter mast on Am Meall, Campbell Harper (52) rolled backwards on steep ground, breaking his leg in seven places. Stretchered by Glencoe MRT and winched by RAF Wessex. 28
- SEPTEMBER 19 – William Donnelly (44) and John Gorham (42) got lost in mist at midday on Am Bodach (Mamores). After a night out they saw the way down to Kinlochleven when mist windows opened, but they were airlifted by RAF Sea King. Glencoe and Lochaber MRTs and SARDA. 47
- OCTOBER 11th – After separating from two companions Lewis Clark (37) got cragfast on a large area of scree and rock not far from the summit of Sron na Creise, Black Mount. Roped down by Glencoe MRT members who escorted him from the mountain. 39.
- OCTOBER 15th – Arthur Davis (53) slipped on snow in the Creag Dubh area, Newtonmore, spraining an ankle. RAF Wessex airlift. 9.

- NOVEMBER 2nd – Glen Fuar (SW of Loch Tulla, Rannoch Moor). Dutch soldier (about 25) had severe hypothermia. His heart arrested twice before uplift by RAF Wessex after dark. Treated with Flectalon, oxygen and heating he arrived at Vale of Leven Hospital semi-conscious but improving. Medic. in party.
- NOVEMBER 15th – Beverley Hay (20) strained one of her thigh muscles on An Gearanach, Mamores and had to be stretchered to Steall Car Park, Glen Nevis by Lochaber MRT. 65.
- NOVEMBER 21st – Fully equipped with crampons and helmet, Neil Stevenson (18) was climbing, roped, Grooved Arete, E. Face Aonach Mor. He slipped and fell 45m seriously injuring his back. Stretchered below cloud by Lochaber MRT, then stretcher winched by RAF Wessex which had to stop overnight at Crianlarich due to weather. 91.
- NOVEMBER 29th – Descending from the summit of Beinn a' Chaorainn, Glen Spean, and about 150m down, Douglas Philp (46) slipped and fell 50m on to a snowy ledge, suffering fractured ribs and bruising. Airlift by RAF Sea King. Lochaber MRT. 17.
- DECEMBER 27th – Wearing crampons in the NW Coire of Stob Ban (Mamores), Mark Granidos (24) tripped and injured a lower leg. Winched by RAF Sea King. Lochaber MRT.
- DECEMBER 27th – Two adults (M52, F38) and two cold children (F8, M7) were found by Glencoe MRT before midnight by following camera flashes. Rescuers lowered them down cliffs. With no torches the party was over 700m up on the SE Spur of Beinn Mhic Chasgaig, Glen Etive. The children wore rubber boots yet there was hard neve on the hill. They were rescued by RAF Sea King. A more cautious trio of the same party had turned back earlier, then realised that the other four were benighted without torches. Kinloss MRT also called out. 133.
- DECEMBER 28th – Traversing up a steep ice/snowslope on Meall Cian Dearg of Stob a' Choire Mheadhoin (L. Treig) Peter Hastie (46) slipped and lost his ice-axe trying to self-arrest, falling 30m to below the snowline, with head, chest and ankle injuries. His companion went for help, alerting Lochaber MRT and RAF Sea King. 30.

CAIRNGORMS

- 1991, APRIL 21st – Student (23) fell over cliff at Cove, Aberdeen. Stretchered down to lifeboat by CG cliff team.
- APRIL 28th – Child (2) stuck on cliff at Newtonhill. Recovered by CG on routine patrol.
- MAY 1st – Person (15) recovered from cliff at Aberdeen by CG team.
- MAY 15th – Diver stranded on cliff at Todhead (9 Km. S. of Stonehaven) recovered uninjured by CG cliff team.
- JUNE 1st – CG teams rescued woman who broke an ankle in a cliff fall at Collieston.
- AUGUST 8th – Helicopter recovered person cragfast at Stonehaven due to unstable rock face. CG teams in attendance.
- AUGUST 11th – Person over cliff N. of Arbroath with severe injuries. Helicopter winched from cliff base with CG assistance.
- SEPTEMBER 14th to 16th – Protracted search of cliffs for female by CG teams, lifeboat, CG and RAF helicopters, MRT and volunteers. Body located.
- DECEMBER 1st to 2nd – James McWilliam (30) with no map, compass, torch or whistle, walking Jock's Road (Glen Doll) got lost in dark. Though he saw rescuers' flares he could not signal back. Tayside SARU, RAF Wessex. 171.
- DECEMBER 22nd to 23rd – After crossing Mount Keen, David Mayes (46) fell into bogs getting lost in the dark on Hill of Cairney. He bedded down for the night but it got lighter by moonlight so he walked out. Tayside MRT and Police SARU. 20
- DECEMBER 27th – Sea cliffs just S. of Stonehaven. Man fell over. Paramedic attending also fell. Both airlifted by RAF Sea King. Coastguard Cliff Team.

- 1992, JANUARY 11th – Crossing Luibeg Burn from boulder to boulder in inadequate boots, Alan Barbour (23) fell back injuring the top of his foot. Aberdeen MRT.
- JANUARY 11th – About 250m south of Lochnagar summit Geoffrey Cumming (41) was descending snow-covered heather when his right leg went through the snow into a hole, tearing a calf muscle. Grampian Police. 2.
- JANUARY 11th – Aberdeen MRT searched Derry Cairngorm after a report of an orange smoke wisp, which could have been a flare. Nothing found. 83.
- JANUARY 15th – William Snow (21) and Michael Kew (20) started to climb Raeburn's Gully of Lochnagar at 14.00 and took longer than they estimated. Grampian Police MRT. 1.
- JANUARY 18th to 19th – Two men, Philippe Scott (55) and Andrew Scott (26) got lost in thick cloud between Cairn Bannoch and Broad Cairn. Overdue, they waited for a weather break and got themselves down to Glen Doll after midnight. Tayside SARU, Kinloss and Tayside MRTs, RAF Sea King. 110.
- JANUARY 30th – Body over sea cliffs 3 Km NE. of Arbroath recovered by CG Cliff Team.
- FEBRUARY 2nd to 3th – Having crossed Beinn a' Bhuid and Ben Avon from Invercauld, Simon Stewart (22) lost his compass in darkness. He walked out to the Crathie-Tomintoul road. Braemar MRT. 5.
- FEBRUARY 8th – An organised group of six (aged 17-29) got lost walking from Glen Shee to Glen Doll. They were keeping contact with CB radios at set times and reported themselves unable to descend a steep, dangerous waterfall in darkness (Ravine of the White Water). Guided down by Tayside MRT and SARU. 60.
- FEBRUARY 17th – A climber took a short fall in Coire an-t'Sneachda, Cairngorm and winded himself. His companion shouted for help, but the winded climber recovered and they finished the route unaware a rescue had been mounted.
- FEBRUARY 23rd – Kathleen Scanlon (40) and Maureen Robertson (40) got lost and overdue in the forest tracks of Glen Tanar, Deeside. Grampian Pol. MRT 4.
- FEBRUARY 24th – Police and firemen at Forres rescued three schoolboys stuck on an island below Findhorn Bridge for over six hours by rising water.
- MARCH 1st to 2nd – Kathleen Caird (40) was left by her husband near the top of the Land-Rover track on Beinn a' Bhuid while he carried on to the North Top. Returning, he could not find her so asked another party to inform police while he searched. A Grampian Police vehicle found him on the track. His wife had crossed the plateau in a bad blizzard, then, lost, spent the night descending the other (NW) side of the mountain with no map, compass, torch, whistle or extra gear. By sheer luck she reached Faindouran Lodge where she was found. Temperature dropped to minus 20°C during the night. Aberdeen, Braemar, Kinloss and Leuchars MRTs, RAF Sea King and Wessex searched. 1222.
- MARCH 8th to 9th – Man (50) separated from his friend descending the Corrie Fee Path into Glen Clova, and was found at 07.40 on 9th. descending Kilbo Path which is 2 km further east. It is thought that this same man was airlifted from CIC Hut on Ben Nevis in 1991. Tayside MRT and SARU, Leuchars MRT and RAF Wessex. 217.
- MARCH 15th – Double roped, and with a runner on each rope, Andrew Fanshawe (28) fell while leading Eagle Ridge of Lochnagar in winter condition. One of the runners was an in-place *piton and the other was a chock he placed himself. There was less than 10m of rope left when he fell and the two runners were not very far above his second's belay at the Sentry Box, so that although both ropes held he fell a considerable distance and sustained fatal head injuries. Conditions were freezing with a NNW gale. He was lowered off from 400ft up the climb. Braemar MRT and SARDA. 382. *See incident of August 16.
- APRIL 4th – Trevor Cousins (26) and Richard Hartshorn (30) were roped and climbing The Runnel, Coire an-t'Sneachda, Cairngorm. As Cousins climbed the cornice it gave way and both fell 160m on to a snow slope suffering minor injuries. They walked to the carpark and were lifted by RAF Sea King. 14.

- APRIL 14th – Francis Pearson (M55) fell from Bullers of Buchan into sea. Son went for help. A man (30) attempting rescue got cragfast. Second man was rescued by RAF Sea King which also recovered the body from the sea. Coastguard Cliff Team and Peterhead Lifeboat.
- APRIL 26th – Tired after walking over Beinn Bhrotain, Jill Geddes (25) walked into a bog near Luibeg Bridge, being immersed up to her neck and injuring a knee. Rescued by companions and evacuated by Grampian Police and Braemar MRT. 8.
- MAY 10th – A man injured in a fall on snow was rescued from Tap o'Noth, Rhyne by an RAF Wessex landing on. Weather at the time: Snowing with S. wind 20 knots.
- MAY 10th – Party of four tried to jump across fast flowing River Erich at Cargill's Leap, 500m upstream of Blairgowrie Bridge. John Towell (22) slipped on rock shelves, treacherous when wet, was washed downstream and disappeared in darkness. Police and RN divers.
- MAY 16th to 17th – After separating from a companion on Cairn Toul, John Cudlip (24) got cragfast descending into Garbh Choire. Found by Cairngorm MRT, who were winched out with him by RAF Sea King. Slight cold injuries. 48.
- MAY 27th – Two men (both 64) got separated from another (62) on Stac an Fharaidh, Cairngorm. Cairngorm MRT and RAF Sea King were involved because the group of two went to Loch Avon searching for the other, who had returned and said one of his friends had chest pains. 10.
- JUNE 16th – A 17-year-old girl collapsed 1 km west of Linn of Dee. The weather was very hot and she had not been drinking enough. Grampian Police drove her to Braemar where she was treated for dehydration. 4.
- JUNE 20th – Despite resuscitation for an hour by Kinloss MRT and others on scene, Maurice Marklove (44) died from a heart attack on Cairngorm summit. He was airlifted by RAF Wessex. 10.
- JUNE 20th – Landing at Pools of Dee, Lairig Ghru, an RAF Wessex crew gave first aid to a walker with a knee injury.
- JUNE 20th – Woman's body over cliffs at Stirling Hill was recovered to base of cliffs by CG Cliff Team and taken to Peterhead by lifeboat.
- JUNE 24th – Lucy Adie (19) slipped going down a hill track in Strath Nethy spraining her ankle. Rescue by RAF Sea King. 10.
- JUNE 28th – Running in Lairig Ghru Race, Gerald Box (47) slipped and cut his knee badly. Airlift by RAF Sea King. 6.
- JULY 10th – Man over sea cliffs at Boddam with broken leg was recovered to base of cliffs by CG Cliff Team and taken to Peterhead by lifeboat.
- JULY 12th – In a party of 14 descending Brae Riabhach on the third day of a journey, Victoria Burns (16) stumbled and sprained her ankle. she was carried by colleagues to old Sinclair Hut site where they met someone with a CB radio. Rescue by RAF Sea King. 11.
- JULY 14th to 15th – Johannes Kunke (M27) and Peggy Hoffman (21) were overdue in Lairig Ghru but made their own way back. Cairngorm MRT on standby.
- JULY 15th – Martin Rowell (19) slipped on wet grass near Fords of Avon Bothy, injuring his groin. Airlift by RAF Sea King. Braemar MRT. 8.
- JULY 18th – Near the summit of Carn na Caim, Drumochter Hills, Colin Cowman (73) died of a heart attack. His companion tried resuscitation then went to A9 for help. Evacuated by RAF Sea King. 10.
- JULY 27th – Young boy with facial injuries and broken ribs, over cliffs at Auchmithie was rescued by RAF Wessex to Dundee Hospital. CG Team.
- JULY 28th to AUGUST 1st – Four lads (all 18) on an award scheme in the Dee/Geldie/Feshie Glens made a navigation mistake and walked 'off their map' not having the adjoining Sheet 43. They were found by RAF Sea King at the Pony Hut at the Eidart/Feshie confluence. Cairngorm MRT. 16.

- JULY 30th – Man abseiling at Auchmithie got cragfast because his rope was too short. Coastguard Cliff Team got him down uninjured.
- AUGUST 15th to 16th – Stuart Burn (18) slipped and aggravated an old back injury 1 km S. of Angels Peak. Rescued by RAF Sea King. 8.
- AUGUST 16th – Body over cliffs at Whiting Ness recovered by CG Cliff Team.
- AUGUST 16th – Cairngorm MRT and RAF Sea King searched Loch Avon after a walker reported cries for help from Castlegates Gully. Nothing found. 14.
- AUGUST 16th – Sixth pitch of Eagle Ridge, Lochnagar. Leslie Bingham (61) was solo climbing using a back belay. He found *piton in place and used it as the anchor of the back-belay system. When about 10ft above the piton he fell off. His back belay and the rope both held firm; but the jerk on the piton caused by falling past it overstressed it and pulled it out of its lodgement. He fell 700ft and was killed. Two people at the top of Pitch 3 saw the fall, which was also seen by two men in the floor of the coire. Evacuation by RAF Wessex. Braemar MRT. 29. *See incident of March 15.
- OCTOBER 17th to 18th – Dennis Wesson (46) and John Jackson (42), experienced mountain bikers, were benighted on a journey from Linn of Dee to Tomintoul via Fords of Avon. They had to walk all night dragging their bikes though deep, wet snowdrifts. Grampian Police MRT. 4.
- OCTOBER 18th – Body over cliffs N. of Arbroath recovered by CG Cliff Team.
- OCTOBER 22nd – The Stuic of Lochnagar. Grampian Police and Braemar MRT. Two team members lowered themselves down the cliffs and were able to guide three cragfast Blackface sheep to safety.
- OCTOBER 25th – Forest of Birse, Kincardine. Descending Fungle Path northwards at the steep part, Gladys Falconer (65) slipped on frozen heather, breaking her ankle. Stretched out by Braemar MRT. 16.
- OCTOBER 31st to NOVEMBER 1st – Two men (late 20s) attempted Hanging Garden, Grade IV on Creag an Dubh Loch. Overdue but walked out. Aberdeen MRT. 66.
- NOVEMBER 1st – Two men were overdue attempting Raeburn's Gully on Lochnagar in poor condition. Aberdeen MRT. 18.
- DECEMBER 6th – A party of 17 club members attempted a two-way walk from King's Deer Hunting Park, Fettercairn to Charr Bothy, Glen Dye, and back. One walker injured her knee, so a man of 57 went back towards Arnbarrow Farm to get a car to pick her up from an escape route to Glen Dye. This volunteer, who had a history of being a poor navigator and a history of getting lost, did just that again. The others got out OK, but he wandered on various hill tracks for hours with mild hypothermia. He would have died overnight but was found by local gamekeepers and estate workers organised by Grampian Police. 8.
- DECEMBER 19th to 20th – Having had problems the previous week navigating with a companion, a man (41) went alone to Carn an Tuiric to resolve his errors, but he got lost again in darkness and low cloud. Found unhurt just above the Caderg Path of Caenlochan Glen by RAF Sea King using night vision goggles. Aberdeen, Braemar, Grampian, Kinloss and Tayside MRTs and SARU. 167.
- DECEMBER 28th – Five walkers deviated from the Meikle Pap Path, Lochnagar, to make it more interesting. Yvette Kozielski (23) not wearing crampons, slipped on neve and broke her pelvis. Braemar and Grampian Police MRT, RAF Helicopter. 48.
- DECEMBER 29th – Glissading with no helmet down neve on N. Ridge Bynack More, Calum Fraser (31) sustained serious head injuries. Incident reported to Glenmore Lodge. Picked up by RAF Sea King. Cairngorm MRT on standby. 10.
- DECEMBER 29th – Attempting to descend east into Garbh Choire NNE of Glas Maol without crampons (though severe frost had turned snow and hillside rock solid) David Leonard (47) slid over 200m into rocks. He failed to brake with his ice-axe and injured his lumbar spine. His companions had to rely on the experience, equipment and torchlight of a passer-by to help them. Braemar and Grampian Police MRTs. RAF Sea King. 14.

- DECEMBER 29th to 30th – False alarm said three walkers were in difficulty on Cairngorm. Vain searches by Leuchars MRT and RAF Wessex. 231.
- DECEMBER 29th – Anthony Wheeler (36) and David Wheeler (34) got cragfast on Wee Devil, Hell's Lum Crag (Grade IV). One had a sprained ankle. Winched off by RAF Sea King at 21.00 using NVG (goggles). Cairngorm MRT. 81.
- DECEMBER 30th – Path north of Sandy Hillock above Loch Muick. David Gardner (45) slipped on ice without crampons and broke an ankle. Grampian Police MRT, RAF Sea King. 10.

SOUTHERN HIGHLANDS

- 1991, JANUARY 26th – Paul Douglas (15) slipped on wet grass at Bealach a'Mhaim, Beinn Ime, dislocating a patella. Stretchered by Strathclyde Police and Arrochar MRT. 44.
- FEBRUARY 27th – Two men separated near Beinn Ime summit. One reported the other (40) lost but he turned up as search started. Strathclyde Police, Arrochar MRT, RN Sea King. 12.
- APRIL 12th – Felling on Dubh Cnoc (288m), Glen Loin, another tree rolled on to Alan MacIndoe (19) jamming him on to the one he had just cut down. He was found by workmates unconscious with spine injuries. Stretchered by Strathclyde Police and Arrochar MRT. 30.
- JUNE 15th – Helicopter lifted injured person from cliffs at St. Andrews.
- JULY 13th – Lost with eight others between Ardgartan and Lochgoilhead on bealach of Coire Odhar, Margaret Monahan (50) slipped in wet forest injuring her knee. Stretchered by Police and Arrochar MRT. 32.
- AUGUST 8th – Kenneth Duffus (14) recovered from the cliff at Kincaig, Elie, Fife by helicopter. CG Team in attendance.
- AUGUST 17th – After watching Arrochar Alps Hill Race, Jan Bryan-Jones (46) broke her ankle going down the Narnain Pipe Track. Stretcher carried down by Strathclyde Police and Arrochar MRT. 23.
- NOVEMBER 30th to DECEMBER 1st – Adrian Duncan (42) made two attempts to climb Ben Chonzie. His map did not cover the start of the route. He got lost in mist and benighted without a torch. Found own way down. Tayside SARU. 24.
- 1992, JANUARY 3rd to 5th – Search of fields, foothills and river banks for a woman (75). She was found dead on Jan. 9th. at Gulline Beach. Ochils MRT, SARDA, RAF helicopter. 323.
- JANUARY 14th – Paragliding from the western end of Bishop Hill, Lomond Hills, Fife; Douglas Campbell (57) attempted to launch but did not gain enough speed, stalled and crashed on crags. He sustained broken ribs with a pneumothorax, fractured shoulder and wrist. Tayside Police SARU, RAF Wessex.
- JANUARY 25th – Walking along the beach at Auchmithie, Arbroath, Scott Williams and Duncan Swankie (both 10) feared the tide flooding and tried to climb 45m cliffs. They got cragfast halfway up and were rescued by RAF Wessex, Coastguards, Police. Arbroath Lifeboat also involved.
- JANUARY 25th to 28th – Leuchars MRT helped Stirling Police searching for a man (79) missing from January 25th. Intensive but inconclusive search of rough ground and forest north and south of River Forth. 423.
- JANUARY 26th – RAF Wessex double-stop lifted a man (62) suffering a broken ankle, 2 km NW. of Ben Lui.
- FEBRUARY 3rd – Ochils MRT called by Police to search the top of a 60m face in Tillicoultry Quarry after the body of a woman (34) was found at its foot. They found marks in the mud and stones where she had gone over. 4.

- FEBRUARY 12th – David Bilsland (63) died of a heart attack descending the South Ridge from the summit of Ben Ledi. Stretchered down by Killin MRT. RAF Wessex returned to base when doctor on scene declared him dead. 7.
- FEBRUARY 15th – Of two men climbing Beinn Ime, one slipped on steep neve and fell a short way. Both got stuck and alerted other walkers, but eventually they got their act together and walked off. Strathclyde Police and Arrochar MRT, RN Sea King. 25.
- FEBRUARY 16th – Maureen Shearer (51) slipped on Ben A'n Footpath, Trossachs, fracture dislocating her ankle. Winched from forest clearing by RAF Wessex. Killin MRT.
- FEBRUARY 19th – 'Faresaver' (VD) Auchinstarry Quarry, Kilsyth. A rock measuring 6ft by 2ft was displaced when Ali Brown (24) was leading the climb although four climbers had completed the route previously. He sustained a head wound below the rear helmet line, also chest and leg injuries. Winched by RAF Wessex. 112.
- FEBRUARY 19th to 20th – Without axes or crampons, Thomas Clancy (30) and William Harris (26) could not descend Ben More path because of neve and ice. They tried to get down East Ridge but got stuck on steep snow and sheltered for night behind rocks. RN Sea King saw a flashing light and winched them off. Killin and Leuchars MRTs, SARDA. 149.
- MARCH 16th – Dumbarton and Oban Police MRTs asked Leuchars and Rescue 177 to help in search for occupants of a car left at Cruachan Power Station for two days. Driver and companion turned up after camping on the mountain for an extra day due to tiredness. 136.
- MARCH 21st – RAF Wessex rescued woman (62) with fractured tibia and fibula from East Lomond, Fife.
- APRIL 1st – Chasing her dog, which had run off, Jean Allan (62) slipped on a footpath at Callander Craggs. She grabbed a tree to prevent a roll down 25m of steep, ground below her, and got cragfast. Killin MRT roped her to safe ground, uninjured. 2.
- APRIL 11th – Climbing Craighfootie Crag, Dairsie, Fife, Simon Lidwell (19) fell 10m with very serious injuries. Police, RAF Wessex.
- APRIL 11th – Emma Taylor (12) was swinging on a tree at Inchmagrannachan, Dunkeld, on a 9m length of black webbing. She accidentally fell through a loop in the swing, causing restriction around her middle and death from asphyxiation. Search by Police Dog, Tayside Police SARU and Tayside MRT. 75.
- APRIL 25th – During a sponsored walk on Ben A'n, Duncanina McColl (62) died of a heart attack. Killin MRT, Police and Ambulance Service. 5.
- MAY 2nd – RAF Wessex recovered the body of a man (60 plus) who died of a heart attack walking on West Lomond, Fife.
- MAY 6th – Six youths with learning difficulties and two instructors attempted a Bronze Award Expedition from Brig o' Turk to Ballimore, Balquhiddel. Gary Whitfield (23) got exhausted and had to be two-man carried-and-walked for 1 km to safety. Killin MRT called out. 8.
- JUNE 5th – A German student (24) got very drunk and was last seen at Ardgartan Camp Site, Arrochar, in the early hours of the morning staggering towards the beach. His friend reported him missing later that day. Despite extensive searching of Loch Long and shoreline by Strathclyde Police and Arrochar MRTs, SARDA and MOD Police launch his body has not been found. 90.
- JUNE 7th – With seven others descending a steep grass ridge of Meall Corranaich, Lawers Range, Ina Glasgow (73) slipped and sprained her ankle. Stretcher winched by RAF Wessex. Killin MRT. 18.
- JUNE 8th – Ian Pitcairn (17) was leading and cleaning holds on a new line right of 'Direct Direct' on The Cobbler. Two 'Friends' he was resting on pulled out so he fell 13m and hit the ground. He was not wearing a helmet and four stitches were required to close a head cut. He walked down to Narnain Boulder but was in such pain he was airlifted by RN Sea King. Strathclyde Police and Arrochar MRT. RN Sea King. 50.

- JUNE 13th – Man (30) got separated from rest of party and suffered fatigue and minor leg injury near Black Wood of Crannach, Rannoch Moor, on gentle slopes of Beinn a'Chreachain. RAF Wessex landed on and took him to Bridge of Orchy.
- JUNE 15th to 16th – Roderick Forsyth (34) was found dead at the foot of crags SE of the South Peak of The Cobbler. Arrochar, Leuchars and Strathclyde Police MRTs, RN Sea King. 205.
- JUNE 28th – Twelve cadets with six instructors were contouring a steep, grassy slope below Stob Garbh of Ben Lui. David Pascal (18) slipped and slid 15m injuring his head on a large stone. Airlifted by RAF Wessex of 22 Sqn. Killin MRT. 25.
- JULY 15th – Heading from The Cobbler to Beinn Narnain in a group of six, a lad of 19 collapsed complaining of dizziness and head pains. Airlifted by RN Sea King but left hospital before examination. Strathclyde Police and Arrochar MRT. 24.
- AUGUST 20th to 21st – Mark Rich (29) and Helen Rich (27) got lost on Ben Venue and reached the S. shore of Loch Katrine. Trying to get back to Achray Hotel they went up a steep crag near Goblin's Cave and got cragfast amongst deep bracken. Guided down by Killin MRT who found them by torch signal. 11.
- AUGUST 23rd – Elizabeth McMillan (39) stumbled near the summit of Meall nan Tarmachan and broke her left fibula. Airlift by RAF Wessex. 4.
- SEPTEMBER 1st to 3rd – After large area searches around the town of Kirkcaldy by Leuchars MRT and RAF Wessex, James Hepburn (82) was spotted on the third day by a very tall policeman with Leuchars team. He was stuck in a bramble thicket. Despite semi-lucidity he responded quickly to aid, needing only bed rest. 360.
- SEPTEMBER 6th – Four boys aged 14 on an award expedition were overdue because of bad weather. They abandoned their camping gear near the top of Ben Cleuch and were found descending by Ochils MRT. 37.
- SEPTEMBER 24th – Climbing waterfalls in a group wearing wet suits and trainers, Rosemary McKinlay (43) evaded a difficult section of Silver Glen Burn, Alva. On the easier route she slipped on wet grass and broke her ankle. Ochils MRT. 2.
- SEPTEMBER 28th – Lucy Munro (22) tripped on rock near the summit of the N. Peak of The Cobbler and dislocated her knee cap. Winched out by RN Sea King. Strathclyde Police and Arrochar MRT. 18.
- OCTOBER 1st – Walking with his wife in the forest below the E. side of Ben Venue, William Gibb (73) slipped on a steep and greasy part of the path and dislocated a shoulder. Stretchered by Killin MRT and Ambulance Service. 3.
- OCTOBER 20th to 21st – Solo walker David Baird (54) probably slipped on ice or frozen ground on the SE Face of Beinn Challum (1022m). He was killed by a fall of 65m. He wore lightweight boots with recessed heels. Killin and Leuchars MRTs, SARDA, RAF Wessex. 272.
- OCTOBER 25th – Searches of Beinn Chabhair were set up by Killin, Kinloss and Leuchars MRTs, SARDA and 202 Sqn Sea King. A profoundly deaf woman (21) minimally equipped, had got separated from her companion near the summit. She was found and winched off by the helicopter crew who wore night vision goggles. 120.
- OCTOBER 31st to NOVEMBER 1st – Descending north face of Ben More, Christopher Leggat (40) and John McGregor (40) were forced into coire by driving snow and got lost. Spent night in dense woods and were picked up by Police vehicle on road. Killin and Leuchars MRTs, SARDA, RAF Wessex. 154.
- NOVEMBER 14th – Two men overdue on Ben Lui turned up safe. Oban Police MRT and helicopter alerted.
- NOVEMBER 15th – South Spur of The Law, Tillicoultry. Edith Fleming slipped on wet grass and broke her ankle. Winched by RAF Wessex. Ochils MRT. 6.
- NOVEMBER 22nd – Ann Lockhead (40) was one of three descending north side of Ben Venue. She slipped on wet bracken covered with patchy snow and fell 16m with cuts and bruises. Killin, Lomond and Ochils MRTs. 9.

- NOVEMBER 25th – Their torches failed when two people were descending from Beinn Each to Loch Lubnaig. On the Ardhullarie Path they separated and lost track. Daniel Williamson (76) fell 13m and could not move. Killin MRT found him with a searchlamp, then roped and rescued him, suffering from cuts and cold effects. 9.
- DECEMBER 5th – David Coles (56) slipped on wet grass between Glen Loin and Inveruglas Water, Arrochar, breaking a lower leg. Strathclyde Police and Arrochar MRT. 13.
- DECEMBER 6th – Abseiling down a greasy face in Bridge of Allan Quarry, John Duncan (40) slipped and fell 18m sustaining head and pelvic injuries. Ochils MRT on exercise saw the incident and so were able to treat and evacuate him immediately. Instead of clipping into the main harness he had clipped into a gear loop which failed when he slipped. 6.
- DECEMBER 12th – Michael MacLachlan (44) fell asleep on the path to Carn Maigr Bothy above Invervar. He woke in darkness and lost his bearings. Tayside Police SARU, Tayside MRT, SARDA. 55.
- DECEMBER 24th – Without crampons, but well-equipped, experienced and with two companions, Keith Endean (29) slipped when 50m from the summit ridge on the north side of Stuc a'Chroin. He lost his ice-axe trying to brake with it and fell 65m fracturing his pelvis and suffering cuts. Killin and RAF Valley MRTs. Evacuated by stretcher carry, Argocat and RAF Wessex helicopter. 54.
- DECEMBER 28th – Joseph Campbell (40) was descending the NW Ridge of Cruach Ardrain when he tripped on a crampon and fell 55m with arm and neck injuries (subluxed C3 on C4 vertebrae). Stretchered down by Killin and Kinloss/Stafford RAF MRTs. 282.
- DECEMBER 29th – Solo walking on Beinn an Lochain, Arrochar, Terrence Farrar (55) died of ischaemic heart disease. He had left a route-card in his caravanette in a lay-by. Body was found by RN Sea King. Strathclyde Police MRT and SARDA. 60.
- DECEMBER 30th – In a party of four descending West Ridge of Ben Lui, wearing crampons, Jack Crichton (34) fell 45m on hard neve sustaining head and leg injuries. Winched out by RN Sea King. Killin and Strathclyde Pol. MRTs. 125.

SKYE

- FEBRUARY 17th to 18th – Glendale, Skye. Man left house at midnight and was found dead in burn. Ground search not mountain. Sleepwalking? Skye MRT, CG and Police, Bristows (HMCG) Helicopter.
- FEBRUARY 25th to 26th – Abseiling on Sgurr nan Gilleann, Robin Mack (28) had upper limb injuries and frostbitten fingers. His rope had jammed leaving him suspended for 30 minutes then he cut the rope and landed on a ledge where he stayed overnight. Hugh McBryde (40) had been abseiling nearby and decided to bed down for the night where he could keep an eye on Mack. In the subsequent rescue McBryde had his skull cut by a loose rock dislodged by helicopter downdraught. Both left hospital after treatment same day. Skye MRT and HM Coastguard Helicopter. 29.
- MARCH 21st – Line Pabol (F21) overdue from a walk at Torvaig. Search by Skye MRT, Coastguard, RNLI Crew and RAF Sea King. She turned up OK.
- APRIL 11th – Scrambling up wet rock and scree, a party of four were navigating poorly in Coire a' Bhasteir of Sgurr nan Gilleann. Rhian Emmens (F39) was fatally injured by a fall into a gully. Stretchered down by Skye MRT and Police. HMCG Helicopter. RAF Wessex recalled due to weather. 96.
- APRIL 11th – HMCG Helicopter airlifted the husband of the dead woman in the above incident and also one hypothermic case (female).
- APRIL 12th – In Coire Dubh, north of Bla Bheinn, Gordon Roberts (23) slipped and fell 150m with spinal and pelvic injuries. Going to help him, Kevin Munson (25) slipped, fell 20m and was also injured (cuts and bruises). Airlift by HMCG. Skye MRT 22.

- APRIL 25th – In Coire Lagan, on the W. Buttress of Sron na Ciche, others in the party assumed that their two companions were cragfast, but delay was due to a snagged rope. Shouted communications were impossible due to wind noise. Somebody blew a whistle! Skye MRT and RAF Sea King were involved but the pair extricated themselves. 24.
- APRIL 30th – Jaqueline Sackville (20) lifted by RAF Sea King from Ben Suardal, Broadford, suffering over-exertion and mild hypothermia. 14.
- MAY 22nd – Ian Ritchie (41) fell 10m on to scree just west of Bealach Coire na Banachdich, injuring his leg. Skye MRT. RAF Sea King. 18.
- MAY 23rd – Descending scree in Coire a'Bhasteir, NE of Am Basteir, Richard Allsop (25) was struck by a boulder dislodged by another in his party of four, sustaining a 10cm cut to a calf. Skye MRT and Police. RAF Sea King. 14.
- MAY 24th – Crossing the Bad Step of Loch Scavaig, Karen Schmid (25) slipped and fell 3m to the shore, sustaining a cut above her left eye. Skye MRT and Police. RAF Sea King. 18.
- MAY 25th – Neist Point, Skye. Kay Jones (45) injured her leg on sea cliffs and was airlifted by HMCG Helicopter. 6.
- MAY 30th – Mark MacLennan injured a knee climbing Sgurr Dubh Mor. He was airlifted by Sea King helicopter.
- JUNE 30th to JULY 7th – Woman (26) had walked, camped and spent a week at the south end of Glen Sligachan. She walked out after searches by Kinloss and Skye MRTs, RAF Sea King and HMCG Helicopter unaware that she had caused alarm She had failed to contact uncle as promised. 840.
- JULY 7th – Mackinnon was leading 'Shangri La' on Sron na Ciche with Bell as second. Nearing the top pitch he climbed a steep groove. As he climbed out of the groove he was pulling himself up with both hands when they gave way and a piece of rock as big as himself came away from the cliff. Mackinnon was holding on to the rock as it fell and he tried to manoeuvre it past him, but it caught his right ankle. He fell for about 6m and stopped just above Bell. Mackinnon was airlifted by RAF Sea King from the crag with a fracture dislocation of the ankle.
- AUGUST 9th to 10th – Vivien (F53) and Sarah Bateman (20) and Gareth Brooks (25) were benighted on a climb of Sgurr Alasdair. Safe and well.
- AUGUST 22nd – 23 Belgians in shorts and T-shirts walked from Glenbrittle around the coast to Coruisk Hut. Yacht 'Malish' radioed for help. One unconscious from hypothermia and six very cold were airlifted by HMCG Helicopter despite flying being restricted to below 100m because of poor weather. The other 16 were taken by Mallaig Lifeboat to Armadale. Skye and Kinloss MRTs called out. 200.
- SEPTEMBER 5th – Solo walker, Frederick Norris (50) slipped on wet rock injuring his leg near Loch an Fhir-bhallaich, Coire Lagan. Winched into HMCG Helicopter. Morphine used. Skye MRT. 12.
- SEPTEMBER 8th – In mist on The Quiraing, Lynn Moody (44) sprained an ankle when she slipped on wet scree north of Meall na Suiramach. Stretchered off by Skye MRT and Ambulance Service. 19.
- SEPTEMBER 25th – An exhausted mountain biker, with possible hypothermia was airlifted by HMCG Helicopter from Rubha Buidhe, a cape 4 km ESE of Kyleakin. Party was recovered by HMS Sandown's inflatable rescue boat. 6.
- OCTOBER 4th – One of a party of five, Lily Ames (54) broke her leg in three places when she stumbled in boggy ground, descending Coire a'Ghreadaidh. Stretcher carried by Skye MRT and Police. 16.
- OCTOBER 4th to 5th – After walking over Bruach na Frithe, Jaqueline Wilson (28) went down Lota Coire with her husband. She got exhausted and he went for help. Skye MRT and RAF Sea King. 225.

DECEMBER 29th to 30th – A party of five in mist was descending a snow/ice slope towards Coire a'Ghreadaidh. One slipped, knocking over Barbara Dunn (44) who fell 30m down snow on to rocks. She wore crampons at the time. She suffered various limb and rib fractures with a punctured lung. Stretchered by Skye and RAF Stafford MRTs and Police to HMCG Helicopter for airlift. 414.

ISLANDS

(Other Than Skye)

- 1991, AUGUST 20th – Extensive RN Sea King search for missing persons on Island of Oronsay assisting Oban Police. Nothing found. 16.
- AUGUST 31st – Corrie Burn, Goat Fell, Arran. Fallen walker Stephen Eck (21) at bottom of gully with head, pelvic, ankle and wrist injuries. RN Sea King lowered medic, crewman and stretcher, then held off before lifting patient. 11.
- SEPTEMBER 10th – Nicholas Green with suspected broken leg lifted from narrow coastal path, Isle of Arran, by RN Sea King. Found with two instructors.
- SEPTEMBER 18th – A woman walker broke her ankle at Carsaig, Mull (Top of very high cliffs on S. Coast) by tripping on a path. Carried out by colleagues. HM Coastguard. 8.
- SEPTEMBER 30th – RN Sea King airlifted Eleanor Ross, an injured walker, from near Lochranza, Arran.
- 1992, about JANUARY 1st – Isle of Unst, Shetland. Two well-equipped walkers were first footing the hut at 200m on top of Hermaness Hill. David Caseley (26) was blown away with the hut in a 150 knot hurricane. Mary Buyers (22) was blown over cliffs. Both fatal. HMCG Helicopter.
- FEBRUARY 10th – A search by Orkney Coastguard and RAF Sea King found Michael Lees (28) safe. Overdue, he had extended his walk over Ward Hill, Hoy.
- FEBRUARY 24th – HMCG Helo was diverted for a man stranded on a sandbank at mouth of R. Laxdale, Lewis, but he walked ashore as tide ebbed.
- MARCH 27th – William Grant (45) who was working on a reservoir on the Island of Rona, got lost when exploring, and was four hours overdue for his transport. Kintail MRT, HMCG Helicopter. 20.
- APRIL 1st – Arran MRT stretchered John Gavigan (46) from the track to Loch Urie, Lamlash. He slipped and injured a leg. 18.
- JULY 17th to 18th – Birdwatching on Hallival, Rum, after his wife had returned to Kinloch, Christopher Vasey (43) got lost and went to SW of the island. With a faulty watch and no map or compass, he got back to Kinloch as a search by Lochaber MRT and RAF Wessex started. 38.
- JULY 25 to 26 – John Vickers (27) separated from two companions on Goat Fell and spent the night in a derelict building in Brodick. He was reported missing. Arran MRT, SARDA, RN Sea King. 155.
- JULY 28th – Coastguard helicopter R119 assisted by Scalpay CG Rescue Team airlifted Mrs M. Booth (53) (broken ankle) from a footpath near Eilean Glas Lighthouse, Scalpay, North Harris.
- AUGUST 18th – Joyce Smith (62) slipped on the footpath SE of Ben Nuis and broke her ankle. Stretchered down by Arran MRT. 27.
- OCTOBER 17th – Three women and a man, all in their 20s, got benighted when they underestimated the time needed to walk around the southern coast horseshoe of Rum from Kinloch. They had no compass and one torch which went flat. Found unhurt, but cold, five miles from home. Police, Mallaig Lifeboat, HMCG Helicopter. 20.
- OCTOBER 20th – John MacAskilli, shepherd, died from asphyxia, found by air search and winched by HMCG helicopter from steep ground at 300m. and 1 km due west of the summit of Hecla (606m), S. Uist. 10.

OCTOBER 25th – Arran MRT and RN Sea King searched for a soldier missing from a search and evasion exercise. Leuchars Team were en route to Arran when he turned up. 38.

NOVEMBER 16th – Brian Drummond (25) and Darren Phillips (21) both slipped on wet scree and suffered torn knee ligaments on an Army exercise near Prince's Cave, Corodale Bay, E. Coast of South Uist. Winched out by HMCG Helicopter. 8.

SOUTHERN UPLANDS

1991, JULY 31st – Heads of Ayr. RN Sea King airlifted Mr. McGlauchlin from a cragfast position. A second climber got himself down. 4.

AUGUST 19th – CG teams transferred doctor and ambulance persons for three hours cliff face medical attention at Eyemouth prior to casualty airlift.

AUGUST 29th to 30th – Woman (46) who had committed suicide near Melrose was found by sweep search. Tweed Valley MRT and Borders SRU. 32.

SEPTEMBER 8th – A. Warren (69) with heat exhaustion airlifted by RN Sea King.

SEPTEMBER 25th – Helicopter airlift for person at base of Eyemouth cliff. CG teams.

OCTOBER 28th to 29th – RN Sea King night search in rapidly deteriorating weather for Miss G. Andrews missing in Carrick Forest W. of Loch Doon. Mission aborted. Casualty flown out with brother next day.

NOVEMBER 23rd – Two men (20s) looking for a bothy in forestry near Mossdale separated, one raising alarm for the other. Galloway MRT. 8.

NOVEMBER 30th to DECEMBER 1st – Southern Upland Way between Loch Trool and White Laggan Bothy. Searches for missing sponsored walkers by Moffat and Galloway MRTs, RN Sea King, and SARDA. They turned up safe. 77.

DECEMBER 10th – Descending Craigenallie Crags on Cairngarroch, Glen Dee, Ann Jessett (28) slipped and slid over rocks on to a ledge where she was too scared to move. Lowered by Galloway MRT, cold but uninjured. RN Sea King unable to land (night). 134.

1992, MARCH 1st – Unroped, William Buchanan (14) slipped climbing sea cliffs at Dunskey Castle, Portpatrick, injured head, pelvis, abdomen and arm. RN helicopter, Portpatrick and Drummore CG, Portpatrick RNLI. 37.

MAY 22nd to 23rd – Left at Craigenallie (77/503 780) to be collected next day, Mary Dunlop did not turn up. She was found by SARDA dog on slopes of Craiglee, around Loch Dee. Unhurt, she was just lost. Galloway MRT, Police, Forestry workers, RAF Helicopter. 40.

JUNE 7th – Grey Mare's Tail Waterfall at Moffat. Corina Philips (21) climbed in trainers and got stuck 20m from the foot. Lowered by Moffat HRT. Shocked, she did not seem to know she was at risk. 18.

JUNE 14th – Barry Eels (39) was the rearmost in a family group of four walking the 'short path' of The Grey Mare's Tail. He fell over 20m down a grassy, rocky gully into Tail Burn, sustaining shoulder and severe head injuries. Moffat HRT stretchered him to ambulance. It was learned that he suffered from epilepsy. 16.

JUNE 15th – Sea cliff climbing unroped at Dunskey Castle, Carl Dunn (29) was rescued by cliff ascent, uninjured. RN helicopter, Portpatrick and Drummore CG and Police. 50.

JUNE 23rd – Searches by Moffat HRT for an experienced male hillwalker (39) supposed to be spending summer solstice on Hart Fell (808m). He returned home on 24th from Rannoch Moor and Fort William! 132.

JUNE 30th to JULY 3rd – Searches of rough grazing, forest and lochs around Kirkalla Farm, Newton Stewart by Galloway, Leeming and Leuchars MRTs, Diving Team, SARDA, Forestry Commission, RN Sea King and local volunteers for Amanda Ross (21) later found drowned. 1000.

- JULY 2nd – Charity walking over Criffel in trainer/boots Linda (23) slipped on wet grass breaking an ankle. Moffat HRT and Police. 34.
- AUGUST 3rd to 4th – Galloway MRT searched farmland for Iain McMaster (18). Found dead by sweep search. He had stumbled with a loaded shotgun and shot himself accidentally. 5.
- AUGUST 16th – Woman (about 35) who slipped on a steep path near Fast Castle, St. Abbs, injured her knee and ankle and was stretchered out by RAF Wessex helicopter.
- AUGUST 18th to 19th – Keith Bell (44) left his car keys on top of Merrick (843m) He started back up at 20.00 got the keys, but went west instead of south. He turned up safe at 08.15. Galloway MRT and Police. 45.
- SEPTEMBER 11th – Malcolm Parker (48) fishing River Minnoch, near Newton Stewart, was trapped on an island by rising river level. Roped off by Galloway MRT and Police. 6.
- SEPTEMBER 13th – McNab Grant (M19) motor cycling the Pennine Way on The Cheviot in a group of seven. Separated from them and descending steeply in The Hen Hole he went over the handlebars and suffered concussion and leg injuries. After a suspected period of unconsciousness he walked to Auchope Hut where a backpacker helped him but was himself too tired to go on. Found by Borders SRU. 48.
- DECEMBER 27th – Four lost teenage Scouts (13-14) fortunately came across Snarhead Bothy (two miles NW of Leadhills) in strong winds, sleet and snow. Found by Police. Galloway and Moffat MRTs called out. 97.

NON-MOUNTAINEERING

- January 2nd – Andrew Gilbert, paddling the River Roy, was dragged out of his boat by a stopper. Lochaber MRT searched the banks near Achavady and found him exhausted but unhurt. 102.
- MARCH 31st – RAF Leuchars MRT filled sandbags for five flooded areas near Cupar, and used team vehicles to evacuate several people from a house. 142.
- APRIL 3rd to 4th – Several RAF Sea King and Wessex helicopters, Aberdeen, Grampian Police and Braemar, Kinloss, Leuchars, Tayside MRTs and SARDA were involved in searching 600 square km of mountains for a missing Grobe 112 two-seat aircraft with two people on board. An AWAC aircraft flying NE of Aberdeen gave last known position of the Grobe aircraft as 2 km NE of Lochnagar. MRTs searched Lochnagar and Glen Muick at night in high avalanche risk conditions. There was more aerial searching on the second day with MRTs on high points around Glen Muick and searching woods E. of Ballater. Police divers took over when wreckage was found on the shore of Loch Muick and aircraft documents in the water. c1000.
- APRIL 7th - RAF Leuchars MRT was called out to search for a light aircraft missing between Carlisle and Teeside.
- MAY 8th – Engine failure caused a civilian helicopter to crash (no injuries) 5 km S. of Brin Rock on the Nairn/Findhorn watershed. Found by RAF Sea King, Cairngorm and Kinloss MRTs and SARDA assembled. 74.
- MAY 12th – Tucano crashed 1.7 km SSE of Mill of Tynet, Buckie, with ejection seats just 400m N. of aircraft wreck. Kinloss MRT mounted crash guard with RAF Sea King involved. No fatalities.
- JULY 15th – Leuchars MRT and RAF Wessex involved after a Bulldog aircraft from University Air Sqdn. force landed without damage to aircraft or aircrew. 40.
- AUGUST 22nd – Civilian light aircraft from Blackpool bound for Mull, crashed on Glas Bheinn, Craighouse, Jura, killing all four men on board. HMCG, RAF and RN Sea King type helicopters and RAF Nimrod were involved in the aftermath. Kinloss MRT located casualties, mapped area and mounted crash guard on 23rd to be relieved by Strathclyde Police MRT on 24th and 25th to clear remains with the help of a Police helicopter. Leuchars MRT diverted en route. 1038.

IN MEMORIAM

ROBERT D. WALTON j.1945

ROBERT D. WALTON joined the club in 1945 after having been in the JMCS since 1936. Childhood days in Arran had made him familiar with the moors and hills and had produced a lasting affection for Arran.

As a student he explored the west of Scotland with a bicycle and a tent, reaching Cape Wrath and climbing hills on the way. His first Munro was Ben More in Mull in 1930 and his last (then) with his son, was Luinne Bhein in 1968. Candid friends pointed out that the anglicised pronunciation of this last was just right for a Munro-bagger.

After his retirement, regrading of the Munros had produced some new claimants and he spent a happy few days at Shenevall clearing them off. Throughout he considered himself mainly a hill walker.

His first visits to the Alps were with Austrian students, first in Austria, then on to the Oberland where they climbed five of the 13,000ft peaks in 10 days, then a few of the easier Chamonix aiguilles and the Dauphiné peaks.

Although he attended a number of Club meets in the Fifties and Sixties, he enjoyed going alone on the hills and latterly he went with his wife and son on the Scottish hills, the English and Irish 'Munros' and some of the higher tops of the Jotenheim. Since his son went to California in 1973, he and his wife have alternated walking trips in the Alps with trips in the Sierra Nevada in the high wilderness areas associated with John Muir – and other areas.

In the Alps he devised circuits zig-zagging across the frontiers by unfrequented and unofficial routes – five crossings in one such circuit – sometimes with delightful surprises, like the siting of white '*Eritrichium naxum*', sometimes with unexpected difficulties when a heavy late snow fall involved the crossing, with walking sticks, of three 10,000ft passes and a precautionary nylon cord and deadman were brought into use.

He was educated at Allan Glen's School and Glasgow University where his record as Prizeman in astronomy led naturally to work as a navigation instructor in the RAF. He taught maths in Govan, Hillhead, Galashiels and finally as head of department in Dumfries Academy. There, as one of the Scottish Mathematics Group, he took part in writing the series of standard text-books in Scottish schools over the last 20 years.

Two of his articles appeared in recent issues of the Journal. The first, 'Navigator's Route, Sgurr nan Gillean' was first sent to the then editor 30 years ago and was rejected as too flippant! '*Autres temps autres moeurs*'. A similarly flippant article about a test flight in a Horsa glider was published in the RAF magazine, 'Air Mail'.

Over the years various papers and articles on mathematics, education and psychology were published, as well as some on hill walking. His first photographic success was to sell, in the Thirties, a picture of the Falls of Glomach to the Glasgow 'Bulletin'.

After the war his photographs appeared in Blackwell's Alpine and Mountain calendars at the end of the black and white era. More recently, his colour plates have appeared in the Arran calendars.

He was glad to recall that while at Govan, Hillhead and Dumfries he introduced many pupils to the pleasures of hill walking. From Dumfries parties criss-crossed the Galloway wilderness in all directions. Until recently, he was Honorary President of the Galloway Mountaineering Club and recently along with another local resident, he succeeded in having reopened a blocked pathway, but only after taking costly action at the Sheriff Court.

Some 20 years ago he was asked to revise and extend a book of walks in Dumfries and Galloway and this has recently been again revised and issued with his colour plates. He also produced recently a book of colour plates of Arran to supplement his book of walks in Arran. This last was originally offered to the Arran Tourist Board and refused on the grounds that it would not sell – it is now in its seventh printing.

He always took the view that going on or among the hills was for enjoyment, that it was not necessary always to reach the summit, let alone to reach it by a new or difficult route. The ‘Cockerel on a Dunghill’ attitude is perhaps present even in claiming to have ‘done the Munros’ or even in claiming to be a member of the SMC!

*The gate to freedom may stand open wide,
But those who cannot see still stay inside.*

And vigilance and effort are needed to see that the gate stays open for everyone.

R.D. Walton.

BILL BENNET j.1946

EVERYTHING that Bill took up was carried through with quiet enthusiasm and considerable success. I met him first in the 1st Glasgow Scouts. He was already a Patrol Leader and everyone wanted to be in his patrol. He became a tower of strength for many years in ‘A’ Company, helping to turn out youngsters with a grounding in what is now known as conservation.

He joined the Club in 1946, like most of his generation by way of the JMCS and soon became known not only as a climber but a great worker for the common weal. Among the memorable times with Bill, two stand out. In March, 1936, with Rob Anderson, we did Crowberry Gully, from Danny's Barn, the howff by Altnafeadh.

There had been a lot of snow that winter since November and the Buachaille was plastered. The ice pitches were delicate and masked by soft snow; much step-cutting and, of course, no crampons. The climb took about eight hours. At Easter the following year we carried out a long-planned expedition, crossing the Cairngorms from Blair Athol to Aviemore.

The first night we camped above the Tilt, hard frost, bright moonlit snow everywhere. Bill produced his Primus. ‘I’m using petrol, it’s much better.’ I expressed some dubiety, but such was my faith in his practical efficiency that – ‘Well if you say so’. Actually, the only unusual happening was a wee blue flame that shot out of the valve as he reduced pressure.

We crossed An Sgarsoch and over Beinn Bhrotain camping on the next col. Magnificently Arctic, Bill remarked that the only black ground was far down Deeside. Next day was long, over Monadh Mor and the splendid round of Cairntoul and Braeriach. The only slight regret, which came much later, was what it would have been

like on skis. There is a fine view taken by him that weekend in Bill Murray's book 'Mountaineering in Scotland'. He was a good photographer. Bill was the first person I saw on skis, home made, by himself. He could turn his hand to anything.

We had a happy first visit to the Alps just after the war. Tom McKinnon, already with Alpine experience, and a great leader, was there too. The best of several good climbs was the traverse of the Wellenkuppe and the Obergabelhorn by the Arbengrat. We were late on the summit, Tom suggested a night out would be preferable to descending the afternoon ice on Mt. Durand. He was right, everything was frozen hard by early morning.

Bill's great legacy to the Club must surely be the amount of hard work and practical skill he gave so unstintingly and cheerfully towards the huts, particularly Lagangarbh and the CIC. In recognition of all his work he was made Honorary Vice-President in 1986. A typical construction job was the weekend spent with a work party organising materials and the building of the first lavatory at the CIC, which lasted for many years.

Another great interest was sailing. His boat the 'Fairy' was well known and shared by many friends on cruises around the Western coasts and isles. During the war he was a member of the Clyde River Patrol, but overwork and effects of leadburning during his reserved occupation resulted in a period of ill health. He must have suffered much in his last long illness but he received the greatest support from Sandy and Katherine, his son and daughter. He will be missed by all who knew him well.

Douglas Scott.

GRAHAM TISO j.1959

GRAHAM TISO combined a passion for the mountains and the sea with being an outstandingly successful businessman. Tragically he was killed in an accident last June while working on his boat on St Lucia in the West Indies.

His love for Scotland went deep. At the age 16 he and a friend, Alan Wright, hitch-hiked from Birmingham to the North-west Highlands. There and then he decided to live in Scotland and in his early twenties he persuaded his employer to move him to Edinburgh. He joined the JMCS and I first met him when he took this new schoolboy member under his wing.

We climbed the good standard routes in Glen Coe – Whortleberry, Hangman's, a streaming Clachaig Gully with sojourns to the Lakes, Ben Nevis, Carnmor and down into Glen Etive. This was in the fifties and sixties and Scottish climbing was going through a renaissance which Graham was part of.

It was the period of Marshall, Smith, Haston and Moriarty, gentlemen not known for their sensitivity and, as an Englishman, Graham took terrible abuse. He took this in good part and always remained his own man revelling, not only in the mountains, but in the company of the characters with whom he climbed.

His best climbing was done in winter, often with Jimmy Marshall, and his record includes some fine climbs – Crowberry Gully, Parallel Gully B, Smith's Gully and Vanishing Gully. The culmination of a long-held ambition, which gave him great pleasure, was the second ascent of the Cuillin Ridge in 1965.

Graham was not a natural climber but had the determination to acquire the skills and was brave and adventurous.

One of Graham's attributes was that he had transport – a motor bike and a car. He was as enthusiastic a driver as a climber. Etched in my memory is careering towards a

telegraph pole, trapped in the sidecar, watching Jimmy Marshall preparing to leap from the pillion and Graham wrestling with the bike. There was no stopping when we shaved by, just a belly laugh from Graham.

His car was usually crammed with passengers and kit and it would be raced down the Black Mount to shouted encouragement as he attempted to exceed the magic 40mph round the bends. Even Graham was silenced when it lost adhesion and skipped across the road – not for nothing was the car known as ‘the crab’. The same car was manhandled over drifts on the Dalwhinnie road to get the occupants to Creag Meaghaidh.

We used to complain about the need to buy our boots mail order but Graham saw the commercial opportunity. He opened for business in 1961 in the back shop owned by some friends, then the next year opened his first shop. Graham had an innate sense for business and for what the market needed. When Scottish bogs rotted boot stitching, the manufacturers were left in no doubt of what was required of them. He was a fanatic for quality and drove up standards and innovation across the whole trade not just for his own business.

His commitment was broad and, in the seventies, he was a member of the equipment sub-committee of the BMC working with Dr. Joe Griffin and John Armitage. One of the problems was the balance of strength of a rope and the ability to tie a knot in it. Technicians devised impractical formulae but Graham simply tied an overhand knot and if the tail could pass through the eye of the knot it failed the test. The Tiso test epitomised Graham's ability to simplify problems and think laterally.

In 1972, when Chris Bonington needed someone to organise the equipment for the Everest expedition at short notice, he turned to Graham. Graham went to 24,000ft and spent several nights alone there in poor conditions; he endured this in a way I saw him do on other occasions – he slept through it. His plan had been to return to Everest the next year with a party of ‘unknowns’. However, the decision was made to have another major expedition to the South-west Ridge and Graham declined to join it.

One of Graham's enduring monuments will be the contribution he made to the Club. He was a Committee Member in 1966-69, Guide Books General Editor 1971-72 and had an unbroken period from 1972-91 as Convenor of the Publications Sub-Committee. Graham saw the potential for an updated, broader range of publications but initially had to struggle against some conservative elements.

With his classic combination of business flair, cunning and bullying he got his way and must take the bulk of the credit for the financial strength of the Trust today.

His interests in Scotland and the outdoors extended beyond the SMC. He was an early Trustee and a driving force behind the John Muir Trust and became a governor of Rannoch School with its ethos of self-reliance through adventure.

When he damaged his ankle climbing at Traprain he turned to sailing. He bought Mysic, a Fifer ketch, exploring the Western Isles and beyond to Norway, the Faroes and Iceland. In 1984 he had a yacht, the Sea Eagle, built to his specification. She was built for single-handed sailing and, although it would be years before he took her there, she was designed for both equatorial and high latitude sailing. As he delegated the running of the business he extended his sailing to the Azores, Northern Spain and Spitzbergen, at times with his family but often making long passages alone. In sailing, as in climbing, he applied a self-sufficiency ethic.

When he stepped in to sponsor the Scottish Islands Peaks race he tried, typically, to keep it an adventure for amateurs. He limited the number of entrants and there were prizes for eccentricity and style as well as speed. The norms of conventional yacht racing and the protest committee were not for Graham. His sailing took him further afield and he crossed the Atlantic to the Caribbean and made it his base. From here he sailed up the American coast, anchoring off Manhattan, to Newfoundland and West Greenland and was preparing for a trans-Pacific trip when he was killed.

Graham was an enigma. He could be brusque to the point of rudeness. He had no tolerance for those he regarded as fools but was generous with time and money for people or causes he believed in. Small talk was not Graham's forte and he became something of a caricature of himself. He described with glee how his doctor, on diagnosing a hearing problem, told him: 'You are deaf in certain frequencies and won't enjoy cocktail parties any more since you won't be able to hear the women's voices.' He could be a difficult man to relax with but more than worth the effort.

Graham's objective was always to spend six months of every year in the outdoors. Like most things he tackled he exceeded this: Graham knew what he wanted and did it. A great character and a friend has been taken from us.

Andrew Wightman.

THEO NICHOLSON j.1948

AFTER 10 cruelly frustrating months following a severe stroke, Theo Nicholson lost a courageously-fought battle for recovery on October 28, 1992.

Sadly – looking back over his very long and full life – it has to be acknowledged that all too many of those who shared in the strenuous days he loved so well are no longer with us; those who *can* remember are grateful indeed for a particularly rich store of memories.

Thinking of his mountain days, one would surely best describe Theo as the complete all-rounder. The record – on foot and on ski – ranges over at least 10 countries, from Scotland and Norway to the western United States and the South Island of New Zealand.

Ski mountaineering began at Adelboden in 1928. This was to take him back to Switzerland as often as he could manage, to Austria and to Norway, where spring glacier-touring was his very special delight. It was to play a large part also in his war service – as a volunteer in the 5th Scots Guards (Finnish Ski Battalion) in 1940; as an instructor in Commando mountain warfare at Braemar and on the rocks of North Wales; later in the Canadian Rockies with the Lovat Scouts, training in the Columbia Icefields, Watchtower Valley and the Maligne Lake areas. Another war-time variation was serving on John Hunt's staff in Greece, where Mount Olympus was a big attraction on a number of occasions.

In addition to membership of the Alpine Ski Club, Theo was a member of the Alpine Club and an honorary life member of the Lake District Ski Club. His experience of the Scottish hills, dating from 1926, increased rapidly in the years after the war and brought him into the Club in 1948. He completed all the Munros in 1960 and the Tops the year after.

Theo was never more happily in his element than at one of the old-time hotel meets at New Year or Easter. (One thinks inevitably of the friendships he enjoyed so much with members of days gone by – Sandy Harrison, Fred Wylie, Robert Elton, Myles Morrison, Willie Carmichael to name but a few). Speaking personally, it is the details of more long days than a sketchy diary can recall which matter most: May heatwave on the Rum roundabout, doubtful weather to beat on a ski crossing of the winter Cairngorms, rain and sweat over A'Mhaighdean and its neighbours, North Wales, Austria, both nights back home and the misty last of his Tops.

Theo would have liked mention made of all these mountain days. Yet there is much more besides. From as far back as 1926, when he was a special constable during the General Strike, public service took up much of his time: assistant county commissioner for Scouts; honorary liaison officer for Duke of Edinburgh awards; after the war, characteristically, taking a sympathetic, practical part in ex-service benevolent work.

An expert in woodlands and timber, he found more than ordinary satisfaction in his lifelong business career with Southern, the timber merchants, with whom he was latterly chairman and joint managing director. Business aside, he took endless delight in walks in the Delamere Forest and more particularly in his own private woodland near his Kelsall, Cheshire, home.

Perhaps the observation of a close friend on and off the hills for exactly 50 years may be slightly biased. No matter. He would take issue with all and sundry that Theo was unfailingly the best of companions, always interested, always interesting, immensely good fun, never content with anything but the highest standards.

This year, 1993, would have seen his diamond wedding. To Thelma, unselfish sharer of those almost-60 years, to their children, Elizabeth, David and John, and to their grandchildren, words of sympathy, wholly sincere, wholly inadequate.

Campbell R. Steven.

DR. ANGUS McINNES j.1980

IN THE grief that has followed Angus's death, feelings and stories seem to be ever present in the minds of his friends. Days away with Angus were never ordinary. He was a mountaineer in the old sense of the word. He loved ice-climbing, cragging, walking, skiing, canoeing, good beer, blethering and companionship.

He liked to climb the more traditional routes on the mountains and was most comfortable on severe and grade 3 standard. I have one vivid memory of him climbing in Glen Coe. We were doing a 400ft severe which turned out to be about twenty, 50m rope lengths of vertical heather and mud with a grading of at least severe sustained throughout. The evening before his death I was ribbing him that he should publish a list of the 'McInnes's', i.e. a list of dirty, loose and enjoyable climbs of great character in fine locations. I think the idea appealed to him.

He was a man who excelled in the mountains in dirty, rough conditions, occasionally to the dismay of his companions. He once drove to the Cairngorm car park on a wet and very windy day. George Hamilton, who was with him, was dreading going out in these conditions and was very relieved to find that the wind was so strong he could not open the car door and expected a quick retreat to the pub. Angus rose to the challenge and simply turned the car around so George could get out, then turned it again so he could get out. He hated missing a day on the hill because of the weather and almost always found some safe alternative.

Angus was also known for his remarkable mountaineering equipment. To him it was all part of the game. He really felt that the climber mattered, not the gear. We were once on the Upper Couloir of Stob Ghabhar and he was leading up the ice pitch trying his best to ignore my moans about the fact that I needed two hands to open or close his karabiners. Once belayed he took up the slack to find that I had forgotten to tie on: he never said a word but laughed his head off. We continued the climb and as I led over the cornice he told me to look over my shoulder; a golden eagle soared from a ledge about five feet away from me. Pulling over the cornice we basked in a breathtaking sunset until it was quite dark. A great day.

Sometimes the minimal gear got a bit too much. On one hill I found that we were using an AA map for navigation. That was a long day.

However, some idea of his great competence and independence as a mountaineer was shown in an incident on Creagh Meaghaidh a few years ago.

He was on an ice pitch when a couple of climbers high on the cliff were hit by part of a falling cornice. The cornice knocked the two climbers off, injuring them, and their debris went on to give Angus a 40ft peel, severely breaking his ankle. The companion who held this fall let Angus know that there were injured climbers above. Realising that he would not be capable of getting up to the climbers to give medical assistance he asked to be left a rope and suggested that his companion attend to the climbers above. He then proceeded to abseil down the cliff and crawl down from Coire Ardair. The Chopper crew were busy that day and after they had lifted the two injured men from the face and dealt with another incident, they returned and landed beside Angus, who was by now only a few hundred yards from the road. The winchman came over to him, praised his efforts and suggested a lift the rest of the way.

There were many things which were very important to Angus; his family, the mountains, politics, the JMCS. There were also things which were unimportant to him: his appearance on the hill (despite his wife's many efforts), his status and the state of his car, which at times could resemble a busy bothy.

We were once away for a week in the North-west doing a few hills and a few classic climbs such as the Cioch Nose. It had been a hot week and the car had developed a certain atmosphere about it. Angus had his teeth on the dashboard (where else would you keep your teeth?) Travelling south we came across a serious accident where the police were already in attendance. Angus pulled over to offer his assistance telling the policeman that he was a doctor; the policeman took one disbelieving look at us and moved us on.

Over the years Angus's enormous enthusiasm for the hills took him through a staggering list of classic climbs both at home and abroad. He was a regular attender at JMCS meets for 24 years and also tried to put something back into the hills by serving on the committee of the MC of S for many years. This enthusiasm gave him a remarkable propensity for hard walking. A weekend trip to Glen Licht in November turned into a real stamina-tester as we did a 28-mile day in deep snow. We ended the day about five hours after dark wearily trudging by the light of a single headtorch. The next day I was quite incapable of walking anywhere but Angus was up as usual for a quick walk up A' Glas Bheinn before driving home.

Angus died on Hell's Lum, killed instantly by a falling block of ice. With his death many climbers lost a great friend. The hills will never be quite the same for many of us as a sadness will always be present whenever we think of him, tramping the tops with one of his dogs, long looking to the next hill and the next route.

Dick Edie.

NORMAN SINCLAIR TENNENT

NORMAN was a legend in his own time. He was not an easy man to live with, whether as husband or companion. But he was a marvellous person. No climb, no situation, no person was ever the same when Norman was present. He endowed his immediate environment with superlatives. Where one merely saw a cascade of frozen water, to him it was like the golden wall of the Potala palace. He wrote about people, both companions and others, with the cryptic acerbity that characterised his conversation. Has there ever been such a character reference as evinced in 'Missing the Last Post', or such a clear revelation of the man himself.

We are lucky that he left us these pieces in the SMC Journal. Such a writer can never die. He explained himself and his own invincible ethos in those lines on page 29 of the 27th Volume: 'I don't care if we are old fashioned: we climb for the pleasure we seem to find in each other's company, despite everything, and whether we succeed or fail.' He believed, as Graham Brown remarked, that the 'climb is the hero, not the climber'.

Climbing for Norman, as for many of us, was the fulfilment of a need for adventure in an otherwise all too predictable world. He hated money, he detested clients, he could not suffer fools. He loved good food, and conversation, and was a snob when it came to wine and coffee. He resolutely refused to join the SMC. I once, and once only, took him as a guest to an SMC dinner, after which he remarked to me that as the room appeared to be full of old fogies and people in bath chairs, he felt he wasn't quite ready for that! The fact is that he refused to fill in the application form except in the most sketchy manner! Nonetheless, his name and his exploits are so closely linked to members of that club, that historians will assume he was, and indeed, he should have been. It gave him immense pleasure that the Lochaber JMCS made him an honorary member of their club. Maybe the SMC should retrospectively do the same. I can just hear what he would say. It may be our last laugh on him, and like so many of his, kindly meant.

Norman was the toughest man I ever met. He experienced more than his fair share of both physical and mental pain. Yet even his closest companions were never admitted into his inner thoughts, for he was an intensely private person. Only once in the 46 years of our friendship did he offer me a glimpse, when he remarked that the only time in his life when he had been truly happy and free from care, was when he had been a submarine commander moving to attack. And just occasionally, out of nowhere, he would exhale with the words: 'Oh God, that WAS good,' and you felt rather than knew he was talking about the outcome of some recent adventure, or experience. It might have been a book of poems, a climb, a play. Sometimes one never knew.

Norman was a man who flirted with death all his life. He was careless of his welfare and his safety. In 'Missing the Last Post' he makes wonderful fun of my anger at finding he had abandoned the rope that was supposed to be belaying me, while he took out his camera. I recall him saying: 'You're in the SMC, you're not supposed to fall off.'

Born in Glasgow in 1923, he attended Glasgow Academy, and was later commissioned in the RNVR, and volunteered for submarines and diving. Returning from the war he never settled to any activity for long, unable to accept the follies of mankind. His contribution is several first ascents – notably the South Post of Creag Meagaidh – some fine writing, and, in Arisaig, where he settled for the last 16 years of his life, rearing trees, where previously there were none.

I should like to end my tribute to this remarkable man with a slightly abbreviated version of a poem by Anna Achmatova, which for me speaks volumes about our departed friend.

*This poem comes to you instead of flowers.
 You, who even in the final hours showed marvellous disdain.
 You drank wine, you joked like no one else.
 You yourself admitted the terrible guest and remained alone with her there.
 It is unbelievable, to say the least, that I am fated to commemorate someone so
 strong
 Bright and steady to the final breath
 Was it yesterday we spoke? Has it been so long.
 Good-bye.*

Malcolm Slessor.

Notice has also reached us of the deaths of Dan Livingston, R.G.A. Hemming, Charles S. Tilly, D. Campbell Allen, J. Stewart Maclean and R.W.B. Morris.

PROCEEDINGS OF THE CLUB

New Members

The following four new members were admitted and welcomed to the Club in the year 1992-93.

Graham G. Cullen (28) Forest Officer, Elgin.

Justin Finlay (26), Offshore Oil Worker, Lentrán, Inverness.

David E. Gaskell (27), Medical Doctor, Crieff.

Richard T. Prentice (35), Journalist, Glasgow.

The One-Hundredth-and-Fourth AGM and Dinner

Another Highland Dinner, this time at the Duke of Gordon Hotel, Kingussie, on December 5th. Breaking with recent routine, there is no formal report on this particular event; instead, a series of seminars which were presented to the assembled throng before the dinner are recorded for posterity in this issue as articles.

This year sees a sadly long list of members recently deceased. Some lived a long life, outlasting climbing contemporaries, so that the final ascent has had to remain undocumented. The Editor reminds members that self-written notices are welcome, and are filed away deeply and securely. We publish one such notice, by R.D. Walton, whose passing was ably covered by his son in the 1992 issue.

EASTER MEET: ELPHIN

The meet this year returned to Elphin where 17 members and one guest enjoyed the Strangs' bountiful hospitality as residents, campers or passers-by. Meals were gargantuan and the company struggled under the overwhelming burden of a self-service bar. Sutherland experienced the best of the cool Easter weather. Although the higher tops were almost continually mist-enshrouded and therefore avoided, a full programme was completed largely without rain and even with glimpses of the sun.

Affairs of the flesh dominated the extra-curricular activities. A past – but not past it – President was restrained, by a large bolt, from explaining the intricacies of the sauna to our lady guest. The sight of a prostrate and somnolent Slesser in the same locale inspired memories of Lewis Carrol:

*I dreamt I dwelt in marble halls
And each damp thing that creeps and crawls
Went wobble-wobble on the walls*

The discussions following the main meet dinner (excellent) have tended to recede into the mists engendered by the bar, but it would appear that a substantial majority favoured Arran as the next Easter venue. However, this is subject to confirmation as, in true SMC fashion, no one could subsequently be found to admit to having actually supported this proposal. The remainder of the discussion seemed to be about bus passes.

Although poor visibility restricted mountaineering activities to the lesser (but none-the-less worthy) summits, enjoyable ascents were made of Ben Stac, Ben More Coigach, Canisp, Stac Polly, Breabag, Glas Bheinn, and, on the return journey, A'Chailleach and Sgurr Breac in the Fannichs, with more senior members generally showing a clean pair of heels to the upstarts.

Rock climbing was done at Reif. The highpoint of the meet was probably one of the lowest. Tom Strang ferried eight of the company to the west end of Cam Loch whence the Sulven ridge was traversed (both ways) with clearing skies and expanding views, before returning to our indomitable boatman. A superb way to approach a magnificent mountain.

PRESENT: Douglas Lang (President), Bryan Fleming, Mike Fleming, John Fowler, Iain MacLeod, Russell Marshall, Malcolm Slesser, Iain Smart, Oliver Turnbull, Bill Wallace, Robin Chalmers, Sandy Cousins, Dan Piggott, Scott Johnstone, Geof Cohen, Des Rubens, Murray Hamilton, Mrs Hamilton (guest).

Mike Fleming.

CIC MEETS:

Seven weekend meets were held during the 1992/93 winter season. A total of 41 members and 16 guests attended. Climbing was possible on most occasions, but the March meets coincided with very poor conditions in contrast to January 30/31 when good ice and neve was the norm.

The most popular meet, the hut being full, was February 27/28. Conditions enticed three two-man teams on to the Orion Face Route, making what looked like a 'crocodile' ascent to observers.

Even on the 'poor' weekends the CIC is worth the effort as the quality of the company, discussions and banter is commendable.

D.F. Lang.

JMCS REPORTS

Glasgow Section:— In spite of another almost snowless winter and an even wetter summer than usual, members were not to be put off so easily and achieved their usual high level of mountaineering activities even if it was generally abroad.

Membership is still ticking over at around the 100 mark with the addition of just two new recruits. Members were provided with a diary of 15 Club meets held throughout the year. These were the usual selection of camping, SMC and other club huts, Presidents' Bothy and Annual Dinner meets held throughout the Highlands. Attendance at the meets was down on previous years. An explanation for this from a member reveals that the meets were unappealing.

Following a call for change by members at the 1991 Dinner, last year's Dinner was held in the Cairndow Hotel at Loch Fyne. Despite the change of venue attendance was poor with those who had rallied for a change being conspicuously absent. Those who were privileged to be there were entertained by SMC guest, Bill Young, who recalled his days with the JMCS in the Fifties. Alastair Dutton represented the Perth Section.

Several social events were held during the winter months, including four slideshows which received some interest from members. Numbers were significantly boosted by SMC Western District members. The slideshows were all held mid-week at the University of Strathclyde Staff Club. The Whole Club Annual Dinner was hosted by the London Section in the Royal Hotel, Dockray, Cumbria in March. Attended by only seven members from the Glasgow Section, a motion had been put forward to lift the restriction of the Club to males only. Dick Edie represented the Glasgow Section and

said the Section was resolutely opposed to change. While the outcome of this motion remained in favour of no constitutional change, the fact of the matter remains that 75% of recent membership applicants have been women and that the total membership during 1992 increased by just two.

The AGM was held in November and the following were elected: *Hon. Member*, W.H. Murray; *Hon. President*, Ian Cumming; *Hon. Vice-President*, Angus McInnes; *President*, Colwyn Jones; *Vice-President*, John Morrison; *Secretary*, Sandy Donald; *Treasurer*, Anderson Foster; *Coruisk Hut Custodian*, Sandy Donald; *Meets Convenor*, Andrew Sommerville; *Committee*, David Currie, John Park, Donald Ballance and Peter Cairns.

Edinburgh Section:— After concern over membership levels and the lack of 'new blood' in recent years, 1992 saw renewed interest providing 10 new members.

Membership is now 67 including three Honorary Members. The Section continues to be active mainly in climbing and mountaineering, but we do have an enthusiastic paraglider.

Meets were held throughout the year with 14 weekend, three day and 22 evening meets held in the summer including several successful forays over the Border. Nine weekend meets were held in the winter. These were generally well attended, although numbers tended to fluctuate with the weather.

While lean conditions persisted during the winter months, sporadic activity was noted mostly in the Northern Corries and Ben Nevis; torquing axes and mixed routes seemed the norm. Later in the season the most productive meets were those centred at the Lagangarbh and Manse Barn Huts. Routes were being done throughout Glen Coe, with some members investigating Aonach Mor. The Onich meet was particularly enjoyed by our Russian friends, Yuri and Alex, before they returned home to resume taking guided parties in the Caucasus.

Carnmor and the Shelterstone proved to be the year's most successful venues, with the good weather allowing climbing well into the summer evenings. This, unfortunately, could not be said about the Arran meet which by all account was 'a bit damp'. Unofficial meets produced trips to Skye and Beinn Eighe, and also two ascents of the Old Man of Stoer.

On the international front, members visited North America, Yosemite, and Tuolomne Meadows climbing the classic routes including Snake Dyke on Half Dome and Cathedral peak. Others climbed in Colorado and Wyoming. European venues were also popular with several parties visiting the Italian Alps and Spain – seeking winter sun and warm rock.

The AGM and Annual Dinner in November returned to the Kingshouse, Glen Coe, but the attendance was down slightly on previous years. No contentious issues were raised for once – possibly a consequence of several members still making their way down the hillside handicapped by dying torch batteries. New Year was welcomed in once again at the Smiddy, Dundonnell, with the regulars ever present, complemented by a strong contingent of new faces. A new member won the gallon of whisky in the hotel's Hogmanay raffle, much to the appreciation of those present. Despite ample distraction, mountain activities were not forgotten. One memorable nocturnal descent prompted even earlier starts, culminating with several routes on An Teallach.

The Section's two huts continue to be popular venues for ourselves and other clubs and are much-valued assets. Interest has already been shown for mid-1994 much to the credit and effort of their respective custodians.

In preparation for the summer, the Heriot Watt climbing wall is as popular as ever, although some members seem to be using the Dunfermline wall.

Office Bearers:— *President*, B. Leatherland; *Hon. President*, J. Fowler; *Vice-President*, B. Donaldson; *Hon. Vice-President*, M. Fleming; *Treasurer*, B. Finlayson; *Hon. Secretary*, R. Sinclair, 11B Fettes Row, Edinburgh, EH3 6SE; *Smiddy Custodian*, F. Fotheringham, Tigh na Sith, Braes, Ullapool; *Jock's Spot Custodian*, A. Borthwick, 2 Aytoun Grove, Dunfermline; *Committee*, D. Buchanan, A. Chow, R. Dalitz, J. Inglis, C. Stupart.

Perth Mountaineering Club (JMCS Perth Section). Overall membership of the club has declined marginally over the past year with 74 members, five honorary members and 11 introductory associates. There continues to be a high number of introductory associates many of whom may be expected to become members.

The major event of the past year has been the creation of Perth Mountaineering Club. This was set up with the sole purpose of allowing the admission of ladies to our ranks. The JMCS section has been retained and incorporated as a section of the new club. Unfortunately it remains the preserve of the gentlemen as the Whole Club, still stuck in a 1930's time warp, found itself unable to modify the Whole Club constitution at the AGM in the spring. There must now be a question mark over the long term future of the JMCS as a Whole Club.

There was another break with tradition during the year. To lessen the burden on the secretary the duties of meet secretary and newsletter editor were hived off and a new post created. In consequence the previous statistics on meets cannot be reliably replicated. There were 17 meets during the year, which is one up on last year, and the average attendance increased to 10. The figure disguises considerable variations with several well attended meets during the year and a meet with an attendance of three! Hillwalking is still the mainstay of the club's activities however rock climbing venues are still very popular. The CIC winter meet only gave one day's climbing due to a rather wet Saturday. The Sunday was however worth the wait. There was one completion during the year with the novelty of a twosome completing the Donalds. Again we held a cross country skiing week-end however the snow was non-existent. The club hosted the Mountain Mind Quiz after winning the previous year. This was held in Perth for a change and was well organised.

The club was represented at the Edinburgh, London and Glasgow Section and Grampian Club dinners during the year. Our own Annual Dinner this year was held at the Kingshouse Hotel, Glencoe. A guest speaker, Donald McIntyre was invited and regaled us with tales of the early days. The remaining speech was by Alastair Dutton splendidly clad in a kilt. The Annual Joint Lecture with the Perthshire Society of Natural Science was given by Iain Robertson on his walking trip along the John Muir Trail in North America. There were two mid-week meets during the winter months which continue to be popular, one was a showing of members' slides and the other was Lou Kass and tales of Venezuela.

Ron Payne.

SMC AND JMCS ABROAD

Europe

RAYMOND SIMPSON reports, and the Editor apologises for the delay!

In April 1990 I enjoyed 10 days with family and friends ski-touring round Mjølfjell (west of Fiuse on the Bergen/Oslo railway). In a year when European resorts were scraping around for snow there was two-three metres at 2000ft and the local ski lift was buried.

The hills are steep-sided with a good 800m vertical interval. The valleys varied from Loch Avon-type amphitheatres with drooling water-ice cascades, to more open glens with birch scrub lochs. Use of the trains extended the touring potential and we stayed at the youth hostel which was cheap and palatial.

In August 1990, I led a group on a hut tour climbing 12 peaks in the Stubia and the Oetzal. We had mainly good weather but retreated from the Wildspitz in a storm in which four East Germans died of hypothermia. We found the peaks in both areas very interesting.

In February 1991, I led another group ski-touring in the Eastern Pyrenees based at the Lac des Bouillouses in the Pic Carlit Reserve. This is a very pretty area of granite peaks and cirques with pine-clad valleys similar to the adjacent area of Andorra which I visited in Easter 1988.

Peaks are accessible from high cols and the granite ridges are scoured bare by the wind and sun. We were fortunate to see a wolf at around 2300m, otherwise the wildlife for which the reserve (an area of Spain leased to France) is noted was inconspicuous at this time of year.

At the end of March 1991, with Rob Ferguson I did the 'Rund Tour' of the Oetzal on ski. We arrived at the end of a storm and left in another, enjoying eight days of good weather in between. We were fortunate in climbing seven peaks including the Weisstrugel and the Wildspitz experiencing a variety of snow conditions and some interesting climbing on the ridges.

The huts were warm and well stocked and had an interesting cosmopolitan atmosphere. We used Nordic skis for all the tours, but saw no other parties in France or Austria using this equipment for touring off piste.

South East Asia

NIALL RITCHIE writes:— My wife, Aileen, and I spent three weeks in Thailand starting the second half of July. We stayed with fellow Scots, Colin and Lynda Munro in Bangkok.

With the Munros we visited Khao Yai National Park which is about three hours' drive north-east of the capital. The area consists largely of tree-covered hills rising to 4000ft above the rice fields. Here we had our first rain forest experience — what with millions of insects, and the thought of tigers, elephants and cobras lurking at the next bend in the trail — we had mixed feelings about the trip.

We then flew to the country's second city, Chiang Mai, which is 450 miles north of Bangkok. This is the gateway to the trekking region of the Golden Triangle at the borders of Thailand, Laos and Burma, and here we made a trip to the Karen hill tribe village.

Our final highlight was a visit to the limestone sea cliffs on the Phi Phi Islands — a 90-minute boat trip from the Island of Phuket. There is an excellent French/English guide

book for the area which has climbs of all standards from Pumpui (The Whore) VS, to Boulevard of Broken Fingers at French 8b – whatever that is.

The routes we climbed were generously bolted and up to French 6a+. These included Trongpai, La Main de Buddha and Travels With My Aunt at the 250-metre Ton Sai Tower and neighbouring Aao Ling and Hin Taak Crags. A word of warning – don't monkey around with the monkeys and ensure your belongings are safe or they will be off with them quicker than you can say, 'Phuket'.

It is a perfect situation for climbing and gives the added bonus – after a hot day on the crags – of being able to abseil into the lovely clear water to cool off.

This area is a veritable paradise and gave us a great deal of enjoyment. If anyone intends visiting this part of the world I would be glad to provide information and put them in touch with Colin Munro – the Etchachan Club's liaison officer in South East Asia.

Morocco

HAMISH BROWN reports:– 1992 was a successful year for exploring remote areas, many previously unvisited by British parties. A summary of these is given and I would be happy to provide fuller information to anyone interested in visiting these areas, or others, in Morocco, a country with great climbing, ski-mountaineering and trekking possibilities – all year round.

Jbel Aklim: 2526m, highest of Anti-Atlas, climbed in February. Lies SE of Taroudant and most easily reached by Land-Rover. Bus to Igherm and extra three days' walk in/out possible. A cliff-bound plateau with two summits, set above delightful glens and villages.

Western Atlas: Two ways were taken up Moulay Ali, the rock spire, between the beautiful Medlawa Valley and Tigouga. Various peaks were climbed on the 'lost world' Tichka Plateau and from there the Nfis River was followed to Ijoukak (four days of afforested gorges) and several passes to reach Imlil and Jbel Toubkal 4167m – a wonder walk and one of the best in Morocco.

Middle Atlas: In May, Charles Knowles, Len Findlay, El Aouad and I made a south-north journey through the Middle Atlas, taking in the rarely-visited peaks of Jbel bou Naceur 3326m, Moussa ou Salah 3172m and Jbel bou Iblane 3103m, 3081m. Approach was made by Land-Rover via Midelt and the Oued Moulouya to Tinstet and mules engaged later at Tinesmet. The ascents were made from bivouacs and the exit by the dramatic road from Taffert to Ribat el Kayher and Fes. In most villages no Europeans have visited for years and the feeling of wild remoteness, yet great hospitality among the friendly Berbers, makes this an attractive area compared to the over-popular Toubkal region. This exploratory trip was made possible by a grant from the Mountaineering Council of Scotland

Ayachi-Masker: The same party then visited the eastern extremity of the High Atlas and, despite unsettled weather, traversed the main summits of Jebel Ayachi 3686m, 3747m, and 3727m, using mules up the Oued n'Ikis from Tattiouine (Midelt) and then packing – very hard work. Driven by storms south (7000ft descent) to Taarhart a truck was taken to Tounfite from where Jbel Maskeræ's highest summit 3265m was done in a day. The Todra Gorge was visited on the south side of the Atlas: a 1000ft vertical cleft where, sadly, being French influenced, the best climbing routes have been bolted throughout.

Toubkal: An autumn party trekked several passes and traversed this, the highest peak in North Africa, and the one busy climbing/trekking area. Imlil, asa base, remains pleasant and, Toubkal apart, the area is not much visited.

BILL WALLACE reports:— Richard Bott, John Hay, Jane King, Malcolm Slesser, Iain Smart and I met at Glasgow Airport on May 9, en route for the Staunings Alps in East Greenland.

Our information and previous knowledge had indicated that the weather would be excellent (it was) and that temperatures would be consistently below freezing (they were).

It seemed likely, however, that conditions for climbing would be affected by large accumulations of soft snow. That gave us the excuse to leave behind most of our climbing gear and forego any specific objectives.

During the first two weeks we glacier toured and penetrated into the Central Staunings via the Bersaerkebrae making several ski ascents, although only one summit was reached (Harlech, 1,900m). For the last week we abandoned the Staunings in favour of the Scottish-like hills to the east of the Skel where we reached four summits before returning to Mestersvig to rendezvous with John Peden's and Ian Angell's parties who shared the return Twin Otter flight to Akuryeri.

REVIEWS

Gaelic Mountain Names

Responding to my review of 'Scottish Hill and Mountain Names' (SMCJ 1992), Peter Drummond says I came to a 'cynical conclusion' on his book. I was critical, not cynical.

The 'positive approach' of four other reviewers does not invalidate my criticism; it means they were less critical! Authors are often defensive, but progress in any field is furthered by criticism. The best practitioners seek and welcome it.

PD disagrees with my comments on some of his derivations. Readers may like to see a summary of the evidence behind my comments:-

1. Lairig Ghru and Lairig an Laoigh, W.J. Watson's 'Celtic Place-names of Scotland' gave the Lairig Dhru as being named after its stream (Allt Dhru, and then the River Druie), as did A. MacBain's 'Badenoch: Its History, Clans and Place-names'. W.M. Alexander's 'Place-names of Aberdeenshire' gave Lairig Lui as the Lui Pass, as distinguished from the Druie Pass further west. All three used the methods necessary for reliable results, especially information from local folk, old maps, and other sources.

2. Carn Eige. PD knows of 'nowhere that it is spelt Eite, except in AW's review'. W.J. Watson's authoritative 'Place-names of Ross and Cromarty', based largely on local informants, gave Carn Eite unequivocally.

3. PD says I am 'certainly even more wrong about Slinnean Sneachdach' (Sneachdach Slinnean on OS maps, but reversed by PD because he says adjective does not precede noun). About my example of Geal Charn where it does precede, he claims this is 'one of the few adjective-before-noun exceptions confined to mor, and colours like geal'. Not so. Besides mor, and colours, many names begin with Garbh (e.g. Garbh-bheinn). Other cases abound, such as Fuar Tholl, Beag-ghleann, Seana Bhraigh, Ear-choire, Iar-choire, Gearr Aonach, A' Mhin Choiseachd, Crom-allt, Fliuch-airidh, Cam-leathad, Cruinn-choire, Caol Ghleann, Breac-leathad, Leth-chreag, Crion-bhad, Fionnar Choire, etc. In any case, A. MacBain (Badenoch study, above), who used local informants, gave Sneachdach Slinnean. It is unwise to counter work of such calibre without good evidence from local sources, using the necessary methods; PD's comments lack this.

A second edition could be better for readers, SMT and author, if valid criticism were considered objectively and not rejected defensively. I am willing to help.

Adam Watson.

(A response to Adam Watson's rejoinder).

In the April 1931 SMCJ two of the Club's Leviathans, James A. Parker and J. Gall Inglis, fought out a rather acrimonious war of words over the latter's assertion that Beinn nan Oighreag - 'a rather uninteresting grassy hill on the south side of Glen Lyon' (JAP) - was properly a Munro above 3000ft Six pages of closely-printed text echoed to their clashing.

Now I am certainly no Leviathan (nor even an SMC member), and tackling a figure of Adam Watson's stature is venturing on ground where many angels fear to tread. But

I was trying to avoid a six-page 'shoot-out' when I submitted a 'brief response' to his review last year. A longer response had earlier gone to the SMT, my publishers, and in it I dealt at more length with the 'Lairig question'. I quote from it now, after a brief health warning – namely that studying place-name meaning is fascinating and should not be confused with the apparent hair-splitting that follows!

1. 'If indeed Lairig an Laoigh should be Lairig Lui, fair enough ...' – I took the simple meaning from Adam Watson's earlier book with Nethersole-Thompson: '... but since Watson himself says in his Upper Deeside Place-names book that Lui means calf-one (from the river name) then surely my meaning 'pass of the calf' stands.' ... Lui after all is but an anglicisation of Laoigh....' (I might want to disagree with his connection of the pass with the River Lui since the pass is at the head of the Derry not the Lui).

The Lairig Ghru I bracket as gloomy pass, while his book says it is from Lairig Dhru, from the river name Allt Druie, and that it is *probably* (my emphasis, his text) from dru meaning flow or dhruithaidh meaning oozing. His review seems to have overlooked his own cautionary 'probably'. I have also seen a plausible suggestion of Lairig Ruadh, red pass, apposite to the pink screens on the north side, and to the fact that it splits the Cairngorm massif, formally Am Monadh Ruadh. W.J. Watson also bases the pass name on that of the stream, though I see no reason why the stream name should not derive, in corrupted form, from the pass, as indeed neighbouring burns like Allt Creag an Leth-Choin are. However, I didn't cover this level of detail in the book since it's not a hill-name as such.' ... An earlier version of text contained some of this but was excised in a slimming exercise to concentrate on hill-names.'

2. Carn Eige original, longer, response I wrote 'I confess I know of no source...', a more humble phrase than the shorter 'I know of nowhere!' Point taken about the reference to this version of the name, although the book makes no reference to the widely-accepted Carn Eige, or indeed to the nearby Creag na h-Eige, which tends to support Eige against Eite for the Carn. Eite in Gaelic means an unhusked ear of corn, a part of a ploughshare, or – in corrupted form – extending. The middle of these might seem a plausible alternative to eige, file, but unfortunately it is a word from Perthshire Gaelic, not Glen Affric. As the hill is one of the 13 Munros which, at the time of writing, I've still to climb, I wait to see it! However, AW rather exaggerates when he says that WJW's book was 'based largely on local informants, and gives Carn Eite unequivocally.' For in the book the references to OS map occurrences are widespread, and under Carn Eite he does not mention local informants for this hill. As for its possible meaning he wrote, after outlining similar names elsewhere like Glen Etive (gleann eite), 'The connection in Carn Eite is not clear.'

3. Where on earth is Slinnean Sneachdach?... I hear some readers cry! Not named on Landranger maps, deleted even as a mere top from Munro's Tables, possessing little intrinsic interest and lying within the Monadh Liath, that Sargasso Sea of bog and rounded contours, it hardly fires up hill-fever. I gave it two four-line slots in my book on account of its euphonic and imaginative name, snowy shoulder. Now, like Adam Watson, I am not a native Gaelic speaker; and like him I began learning Gaelic upon embarking on place-name study. I have climbed only to the level of a good O-grade, but I was fortunate to have the advice of three Gaelic scholars on the book. Two of them – figuratively at my elbow – indicated that the OS's Seachdach Slinnean was almost certainly a cartographer's mistake. I agree with them, for the normal Gaelic pattern is noun-before-adjective, the exceptions – I wrote in the longer version – being 'largely confined to mor and colours ...'. The list Adam Watson gives of other 'exceptions' ends triumphantly with 'etc', hinting at a cast of thousands more. Let me deal with this.

Firstly as a proportion, the number of adjective-before-nouns is very small compared to the noun-before-adjectives. For instance, in the comprehensive index of Yeaman's 'Handbook of Scottish Hills' there are 140 Beinn Xs compared to about 20 X Bheinnns

(where X is an adjective), and 13 of these latter are grey or grey-green (i.e. – coloured) hills, Glas Bheinn. Moreover some of the examples Adam Watson cites are probably not adjective-nouns, but in fact, double or compound nouns, in the way that Ladhar Bheinn of Knoydart is ‘hoof mountain’. Yes, the preceding noun acts adjectivally to qualify the subject noun, but it is still in noun form, in Gaelic as in English. Thus of his list the words *fuair*, *ear*, *iar*, *crom*, *fliuch*, *cam*, *caol*, *breac*, *leth* all exist in the noun form. *Fliuch-airidh* is equally likely to be wetness-shieling as wet shieling, for the rules of Gaelic grammar applying to dependent compounds fail to distinguish between noun-nouns and adjective-nouns. What is interesting is that most of the adjective-noun and the noun-noun hill-names are found in the West – e.g. 15 of the 20 X-Bheinnns – where Gaelic first developed, indicating relative antiquity in the naming process. Jura for example has a group (south of the Paps) with *Aona h-Bheinn*, *Dubh Bheinn*, *Glas Bheinn* and *Bratbheinn*, and nearby Islay has more. *Morven* (correctly *mor bheinn*) is a rare eastern exception on the edge of the Cairngorm area, and I’d be interested in any light Adam Watson can shine on it.

Having dealt with the three specific points, my overall objection to Adam Watson’s original review is this. He is – as I say in my book – ‘the contemporary expert on the (Cairngorms) area’. In my book in chapters 1, 4 and 8 there are altogether 16 pages or circa 650 lines of continuous blocks of text devoted to major hills within that area, dealing with often complicated evidence. (This in addition to many other shorter references in other chapters.) His review contains not a single word of criticism of these blocks: instead we have literally mountains made out of molehills, for the two *Lairigs Lui* and *Ghru* (not actually hill-names) got respective mentions in my book of 2.5 lines + 4 words, and 2 (bracketed) words. From such *cnocan* of evidence his review went on to admonish ‘too many derivations are highly uncertain...typical of much that has brought place-name study in Scotland into disrepute...’ In all conscience I reject these charges. And whilst I agree that ‘cynical’ is too strong, I felt his review went beyond normal balanced criticism that my other six reviewers did make (e.g. – about my chapter structure, about the interpretation of a particular name, or about the space allocated to exposing incorrect meanings).

I would be delighted to see a second edition (as opposed to a reprint) in a few years. (I hear a groan from a Bearsden editor). Of course there are some mistakes to be corrected: some typographical (like the *knowes* being in south-eastern, not south-western, Scotland); some omissions (like the losing of the name *The Laird’s Tablecloth* from the second paragraph of *Beinn a’ Bhuid*, table mountain, page 12); and some errors like one that Adam Watson pointed out about *Coire Cadha nam Fionn*. But overwhelmingly the changes would be additional material illuminating or adding to the present interpretation, since place-name study never stops, and I’ve discovered a fair bit more over the last two years in maps, in books, from foreign hills and from studying Gaelic. Perhaps the SMCJ editor would allow me a couple of pages on this ‘new’ material – another groan from another editor, in *Menstrie*.

Let us return finally to *Beinn nan Oighreag*, that ‘uninteresting grassy Corbett’ where we left JAP and JGI growling. Perhaps AW and PD should be sent up there to continue their debate wielding copies of Dwelly’s Gaelic dictionary! However, that mountain’s name is much more interesting than its alleged height, or even its view, for it means mountain of the cloudberry. This delightful plant, with a fleshy pink fruit like a raspberry held up on a single stalk, I have seen from *Tinto* to *Seana Braighe* to the *Jotunheim* in Norway and no doubt this particular hill affords these delights too. Adam Watson mentions the cloudberry in his *Cairngorms* book, describing it growing in abundance over 1200-1500ft: no surprise to find in the north-east the Scots name of *Everon Hill* has the same meaning. This knowledge from hill-names, and not the hair-splitting, is what makes the subject so fascinating. I hope Adam Watson and I agree on that: and as a man

whose ecological and campaigning achievements in the Cairngorms I have long admired, I'd be delighted for any light he can shed on hill-names in that area. It gives me no pleasure to be seen as over-defensive or pugnacious in my response to his original review.

Peter Drummond.

Editor's Note: This matter is now closed.

Richard Gilbert's 200 Challenging Walks in Britain and Ireland:— (1992. Diadem Books, 224pp. maps, illus., £9.99. ISBN 0-906371-791).

This book is described by the author as a field guide based on the three longer format books by Richard Gilbert and Ken Wilson, namely 'Classic Walks' 'Wild Walks' and 'The Big Walks'. Most of the mountainous and moorland areas in Britain and Ireland are represented as well as interesting coastal areas and a number of Scottish Islands. Of the 200 walks, some 86 are located in Scotland. The final chapter describes the traverse of the Cuillin Ridge.

The walks are arranged in geographical areas with reference to the original chapters in the larger books. They are also listed at the back according to category.

For each walk, the relevant OS map number is given, a start and finish point, total distance and estimated time for the walk. There is also a brief note of grade, escape routes (if any), transport and accommodation in the area. The description of each walk is concise but includes a general account of the area and essential details of the route which are outlined on an accompanying map. A selection of excellent photographs is included.

I found this to be a well written comprehensive guide which was easy to read and gave a good overall impression of the areas described. It is necessarily, however, fairly superficial and competent use of map and compass would still be required. Although it claims to include excursions for all types of walker, most of the walks are fairly long and arduous and are not to be lightly undertaken by the less experienced. Escape routes and shorter alternatives are mentioned but not in any detail.

As a pocket guide I feel it is too weighty. In an attempt to provide a single volume summarising the three earlier very substantial books the author has perhaps not appreciated that most hillgoers would not wish their sacks to be burdened with a book containing 199 other routes.

However, this book does contain most favourite places and provides both a useful prompt for a new route and a pleasant well-illustrated recollection of days in wild areas. I am sure that walkers will find the challenge they are looking for in this guide which is practical and inspirational.

Janet M. Scott.

The State of the World's Mountains – a Global Report:— Peter Stone (Editor). Zed Books Ltd., 351pp., illus., ISBN 1-85649-116-1, £15.95 (paperback).

This is a book about mountains, not a book about mountaineering. Produced by Mountain Agenda—an ecological study and pressure group—it is a collection of articles on the ecology, climate and political geography of mountain areas around the globe.

It is also not a book to be read easily or casually being a combination of textbook and source book for ecological pressure groups. However, it contains much thought-provoking material and should be essential reading for anyone seriously involved in debate about mountain conservation.

It has the salutary effect of putting mountaineering activities firmly in their place. That is to say, trivial impact compared to other activities such as skiing, except in the

Himalayas. It also points out that the importance of mountains in controlling climate and their role as water reservoirs is on a par with the global climatic impact of the more fashionable rain forests.

Apart from an overview chapter (which I suggest the Hon. Editor investigates for reprinting in the Journal) the coverage is regional, although the regions vary in size from the Island of Grenada to the mountains of the former Soviet Union. National characteristics are evident in the style of the authors with the section on the Appalachians being particularly redolent of American academia.

National behavioural characteristics also show through in the chapter on Japan. It is a sobering thought that one small mountain area in Japan received 1.5 million visitors in 1989. The fate of Mount Tateyama is also sobering reading.

In summary, not a book for light or casual reading but a valuable source of information for those with a serious interest in mountains and their ecology.

Bob Richardson.

Buttermere and Eastern Craggs— R. Graham, A. Davis and T. Price (FRCC, 365pp., ISBN 0-85028-036-2).

A potential eye-opener for all those Scots who dismiss the Lakes as overcrowded, overrated and over the Border.

Buttermere is one of the quietest areas in the Lakes and has some magnificent crags in wild and beautiful settings. The Eastern Craggs area includes major venues like Raven Crag and Castle Rock in Thirlmere as well as a host of worthwhile, but less well known climbing grounds.

This is an excellent new guide which follows hard on the heels of the previous edition (a gap of only five years). As with all current series of FRCC guides, the quality of colour photographs is excellent, although they could have chosen a more striking cover shot. The previous edition's cover showing a climber poised on the crux of Phoenix was rather more of an inducement to buy than the pastoral view on the cover of the new guide.

In general, grades seem to be trending gently upwards. For example, few would argue with the bold and exposed Agony on Castle Rock being upgraded to E1. The only strange revision of grade was for Overhanging Bastion on Castle Rock, one of the Lakes' great classics. In the last edition, the authors bravely defied tradition and upgraded the route to HVS 5a. This group of authors seem to have bowed to the traditionalist backlash and regraded the route as VS 5a. They have, however, salvaged their collective conscience by putting the route at the top of the graded list for VS and adding a comment that the crux move is at the extreme limit of its grade (sounds familiar).

The layout is clear and uncluttered and the diagrams by Al Phizacklea are excellent. The usual star-ratings and detailed pitch grades are used.

For those who know these crags, this is another inspiring guide. For those who have not experienced them, buy the book, apply for your visa and go.

Stuart Murdoch.

Sea, Ice and Rock – Sailing and Climbing above the Arctic Circle— Chris Bonington and Robin Knox-Johnston. (1992: Hodder & Stoughton, 143 pp., many illustrations in black and white and colour. £15.99, ISBN 0-340-57619-7).

This is an account of a voyage to the Kangerdlugssuak region of East Greenland in a 32-foot yacht by six seasoned adventurers.

The object of the enterprise was to climb Cathedral Peak, a far-from-easy 2600m

mountain requiring a four-day trek in. A crew of six in a 32-ft yacht enduring days of storm and headwind does not bear thinking about, yet they put up with the hardship and boredom with civilised good humour as was to be expected from a crew of this calibre. Sailing through the East Greenland pack ice is not for the faint hearted; they were competent as well as lucky getting through it both ways without mishap. The trek in to Cathedral Peak was arduous and the attempt on the difficult summit a worthy failure. Tilman would have been rightly proud of them. The book has three interesting appendices: a short general account of Greenland's maritime background, a history of climbing in the Kangerdlugssuak area and an account of a hydrographic survey of the remote cove in which their yacht sheltered during the attempt on Cathedral Peak. The book is well-produced, the type large and clear and the paragraphs not too long. The illustrations are excellent and the writing clear, unpretentious and thoroughly professional; it can be read and enjoyed in a couple of hours.

Are there any criticisms? No, not really. So I'll have to invent one. In an important sense the story never seems to leave England. The psychological ambience of the party is so overpoweringly regional that in spite of the heroic activity and surrounding grandeur you have the feeling at times that you are present at a Noel Coward play enacted against assorted backdrops from the *Flying Dutchman* and *Peer Gynt*, but then I'm presently re-reading Ejnar Mikkelsen's 'Two against the Ice' and this may be unfairly influencing my judgment.

Iain Smart.

The Climbers:— Chris Bonington (BBC Books, 1992, 288pp., £16.95, ISBN-0-563-20918-6)

The series has already been beamed into our living rooms making, if it were possible, Bonington even more of a household name. On his recent lecture tour he delivered an account of his 40 years' climbing. In contrast this book sets out to be a history of the sport (or way of life) from its origins. As well as the usual clutch of superb colour photos there are several pages of maps and numerous historical illustrations. The bulk of the book is, however, narrative text with a brief calendar and bibliography thrown in. Although less of a personal story than his lecture account, Bonington has plenty of interest to say and, has of course, been a major player himself in recent years.

A re-creation of Mummery's 1881 ascent of the Grépon acts as a scene-setter. Though his guide, Venetz, actually led the climb, Mummery is described as 'the father of modern climbing'. The reason why becomes clear. A description of early climbs of Mont Blanc is followed by that of the explosion of activity among well-to-do Victorians, perhaps trying to escape the rigid social conformity of the times, but never really avoiding it. Mummery was initially shunned by the climbing establishment; perhaps because his ambitious drive broke too many social constraints, and eventually led him to his death in a pioneering attempt at Nanga Parbat.

Bonington continues with the parallel tales of technical advances in the Alps and the new dimensions in high altitude climbing opening up in the Himalayas. His journey is illustrated with excerpts from contemporary writings and with colourful accounts of the personalities involved.

There are frequent and harrowing tales of epics and fatalities. Bonington also explores some of society's attitudes as reflected by climbers whether it be to guides or Sherpas (known to early British expeditions as coolies), or the mountain environment of today. His view is a historical one and, while he does not accuse mountaineers of re-inventing the wheel, it is interesting to note that approaches to route finding, light-weight

expeditions and the non-use of oxygen at high altitude were all pioneered well ahead of their time. The ethos of the sport develops with it and provides a thread running throughout the story, but he never attempts to pin it down too precisely.

Accounts of recent developments are given a quiet, extra authority by his own close involvement with the climbs or their protagonists. The last two chapters describe some very recent feats in the early 1990s and he touches on the problems substantiating solo ascents and controversies such as those surrounding competition climbing. Finally, he hints at the future with its extreme challenges for the solo face climbers and challenges for all of us in the form of the crisis facing the mountain environment.

This book gives a comprehensive and well-illustrated account of the story of mountaineering. While lacking the immediacy of most of Bonington's tales, it does give a glimpse of the characters behind the tales, and left me feeling I would like to read more first-hand accounts.

David Musk.

Encyclopaedia of Mountaineering:— Walt Unsworth (1992, Hodder & Stoughton, paperback, 384pp., illus., £16.99, ISBN 0-340-57744-4).

Following a reading of the 1977 edition, I sent Unsworth a letter containing a list of corrections and shortcomings connected with the entries on Scottish mountaineering; he replied politely and promised to bear the list in mind for a future edition. In the elapsed time, any such corrections seem to have gone the same way as my original list; in worship of the demi-god, Recycle. Several points to emphasise straight off: Unsworth is an Alpinist by inclination and the encyclopaedia perforce has many entries devoted to long forgotten and often obscure Alpine guides. My remarks are basically confined to Scottish entries.

On a purely arithmetical basis at first sight Scotland would not seem to do very well. Of the 374 pages of data entry, three are devoted to 'Scotland, climbing in.' Whether 0.8% of the world's climbing is a fair or even valid estimate of Scotland's contribution I leave for the reader to decide. To be fair however, other entries touch on areas and aspects only briefly mentioned in the main entry. To gain an overall picture of a country, therefore, one has to dance about the book like a hungry midge.

Down to details. The only Glen Coe route mentioned in the main entry is incorrectly named, being the first on the Buachaille – Collier's (sic) Climb. It's correctly spelled as Collie's in the short entry for the Buachaille. Even here, Unsworth has overlooked Ossian's Ladder on Aonach Dubh, climbed 26 years' earlier. Swallowing that the Etive Slabs are in the Southern Highlands, indigestion sets in when we are told that they are further east than the Cobbler – near Balquidder (sic). 'Long routes, VS and above, very popular in the 1960s. Skye receives a paltry three lines, half of which state that 'the Cuillin has a unique place in British climbing'. He does expand on this later though. Peculiarly enough, Arran on the other hand receives 18 lines, though this is let down by the bizarre statement that 'there are rock climbs on most of the peaks, though the rock is a peculiar form of granite'. In the list of guidebooks, Unsworth has the latest guidebook to the Southern Highlands and Arran, but also includes the older Wallace edition to Arran. There is, unfortunately, no mention of the developments over the last two and a half decades of the Southern Highlands as a winter climbing ground.

Small points. J.R. Marshall might be amused to read that John Barry made the first ascent of Smith's Gully on Creag Meaghaidh, while Green Gully on the Ben is still down as having been first climbed in 1938 (the J.H.B. Bell second ascent, Raeburn of course having made the first in 1908). And when last did breeches incorporate a hammer loop?

It is, of course, only too easy to be over-critical, especially by concentrating on one's own area. For all I know, the rest of the encyclopaedia may set a high standard of accuracy, though if the rest of the book is the same as the Scottish contents then I shudder.

In the absence of any major competitor, Unsworth probably has the field to himself. And, due to the sheer drudgery of writing such a book, that's the way it will probably remain.

Someone had to do this book, and I daresay that we should be grateful to Unsworth for being the masochist. That does not mean however, that complacency should rule. Near the beginning of the book he writes that corrections etc. will be gratefully accepted for future editions. As a fresh-cheeked but truth-seeking youth I did this last time round; I won't bother this time.

Ken Crocket.

Avalanche Safety for Skiers and Climbers:— Tony Daffern (1992, 2nd edn., Diadem, £11.99, ISBN 0-906371-26-0).

This is a comprehensive manual for the hillwalker who wishes to learn not only the techniques of recognising avalanche danger and of rescue, but also the very considerable amount of background material which now exists in this area.

Most of the author's examples are drawn from Canadian and U.S. experiences. There are also some references to Scottish incidents, and Hamish MacInnes is credited with assistance in the preparation of the book. The book is written using ski accidents as its main examples — indeed the exceptions to this are in the main, Scottish.

Many climbers may feel initially that they will not wish to read 180 pages on this single subject. However, Tony Daffern's book is amply illustrated with relevant photographs and line drawings.

Also, because of the very clear heading-up of subjects within each chapter, the reader is able to choose whether or not to read the detail of the background information.

This is a comprehensive book on an important subject. It is clearly presented and I would recommend it.

John Burns.

Mer de Glace:— Alison Fell (1991, *Serpent's Tail*, £7.99, ISBN 1- 85242-267-X).

This book was the winner of the 1991 Boardman Tasker Award for Mountain Literature, but unfortunately, was not a book I enjoyed.

Perhaps my reading tastes are like my appetite — anything will do so long as there is plenty of it.

Alison Fell seems to have created some literary nouvelle cuisine; very sophisticated style but without the content to satisfy. If this were a BBC2 play, it would be presented as a series of monologues delivered from a psychiatrist's couch, with occasional slides of a painful childhood, or of 'beautiful but threatening' mountains projected onto the ceiling.

Should you wish to know more about the eternal triangle relationship which is the theme of this book, borrow it from the SMC library; I won't be discarding any Shipton, Murray, Venables or Simpson to make shelf-space for 'Merde Glace'.

Hamish Irvine.

The Cairngorms:— Adam Watson (SMC, ISBN)-907521-39-8; £17.95).

Viewed from a distance the Cairngorms appear to have altered very little during the 18 years that have passed since the last edition of this guide. Closer acquaintance however, reveals a number of significant changes.

Further roads have been bulldozed, several bothies have been removed, the ski centres have expanded, some large tracts of land have changed ownership, the all-terrain bicycles are now widely used and most noticeably, there has been a huge increase in the number of recreational visitors.

The effects of all these and many other changes have been incorporated into the updating of this popular District Guide by Adam Watson.

The style of this sixth edition has been completely revamped. There are 82 colour and six black and white photographs, 15 new maps by Jim Rennie and an eye-catching royal blue (blue to differentiate the District Guides from the general mountaineering books which are black).

The general layout is pleasing and easy to use for referrals and, try as I may, I have been unable to find anything in the text that I could fault. It is good to see the phonetical spelling (in parenthesis) as an aid to the local pronunciation of place names has been continued.

The colour photographs have a major impact and I must admit to being very impressed with the standard of colour reproduction from what are in some cases, quite old slides. The choice of photographs (always difficult) is generally very good although I was disappointed with the winter shot of the North-east Coire of Lochnagar and surely we could find better examples of climbers in action than the headless figures on Djibangi and Kiwi Gully.

Bill Brooker's photograph of Squareface is outstanding. I would have preferred a full-page vertical format picture on the front cover (similar to the Munros) as it would have been less dominated by the bright blue background. Also I miss the historical photographs like those of Bob Scott and Tom Patey in the last edition.

The Guide's preface states: "The main aim is to give an introduction to the area's potential for serious hillwalkers, while at the same time giving readers a flavour of what is unique or unusual about the Cairngorms as compared with other hill districts of Scotland."

In my opinion the book succeeds on both counts and this, I am sure, is due in no small measure to the author's life-long association with, and comprehensive knowledge of, the Cairngorms. I recall at the time of the 1981 Lurcher's Gully Public Inquiry a bemused Chairlift Company manager talking about Adam Watson to a group of sympathisers: "You know what he is doing up there? He is actually counting the boulders!"

This excellent guide maintains the fine tradition set by Sir Henry Alexander and will be much appreciated by both occasional visitor and dedicated Cairngormer alike.

Greg Strange.

The Southern Uplands:— K.M. Andrew (SMC, 181 pp., illus., £16.95, ISBN 0-907521-38-X).

The new edition of the Southern Uplands by Ken Andrew is a welcome addition to the District Guide series, especially to those of us who live in the area. The book is a pleasure to handle and to read, not least because the choice of type faces and paper makes it a model of clarity.

The illustrations are as spectacularly good as one would expect from the author and the publisher, and the inclusion of a few black and white photographs provides an agreeable link with earlier editions.

Reading a guide book from cover to cover is not a task one would normally relish, even spread over several weeks, but the author's relaxed and good-humoured style, and many of the bits of hitherto unknown information scattered throughout the text, maintained this reader's interest. The geological survey was most welcome, but the addition of a map would add significantly to the layman's understanding and enjoyment.

The important question about a guide book is its usefulness in practice, so your reviewer and his wife betook themselves to the upper reaches of the Tweed, previously unexplored territory, and followed the text to climb Culter Fell and Broad Law.

Saturday on Culter Fell raised the question of projecting an image of a land of blue skies and brilliant colours, sadly at variance with the reality of curtains of mist and rain blasting across dreary wastes of dead grass, but Broad Law on Sunday restored our faith in the image, and in neither case could the guide book be faulted.

From a wider point of view Ken Andrew is to be complimented on having written a book which cannot fail to stimulate interest in a vast and under-rated area of Scotland, and he has a happy knack of finding the attractive features in some of our less prepossessing bits of hill country.

The publishers must also be complimented on the fact that the only thing that appears to have been missed in reading the proofs is the redundant word 'though' in the second last line on page 89.

Bryan Fleming.

Glen Coe: Rock and Ice Climbs – including Glen Etive and Ardgour: – K. V. Crockett, R. Anderson, D. Cuthbertson (SMC, 381pp., illus., £13.95, ISBN 0-907521-32-0).

When the first edition of the present Cairngorms guide was published in 1985 it was heralded as the new benchmark for SMC climbing guides. But many climbers in Scotland, familiar with the excellent productions from English clubs and the BMC, remained unimpressed.

Arran, Arrochar and The Southern Highlands published four years later added stars for quality, but retained 'run-on' rather than pitch by pitch route descriptions and ignored a market which increasingly expected graded lists, colour photographs, artistic diagrams and full first ascent details.

Furthermore, typefaces and style established by The Cairngorms were thrown to the wind, as Arran and Arrochar went back three guides to a style which hadn't been seen since Creag Dubh and Craig-a-Barns. To an outsider looking in, and I am neither familiar nor interested in the debate or politics behind the Arran and Arrochar guide, the only conclusion was that the SMC guidebook committee had lost its way. Action was needed, and it appears that action was taken.

The new Glen Coe guide was the SMC's next full production and, quite simply, it is the best rock and ice guide the SMC has produced. That shouldn't be taken as an excuse for laurel resting, for as excellent as it is, it isn't perfect; but then no publication ever is.

Firstly, the SMC now has a firm guidebook identity, although this was actually established with The Cairngorms 1990 reprint. An 'arty' typeface has been chosen for the title and the words on the cover simplified – authors go inside and superfluous words like 'A Comprehensive Guide' and 'Climber's Guide to...' have been dispensed with.

Bookshelf identity has at last been established with a repeat of the title on the spine followed by 'Rock and Ice Climbs', or presumably 'Rock Climbs' for some guides. The blue SMC logo which emerged briefly in the Central and Southern Scotland guide, has justifiably reappeared.

However, all of this may be unnecessary. I can identify all my recent SMC guides – their split spines have been stuck up with Elastoplast!

Internally, the sans serif typeface has been revived giving Glen Coe a clean, modern and authoritative look, sadly lacking in Arran and Arrochar. On top of that there are 16 colour photographs ranging from surprisingly boring to exciting and stimulating; a worthy stab at graded lists for summer and winter; pitch-by-pitch descriptions; a full (as possible) first ascents list; quality stars; generally superb diagrams and maps and an interesting explanation of the proposed new winter grading system. The front cover is very worthy but, alas, a little dull.

Authors Ken Crocket, Rab Anderson and Dave Cuthbertson, aided by Editor Roger Everett have combined to produce the most comprehensive guide yet to climbing in the Coe, Etive and Ardgour area. All the approaches and introductions to the crags have been revised and many of the routes up or down graded, and quality indicated with stars. The regradings seem fair enough, although judging from my experience some of the star ratings are a bit out, but then I realise not all routes can be checked.

Mistakes? Well, there are a few scattered here and there, but no howlers (that I could see) and that's really as much as you can hope for.

However, it would seem that not quite enough attention has been paid to conveying the information in the clearest way on the diagrams. On Creag a' Bhancair for example, The Risk Business disappears after the start and turns into The Railway Children. On the North Face of Central Buttress on the Buachaille, the absence of a finishing number for North Face Route makes it difficult to follow and The Gangway seems to appear from nowhere. On the North East Face of North Buttress there seems to be some confusion at the base of Bottleneck Chimney and Bluebell Grooves and at the top with the number 19 which marks the bottom of Guillotine. The diagram for Slime Wall is quite correct but a strain on the eyes to follow and it's a shame the likes of Hamburg and Performance (both starred routes) have been left off the Aonach Dubh E Buttress diagram.

In general, some of the diagrams with a concentrated number of routes are quite hard to follow and it might be interesting to see if alternate dashed and dotted lines could be used in future, or anything to make following routes as easy on the eye as possible.

But this shouldn't be allowed to mar what is essentially a very fine guide and hopefully the shape of things to come.

Tom Prentice.

The High Mountains of Britain and Ireland. Volume 1:— By Irvine Butterfield (Diadem Books, 320pp., illus., £13.95, ISBN 0-906371-30-9).

This is a revised and updated reprint of Butterfield's 1986 edition. It describes routes to all the 3000ft mountain in Britain and Ireland. There is information on transport and accommodation as well as the descriptions of day walks, some 133 in all. The volume incorporates colour photographs and diagrams indicating the hills and routes up them.

There is detailed information on each area, its hills, and a discussion of the different approaches to the tops.

The book inevitably comes head to head with the SMC Hillwalker's Guide 'The Munros', edited by Donald Bennet. The latter of course is concerned only with the Scottish Munros, whereas Butterfield's book covers all of Britain and Ireland. However, 'The High Mountains' (THM) is, by comparison, big in size and cost. It most definitely

does not fit into the corner of a rucksack as easily as 'The Munros' (TM) might. TM also has the advantage that one can usually find one Munro on one page, alongside the photograph and map. Simple but effective. This is probably why there is a 'Companion' Guide to THM, a slimmed down text version.

The production of THM is good, and it is perhaps an ideal book to plan trips with, but not, obviously, a book to cart up the hill, unless severely lacking in exercise. And Vol. 2? That should be head to head with another SMC book – The Corbetts, as it will cover 'other British and Irish peaks.'

Aysel Crocket.

Northern Highlands Volume 1, Rock and Ice Climbs:—Compiled by Geoff Cohen (SMC, 372pp., illus., £13.95, ISBN 0-907521-33-9).

Though long awaited this guide does not disappoint.

Its appearance results from an era of quiet but steady development of the area's climbing potential. For a handful of dedicated pioneers it has been a period of glorious freedom and wonderful climbing. Scarcity of information has added spice to this exploration. Rock climbs of the highest quality have been found on outcrop and mountain cliffs alike, and the area has been at the forefront of winter climbing development since the early 1980s. Throughout there has been a spirit of courtesy and mutual respect between the competing activists, although most secrets have been well kept.

However, there are doubtless those who fear that this guide might end the North-west's cosy seclusion. Its invitation to the route-ticking multitudes is plain, and they could unwittingly spoil the area's special sense of remote adventure. With greater competition at the leading edge future development could become clinical and eventually cynical.

Given the area's expanse, its remoteness, often vile weather and not least its fearsome midgets the grounds for these fears are debatable. I also believe publication was inevitable and right. The SMC could not fairly build up a growing file of new route descriptions in the journal – without at some stage making the information available to the public.

Furthermore, the spirit and style in which the guide is written cannot be faulted. It is inspirational without overdoing the superlatives, and informative without eliminating the sense of adventure in tackling the climbs. Geoff Cohen has also written an important introductory note in which he resolves his personal doubts about its publication and extols the special quality of the climbing in the North-west.

Despite the enormous task of collating 20 years of disparate development the guide achieves a standard of layout and illustration comparable to other SMC productions.

There is also ample warning of the many overgrown, undergraded and rarely frozen routes which might ensnare the unwary visitor. In the absence of regular repetitions the guide has chosen to use the first ascent descriptions for most of the recent climbs. This leads to a variation in the format and detail of descriptions. However, the individuality of descriptions makes for attractive reading and adds a historic flavour to the text.

Nevertheless, I would have liked to have seen a little more space and enthusiasm devoted to the easier winter routes. The Torridonian gully clefts are unparalleled in this country for scenic splendour, yet the guide dispenses most of them with the perfunctory 'Grade I – straightforward snow-plod' tag. Similarly, the A' Chioch Ridge and Buttress on Beinn Bhan is one of the finest Grade II expeditions, but gets a paltry one line and no stars. There are also a few misgradings of these easier routes.

The failure to assign stars to the climbs on Alligin, Liathach and An Teallach is also inexplicable and detracts from the professionalism of the guide. Surely you either scrap starrings altogether or have them in full.

But these are relatively minor shortcomings. My only other criticism is the bulk and weight of the volume which is inevitable given the extent of its coverage. However, the SMC might have given further thought to slimline guides solely for the weight-conscious winter climber. I am sure that a winter compilation for the whole of the North-west Highlands plus Skye could happily co-exist with the comprehensive texts.

Perhaps the best thing of all about this guide is its implicit revelation of just how much pioneering there remains to be done. Despite the wanderings of Patey, the finger games of Howett and Dinwoodie, the deepest scourings of Nisbet and the predatory swoops of Fowler, there remain sufficient untapped reserves to last well into the next millennium.

Martin Moran.

Journals of Kindred Clubs

American Alpine Club Journal 1992.

All the superlatives have been used for this, the classic of journals.

I will skip the four articles on Himalayan peaks, and start with Mark Bebie's report on the Granitic Peaks of Kirgiza. Terms like Patagonia without the weather, or a Yosemite-scale Wind River Range are used to describe these 17,000ft-plus (sounds higher than in metric) mountains on the border with Tadzhikistan. They appear to have been discovered in 1982 by Soviet climbers from St Petersburg.

Once again I am excited by the Alaskan climbs of Huntington's Phantom Wall, Cobra Pillar, Mount Barrille, North-west Face of Denalli's West Buttress, Neacola, two face routes on Devil's Thumb, Mount Abbe and Mount Alberta's North Face and North-east Ridge.

Climbs and expeditions 1991 covering exploits in all regions of the climbing world takes up more than half of the journal.

The photographs are superb with pride of place having to be the shot of sunrise on the East Face of Keeler Needle – Sierra Nevada, California.

D.F. Lang.

BERG '93.

The German Alpine Club's year book has the quality of Diadem's classic series except that it is a large journal. As such a great variety of subjects are covered viz, in-depth reviews of activities in the Dachstein Region, Baffin Island, New Zealand Alps, the Pamirs, the Hindu Kush, international Alpine expedition reports, Alpine Convention Report, National Parks, hard rock, climbing competitions and finally, a technical review of old *in-situ* hardware dangers and new specification bolt designs.

Browse through this production for the photographs alone.

D.F. Lang.

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Articles for the Journal should be submitted before the end of January for publication in the following issue. Lengthy contributions are preferably typed, double-spaced, on one side only, and with ample margins (minimum 30mm). Articles may be accepted on floppy disk, IBM compatible (contact editor beforehand). The editor welcomes material from both members and non-members, with priority being given to articles of Scottish Mountaineering content. Photographs are also welcome, and should be good quality colour slides. All material should be sent to the Editor, address as above.

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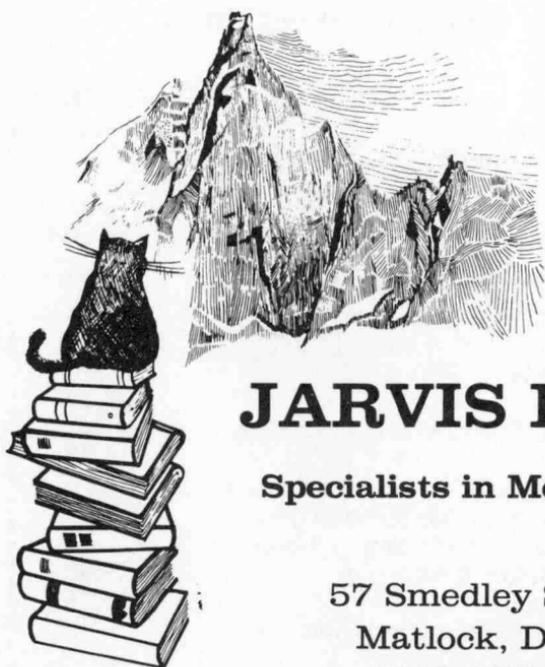
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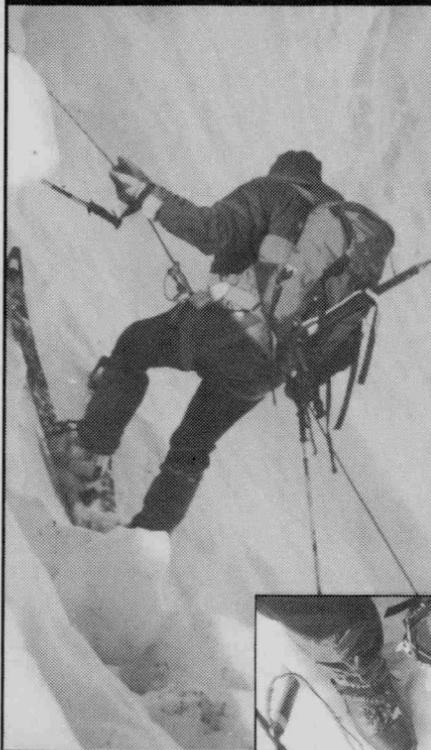
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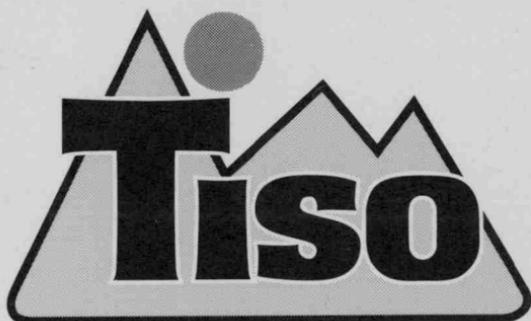
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GLASGOW
129 Buchanan Street
DUNDEE
22-24 Whitehall Street

ABERDEEN
26 Netherkirkgate
STIRLING
Thistle Centre