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The national headquarters of the ACC is in Banff, Alberta. Regional Sections are active in Banff, Calgary, Edmonton, Montreal, Ottawa, Toronto, Winnipeg, Vancouver, and on Vancouver Island. In the United States a Section is based at Portland, Oregon. Activities organized by the ACC and by the Sections include summer mountaineering camps and ski camps for all levels of experience, Club summer and winter training camps, and Section yearly climbing schedules. The ACC maintains several huts in the western Canadian ranges and has a Clubhouse near Canmore just outside Banff National Park. The Club assists members participating in exploratory mountaineering, represents the interests of mountaineers to government agencies controlling the use of climbing areas, and is involved with mountain management and mountaineering safety.

Membership in the ACC is open to all who support the Club's objectives. Some of the benefits of membership include: use of Club huts and the Clubhouse and attendance at camps at member's rates, reciprocal hut use with some other national clubs, the receipt of the Canadian Alpine Journal (except Juniors) and other Club publications, member prices on ACC books. Annual membership fees are: Senior or Associate \$30, Couple \$52, Junior \$15. Entrance fee (except Junior) is \$10. Life memberships are also available.

Le siège social du CAC est situé à Banff, Alberta. Des sections régionales sont actives à Banff, Calgary, Edmonton, Montréal, Ottawa, Toronto, Winnipeg, Vancouver, et dans l'île de Vancouver. Aux États-Unis une section est basée à Portland, Oregon. Les activités organisées par le CAC et par les sections comprennent des camps alpins d'été et des camps de ski pour tous les niveaux d'expérience, des camps d'instruction de club, en été et en hiver, et des programmes annuels d'alpinisme organisés par les sections. Le CAC entretient plusieurs cabanes sur les chaînes montagneuses de l'ouest canadien et un clubhouse près de Canmore, aux approches de Parc National de Banff. Le CAC aide ses membres à participer à l'alpinisme exploratif, représente les intérêts de alpinistes aux agences gouvernementales qui dirigent l'usage des terrains d'alpinisme et s'occupe de la conservation dans les montagnes et de la sécurité des alpinistes.

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Instructions To Contributors

Manuscripts, in English or French, for submission to the Canadian Alpine Journal should be sent to Moira Irvine, editor CAJ, Box 91880, West Vancouver, BC V7V 4S4, Canada.

The deadline for submissions to the 1985 CAJ is 23 November 1984. Submissions received well prior to the deadline are much appreciated. Contributors who wish to read their ms after editing must submit no later than 26 October 1984. This does not preclude further editorial changes if there is too much copy. Contributors who wish to see their edited ms must indicate as such with their submission.

Submissions should be typed, DOUBLE SPACE, with a 1 1/2 inch margin on the lefthand side, on 8 1/2 x 11 inch paper. If forced to submit handwritten material, please submit early, and please write on alternate lines, ie double space. Any corrections to a typewritten ms should be made in pencil. Please submit original copy, not Xerox or photocopy. Maps should include a north arrow, scale, and latitude and longitude. Photographs should be sharp and clear, minimum size 5 by 7. Good colour prints are preferred over colour slides. If marking routes on photographs please include an unmarked print or mark route on an overlay. Please list photo captions on a separate sheet of paper, with title of your ms at top. Put sender's name on back of prints and on slides. When numbering back of photographs do not press hard, do not use ball point or felt tip pen.

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A Traverse Of Northern Auyuittuq

“Having an adventure is a sign that something unexpected, something unprovided against has happened; it shows that some one is incompetent, that something has gone wrong.... If everything is well managed, if there are no miscalculations or mistakes, then the things that happen are only the things you expected to happen, and for which you are ready and with which you can therefore deal.... For that reason we pride ourselves on the fewness of our adventures; for the same reason we are a bit ashamed of the few we did have. An adventure is interesting enough in retrospect, especially to the person who didn't have it; at the time it happens it usually constitutes an exceedingly disagreeable experience.”

Vilhalmur Stefanson,
My Life with the Eskimo.

“ ‘Very pretty!’ said Gandalf. ‘But I have no time to blow smoke-rings this morning. I am looking for someone to share in an adventure that I am arranging, and it's very difficult to find anyone.’

“I should think so — in these parts! We are plain quiet folk and have no use for adventures. Nasty disturbing uncomfortable things! Make you late for dinner! I can't think what anybody sees in them,” said Mr Baggins....”

JRR Tolkien,
The Hobbit.

These two passages were very much on my mind as I left my home on 1 July 1980. I hadn't ventured north up the Davis Strait coast from Broughton since I waited up there for my guides ice bound for six days in 1977. My plans for 1980 had me travelling on my own across mountains and fiords from west of Nedlukseak Fiord to Maktak Fiord — nearly the full breadth of the 21,470 sq km (8290 sq mi) Auyuittuq National Park. Before I even left Montreal my mind was already in the north embarked on a trip that seemed at the time comparable to going to the moon alone without mission control.

Saturday 5 July was a cool, cloudy day in Broughton, the sort of day I have come to expect in this place. I waited all morning for my guides to ready their equipment. When at noon I found one with his skidoo scattered in tiny pieces on his front stoop, I went for a nap for the remainder of the afternoon. Miraculously everything came together in the evening and, just as the sun emerged in a blaze of colour beneath the cloud cover in the far north-west, we were off across the ice, northward out of the harbour. My eleventh Baffin holiday was under way. It was to be my longest and most ambitious trip up to that time - one which, by comparison, made my previous excursions in the Arctic seem like weekend outings. I rode, perched on top of a bundle of duffel, between two 55 gallon drums of gasoline on a long Eskimo sled. Ahead my guide drove the skidoo that pulled me. My second guide, driving his broken-down old skidoo, pulled a second sled on which was tied a great aluminium boat. We travelled far out on the ice of Davis Strait in the full light of the midnight sun, stopping occasionally for tea or to negotiate the crossing of an open lead. About 2 am we stopped to make a stew of Upton's Country Vegetable Soup and fresh seal,



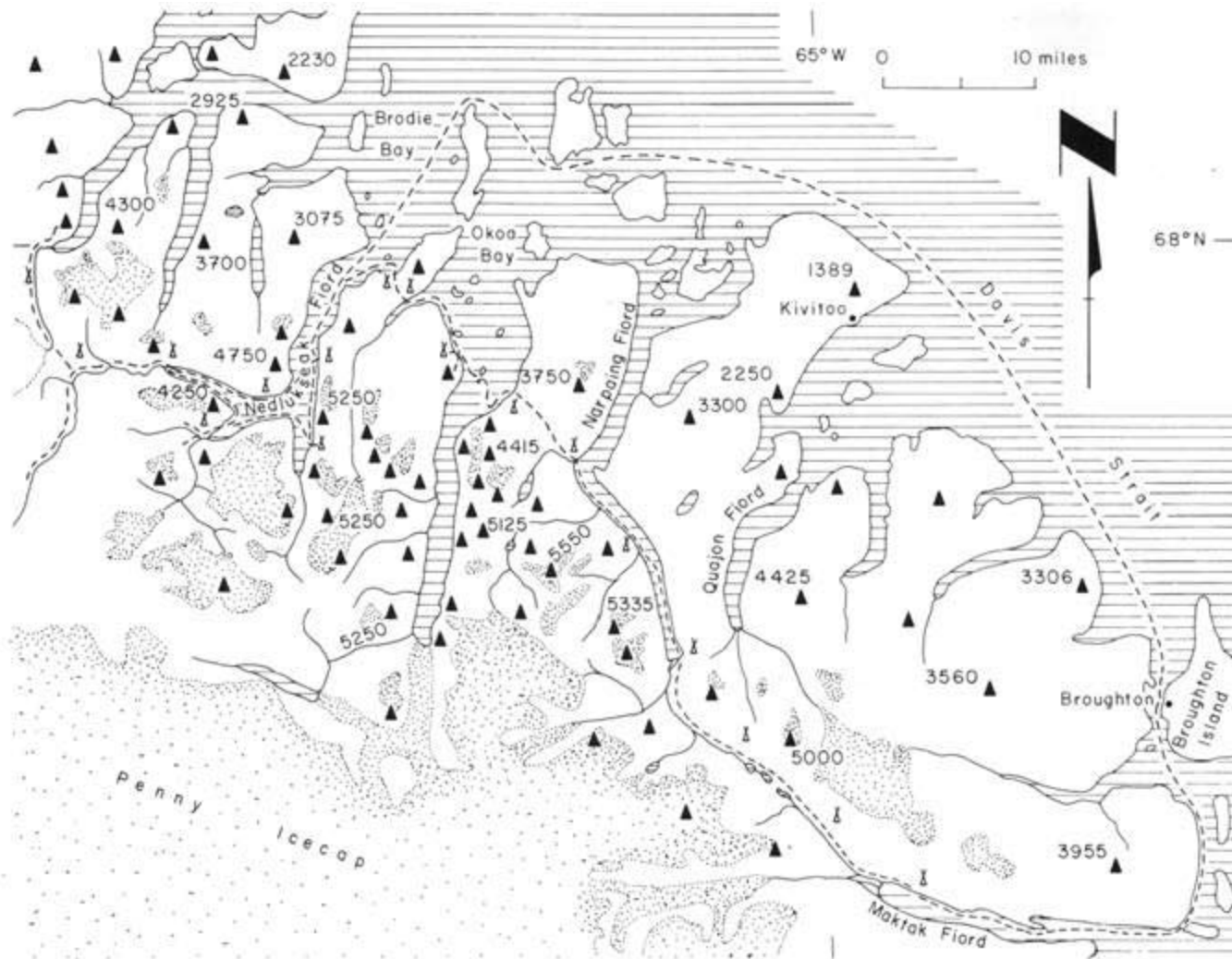
a meal I would have no trouble eating again. Several hours later, near the head of Narpaing Fiord, we came upon the rest of the hunting party that I had joined — about 12 men and skidoos. They were heading to Home Bay. I had made arrangements with two of them to drop me off at Nedlukseak Fiord on their way to their hunting grounds. Following a breakfast on the ice of tea, bannock, and fresh char, the three of us went on ahead, racing over the smooth ice at the entrance of Okoa Bay and flying across the open leads into Nedlukseak Fiord. Late in the morning my guides left me on the shore, about nine miles from the fiord head. I watched them race back out of the fiord until they disappeared behind a cliff. I would not see evidence of another man for 40 days.

It took me two days to sort out my gear and settle my stomach after the constant pounding of the 13 hour sled ride. As far in the fiord as I could see there was solid ice, punctuated by an occasional seal. Everywhere, cliffs of three and four thousand feet plummeted to the frozen fiord. There was only one route for me and that was on the ice. Low fog on the ice delayed my departure a day. Once under way I soon grew used to dragging my fully inflated kayak, loaded with four weeks of food and equipment. Standing in the warm sun on the ice in the middle of the fiord I was finally able to comprehend the true magnificence of my surroundings. Most impressive was a long chain of dramatically sculptured cliffs, nearly 4000 ft high. On my return I would paddle beneath these. I pulled my boat about four miles over the ice before I came to any amount of water. Then the going got rough. The ice was too rotten and broken up to walk any distance on, but there was not enough water to float my boat. Travel was wet and cold as I continually clambered in and out of my boat on water and ice, forced openings between close packed ice and through shallow puddles, and hopped

from one piece of ice to another. Nowhere did the cliffs permit a landing. In the dark shadows of late evening I struggled two miles further in four hours until I could see open water ahead. Shortly past midnight I found a tiny beach and a small heather slope cut into the base of the high cliffs.

By the next evening the edge of the ice had moved another mile beyond my camp. I soon left the ice behind, quietly paddling in the great western arm of Nedlukseak Fiord. At midnight the reflections of the snow and ice covered cliffs in the still water were mesmerizing. The bright sun was up above the cliff tops at 4 am when I made camp at the mouth of the great river that flows into the head of the fiord.

The next week was spent exploring the area west of Nedlukseak Fiord. The valley beyond the western arm is one of the jewels of eastern Baffin Island. My principal camp was set at the elbow of this valley. Following a day of rest in foul weather I climbed north through a pass into a narrow rugged canyon that, in a flood of water, boulders, and ice, quickly descended northward to the head of an unnamed fiord. Beneath the tongue of a great overhanging glacier I placed my camp. The next day I walked through the lower canyon, along the lush grassy river bank to the fiord head and then began to climb. At 2000 ft I came out on a broad, rocky, upland surface from which a small but spectacular rock summit rose in a swirl just west of the fiord head. With cliffs to the left and to the right of me, I wiggled up cracks and across ledges until I reached the final summit slope. It was now early evening but unusually still and warm on top. I ate a lunch as I gazed out the nameless frozen fiord to unnamed islands that seemed frozen in place in Home Bay, like the icebergs. My return to camp was hastened by the rapid



Cliffs on the west side of Nedlukseak Fiord from the entrance to the western arm of the fiord. David MacAdam



approach of a great bank of dark ominous clouds from the west.

Several days later, back in the great Nedlukseak valley, I hiked and climbed many miles further up along the river as it crashed and thundered down over more waterfalls than I can remember. Between the falls, tumultuous rushes through deep narrow chasms alternated with silent, strong flows through heather meadows. Everywhere the rock scenery showed dramatic evidence of the even greater power of the glaciers of another age that carved out this valley. The rock surfaces were rounded, dished, and polished. In some places there were large holes 10 ft deep, ground by ancient glacier mills into the otherwise smooth, curving rock surfaces. Early in the evening I passed the last waterfall and emerged at a large flooded meadow surrounded by a great expanse of low, undistinguished hills reaching far back to the western edge of the Penny Icecap.

When I returned to the head of Nedlukseak Fiord a few days later I found that my kayak had been blown loose by a great wind during my absence. By a stroke of luck it had remained secured to one last large stone which the wind driven boat had dragged 30 ft along the beach. In a day the damage was repaired and, in a lull in another storm, I paddled back out the western arm. As the day progressed the wind and waves again built up until, by late afternoon, they were too great for me to proceed further into the middle arm of Nedlukseak Fiord, my next destination. A second try several hours later landed me back at my rest spot after another hour of struggle on the water. I had to settle for a marginally adequate camp site perched on a very lumpy heather

Streamers of fog in Nedlukseak Fiord from the middle arm of Nedlukseak Fiord. David MacAdam



Cliffs on the west side of Nedlukseak Fiord from base camp. David MacAdam



Falls in the large valley west of Nedlukseak Fiord. David MacAdam





Cliffs on the west side of Nedlukseak Fiord from the entrance to the western arm of the fiord. David MacAdam



slope above my rock strewn landing. There followed the longest, heaviest rain fall I'd ever experienced in the north. In a brief lull in the foul weather I walked to the head of that arm of the fiord and discovered a marvellous waterfall. The water slipped down a broad, smooth rock slope and, upon hitting a lip of rock, was deflected vertically in a great shower of foam and spray. The entire display was dramatically backlit by the only bright sunshine I had that week. There were still further delays owing to foul weather. After I grew tired of waiting for good weather that never came I again returned to the water one steel grey cold morning and headed toward my next destination, the bottom of a valley that leads eastward through a pass to Okoa Bay from near the head of the main fiord. Early in the afternoon the wind increased and the sky further darkened. By the time I was passing in front of the great blank rock wall that divides the fiord swells of three feet or more were sweeping in from the sea and being reflected back out again from the base of the cliff. Normally I can navigate across swells that size without getting too wet but I cannot easily navigate across such swells and the associated chop, approaching from opposite directions simultaneously. Thus I was very tired, cold, and wet by the time I reached my destination that evening.

I had ambitious plans for that area but a late July snow storm confined me to my camp and the shore for the next several days. Finally I gave up hope of further good weather at Nedlukseak Fiord. One night, shortly before midnight, I left and quietly paddled northward out of the fiord on the calm, dark water. The fiord reflected the barest hint of colour in the bright northern sky. Puffs of fog clinging to the cliffs ahead turned a momentary pinkish orange before the early morning sun rose into the dark overcast. For many hours I silently slipped beneath a massive 4000 ft cliff, a landmark that had seldom been out of my sight during the



previous three weeks. Frequently gulls swooped down from high on the cliffs above to pass low over my head with a loud woosh. Later that morning a great wind storm turned the fiord into a froth and forced a long delay in my departure from the site of the food cache I had left three weeks before. The rest of the day was cloudy. Calm mixed with drizzle alternated with wind mixed with cold. The tide worked for me most of the day and by late afternoon I had paddled nearly the length of the fiord. The low hills along the shore near the entrance of the fiord were so undistinguishable I mistook my proposed portage and would have gone far out of my way had I not been diverted by a great ice jam.

I took two days to rest and carry my gear and kayak over the low hills that separate Nedlukseak Fiord from Okoa Bay. Although my holiday was barely half over I had to leave Nedlukseak Fiord and begin my long homeward trek in order to be at Maktak Fiord on the appointed day. Now out of the inner fiord I experienced more pleasant weather. The evenings brought char to the shoreline and the flat calm at midnight provided a continuous four hour sunset-sunrise extravaganza over Nedlukseak Fiord and Brodie Bay. During the first half of my trip I had tried not to let concern about the unknown difficulties of the long return trip occupy my mind. Yet those concerns were very real and justified. Now my attention was focussed on getting across Okoa Bay with its unknown ice conditions, and overland to Narpaing Fiord, then in Narpaing Fiord a place noted for its unrelenting wind, and finally through the long pass to Maktak Fiord.

I returned to the water one warm, still, rainy afternoon. As I set out loose ice along the shore provided a forewarning of what lay ahead. As I paddled in Okoa Bay under low cliffs, dark in the grey light, ice became more common and open water more difficult to

Travelling on the ice at Nedlukseak Fiord. David MacAdam



find. Soon I was again out on the loose ice, now a quarter mile from shore, hopping from piece to piece, as I had at Nedlukseak Fiord at the start of my trip. Suddenly I found myself in freezing water up to my chest. There was a great thrashing and splashing around as I pulled myself out onto the ice with the aid of the rope that tied me to my boat and cross pressure on a piece of ice fortunately nearby. Getting out of the water was not as easy as I had assumed it would be. In fact I had never really given that problem serious consideration until I was in the water. Only a lucky set of circumstances allows me now to write of this adventure. Though wet and cold, there was nothing to do but continue on as I had before, but now with more caution. The exercise helped warm me but I had to live with the wet for several more hours. Once past the cliffs I found an open shore lead and was again able to

paddle with only an occasional piece of ice blocking my route. The inhospitable shore was now more inviting than ever. In the grey midnight twilight I made camp on a slope above the rocky shore and soon was in dry clothes warming up in my tent with a big pot of stew.

The next day was spent washing and drying my salty, wet clothes in the warm sunshine. The ice and its movement in and out of the entrance of the fiord (Okoa Bay is actually both a bay and a large fiord - the latter is known locally as Kangnetulualuk) was a mystery to me. I needed time to study its ways before returning to the water. I also needed time on solid ground to regain sufficient confidence to cross the wide entrance of the fiord. I was in no mood to walk on the ice any more. Being at the foot of a striking isolated summit that I had admired from the head of the fiord in 1975 and again from the opposite side in 1977, I left the water and ice and set off for its top, a good point for an ice reconnaissance. The bright sunny afternoon gave way to grey skies in the evening as the day's cloud build up from the Penny Icecap passed over me and off to sea. The climb to the north end of the long knife ridge summit took only a few hours, though it was not without its difficulties. In spite of the grey light, the views in and across Okoa Bay from its top were some of the most exciting and spectacular I have ever enjoyed in the Arctic. There was something very comforting and reassuring in seeing cliffs and peaks familiar from previous visits, even if from new angles. The inner fiord was blocked by large ice floes nearly the width of the fiord but I had no need to paddle there. I easily noted a route across the more open bay and through the valley to Narpaing Fiord. The only obstacles were the shifting ice along my shore and a great floe on the far side held in place by a seaward island.

The late afternoon wind and tide the next day combined to clear the ice from my shore just long enough for me to paddle to the middle of Okoa Bay where I stopped on a tiny island for an ice reconnaissance and lunch. The early evening was remarkably sunny, still, and warm. The water was now like a mirror and my boat slipped along silently. This was surely the most delightful paddle of the summer. Behind, as I neared the fast ice, seals began to stalk me at a safe distance. They were understandably shy and cautious, and disappeared with a great splash whenever I turned to admire them. Above me towered cliffs, hanging glaciers, and icecaps that I had visited in 1977. These were turned a soft red by the low sun. Once around the end of the ice I followed a shore lead beneath the cliffs. Clouds soon blocked out the low sun but my greatest obstacle, Okoa Bay, now lay behind me. I could now, if necessary, walk to Maktak Fiord.

The night brought a dull sunset in the north. In the morning my beach camp was wrapped in a damp, cold, sea fog. It took me two full days to carry my kayak and other gear through to Narpaing Fiord. On these trips I experienced the full spectrum of normal summer weather — sun, wind, fog and drizzle. My camp at Narpaing Fiord was in a protected spot on the beach at the junction of the valley from Okoa Bay and a sharp bend in Narpaing Fiord. During my stay cold winds blew in the fiord and through the valley to converge over my camp. Puffs of sea fog were scattered about the valley and against the fiord cliffs. Earlier in Broughton, when I had discussed my proposed route with an Eskimo, his only reservation to all my plans was that Narpaing Fiord's winds would

make my proposed two day trip to the head of Narpaing Fiord difficult. He certainly was right. The wind blew relentlessly all day every day and most of each night. There was hardly a time without white caps or three foot swells. After a couple of days of watching the cycle of wind and waves I returned to the water one cold, blustery evening. I expected the wind to die down, which it eventually did, but the swells continued through the night. As long as I kept my stern to the wind and swells I flew in the fiord. But the least pause allowed the wind to swing me broadside and the swells to roll into my lap. I stopped briefly for a rest at the beach on which I had waited for six days in 1977 but I was still tired of it and moved on. The night grew dark and colder. Suddenly a few yards ahead in the dim twilight a seal, the size of a cow, appeared and then dove, superimposing a circle of waves on the already big swells. Probably I startled him as much as he did me. About 3 am I made camp on the most god-forsaken beach I've ever come upon. It was suggestive of an abandoned quarry. A 3 am departure the next morning gave me calmer water until nearly noon when the sun burned through the low fog and the wind returned in its full fury. But by then my paddling was done for the season and I was enjoying a late breakfast in my warm tent at the head of Narpaing Fiord.

The afternoon was spent washing the salt and mud from my kayak prior to a final disassembly and packing for the long overland carry to Maktak Fiord. This was the most grueling part of the trip. Three trips through this pass in previous years made route finding easier this time but did not lessen the difficulties of the rough and rocky terrain. The complete carry (three trips) was made in four days, one less than planned. My feet were battered and blistered when I reached my final camp at Maktak Fiord. I spent the day that I had held in reserve for bad weather bathing and sunning myself at Maktak Fiord. When I grew tired of this I sat on the warm heather slopes among the blueberries, for which the fiord is famous, and gorged myself.

The next evening, 14 August, during a great rain and wind storm, a man reached me by boat from Broughton and my long journey was over. It was only a temporary end, for I was already planning a return to Okoa Bay in 1981.

David P MacAdam

Third Time Lucky-The Andromeda Strain

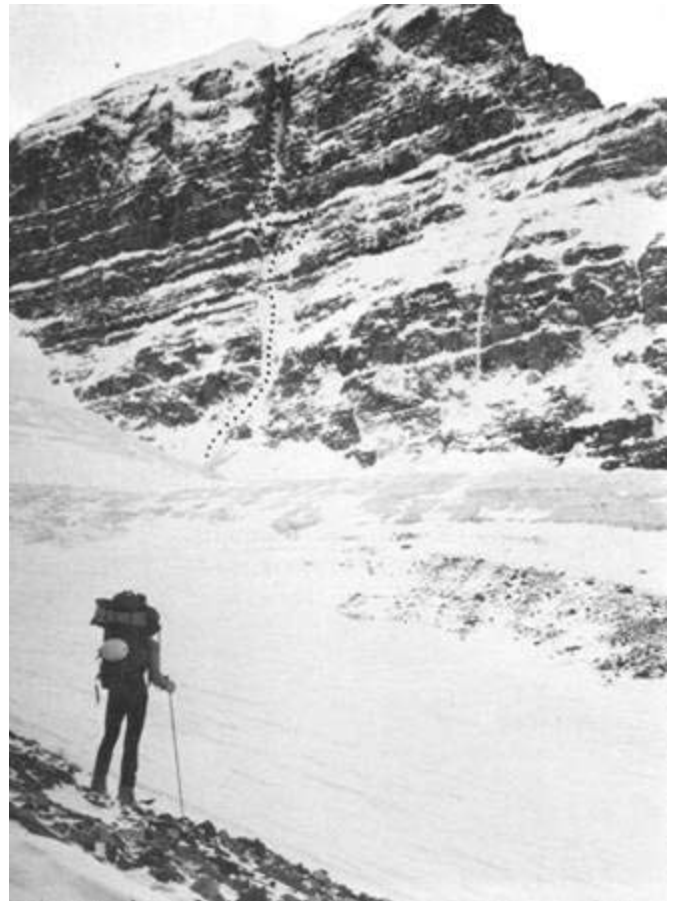
April 16; technically winter is over. The snowpack in the Sunwapta valley is beginning to deteriorate to spring mush but on the big north faces that surround the Columbia Icefield it's still winter. The loose rocks that give the Rockies their dangerous reputation are frozen in place. Daylight is up to 14 hours and given a cool, clear, crisp day the air remains still and nothing moves. Perfect alpine climbing conditions.

Dave Cheesmond, Tim Friesen, and I are sitting on a snow cone beneath the north-north wall of Mt Andromeda. We are here to climb the "Andromeda Strain" a 2000 ft couloir system split at half height by a 300 ft long and very steep rock band. Our man at

Andromeda Strain: Tim Friesen high in the upper couloir.
Dave Cheesmond



The north-north wall of Mt Andromeda with route marked. Dave Cheesmond



the Banff weather office has predicted a three day high pressure system over the Columbia Icefield. Unfortunately our illusion of a clear cold day is falling apart. To the north there is a curtain of malicious grey clouds. The winds are gusting and cold. If anything the weather looks to be deteriorating. Going home now is in all of our minds but we decide to start up in hope that the weather will improve. Our desire to climb the route is stronger than our common sense.

The lower couloir is straightforward climbing, 45 degree styrofoam snow, thin ice, and an occasional bulge. After crossing the bergschrund we coil up the rope and begin a three way unroped French technique shuffle. Frontpoint, side-step, frontpoint, plant the axe, frontpoint, side-step, front-point, plant the axe. It's got a catchy beat so we keep dancin' to it.

Dave and I separately have each made three previous attempts at the route in the company of other people. First Dave would try the route, get to the rock band and, for reasons of weather, sickness, lack of time, etc, retreat. Next my turn would come. I would get to the rock band for much the same reasons end up rappelling back down the lower couloir. The game was to take out the preceding party's rappel anchors on the way up in expectation of success. After failing you'd replace the anchors on the way down for the next team to take out on the way up. Dave and I decided that we'd team up and make our third attempt, the last go round of the game. Tim hadn't been on the route before and he didn't even wish to play the game.

At 1000 ft the weather doesn't seem to be getting any better

Barry Blanchard climbing the snow plastered corner leading up to the half-way ledge. Dave Cheesmond



Tim Friesen leading the exit ice bulge. Dave Cheesmond



- or any worse. The ground is getting steeper. We traverse right working up bulges and across snow ledges to the base of a clean corner with a hard snow vein running up the back of it. Time for a rope and rack. The climbing is classic alpine work, bridging out frontpoints onto small rock ledges while pulling up on ice tools planted delicately into the snow vein. At about 30 ft I clip a good piton and move out onto the right wall. Another 40 ft of linking up snow ledges and I'm on the snow band that extends across the whole face. I set up a belay. Above the snow ledge the rock is all vertical and overhanging. The only visible weakness is an off width crack leading up the right side of a buttress. The off width is a little less than a rope length's traverse left on the snow ledge. Earlier attempts, not involving Dave or me, had tried to climb the off width but it proved too wide to take anything but one foot lengths of sawed off hockey sticks. Having no hockey sticks handy we decided to traverse beneath the off width. Around the corner a steep snow choked chimney system follows the left side of the buttress ending in the upper couloir. We've decided that this is our route.

From the belay I traverse one and a half rope lengths left across the snow ledge. At the start protection is scarce. The snow is quite unconsolidated, making the climbing a little unnerving. Towards the base of the chimney system the snow becomes very solid. I drive my tools in like pickets and belay Dave and Tim over. While I start to work on the chimney system, Dave begins digging us out a bivy on top of a large snow mushroom. The weather has started to change for the better. The air is still and the malicious grey cloud mass is in the process of disappearing. After two hours in the chimney I've gained 70 ft. The climbing is an intense mixture of free moves, aid moves, mixed climbing, and the constant clearing of snow mushrooms. The time is 7 pm and dusk is beginning to

Barry Blanchard jumaring the crux pitch on the second day. Dave Cheesmond



set in. Tim lowers me from the high point. The weather is looking good with only a few clouds in the sky.

The combination of the exertion, on mind and body, of the last two hours, and the anticipation of harder terrain above the high point has left me feeling weak and intimidated. My spirits rise when I climb into our bivy. Dave has done an incredible job. A snow cave 15 ft long by 3 ft wide with a roof over all three of us. A huge pot of soup is already steaming. Our cave is dug into the top of a snow mushroom the size of a VW bus. The whole thing is somehow anchored to an overhanging wall above and a 45 degree snow slope below. We'll be sleeping tied in tonight. Dave further boosts my spirits by telling me that the climbing always looks better in the morning.

In the night the weather performed magic. A perfectly clear cold night with every star in the universe visible. Morning reveals a cloudless blue sky and motionless cold air - alpine climbing weather. As I jumare up to yesterday's high point I feel my intimidation of last night waning. Dave's words are proving true. I'm feeling strong physically and mentally. I'm ready for more climbing.

The ground isn't as steep now but protection placements are thinning out and the moves all involve delicate ice tool hooking on very thin ice patches or small rock ledges. After 40 ft the route traverses right on a snow ledge. The snow ledge is three feet high bordered by vertical rock above and below. I use a technique of frontpointing and planting my tools at waist level, then holding them by the head. Bizarre but it works. At 30 ft a snow runnel leads through to where the climbing backs off. Ascending the runnel with

a 30 ft run out is quite tense. I finally uncover a good pin placement and climb another 20 ft to a good belay. The last 80 ft has taken two hours. I feel good; the crux is over and we're going to get into the upper couloir. Dave does the freight train—jumaring with both his pack and mine. We've only brought one set of jumars so Tim gets the frustrating job of prusiking the pitch.

Dave leads another 40 ft of mixed ground and we're into the upper couloir of ancient grey ice. We move up 500 ft of ice, fourth class, placing a screw every rope length. The couloir steepens here and the ice ends. Tim leads a steep ice bulge up the right wall and we're on the summit slopes. The sky is totally clear and the radiant heat of the sun is a reward. Two more pitches up mixed ground, through an easy cornice, and we're on the summit at 5 pm. There are beautiful, beautiful mountains everywhere, the sun is warm, I'm with friends, right now life is good.

Barry Blanchard

Andromeda Strain, new route Mt Andromeda. 5.9 A2 Grade 4 ice. Dave Cheesmond, Tim Friesen, Barry Blanchard. 16 and 17 April 1983. The route is quite similar to Mt Kitchener's Grand Central Couloir but half as long and the crux is harder.

Mt Willoughby

In 1983 I decided to try a trip I'd thought about for many years - a horseshoe ski traverse of the mountains around the Machmell River behind Rivers Inlet. Part of the traverse would include the immense Ha-iltzuk Icecap around Mt Silverthrone — the least travelled part of the Coast Mtns south of Bella Coola. It is far from charter airlines, is known for its terrible weather, and has glaciers so large that they dwarf the mountains. Some of the gentle ranges in the western part of the icecap have been almost entirely transported away by the ice. The area is fringed with unlogged valleys patrolled by grizzlies.

En 1983, j'entrepris la traverse à ski des montagnes environnant la rivière Machmell, aux abords de Rivers Inlet. J'envisageais ce projet depuis longtemps. L'immense calotte glaciaire de Ha-iltzuk qui entoure le mont Silverthrone est la région la moins connue des montagnes côtières du sud de Bella Coola. Difficilement accessible par avion, cette région est renommée pour son climat imprévisible et ses vallées à forêt vierge peuplées de grizzlys. En plus, ces glaciers ont presque entièrement fait disparaître plusieurs côtes moins escarpées du versant ouest de la calotte glaciaire.

In early spring I laid out the route on maps and air photos. I took over my sister's basement for a while packing the ten parcels for the five air drops to be placed along the route. In addition to food each drop contained gas, slings, matches, candles, socks, books, cairn tubes, foot tape, soap, and sun screen.

In early June my bulging pack frame, skis, and the ten burlap covered drop parcels were loaded on a bus to Williams Lake. The next day I arrived in Nimpo Lake and told Floyd Vaughan that I was ready to fly anytime. I put my gear in his woodshed and camped in the woods nearby. It took nine weeks to get a day clear

enough to do the air drops! I sure had lots of time to explore the area around Nimpo! I visited Charlotte Lake and hiked through the open grassy clearings of the plateau. I became the permanent guest of Geoff and Shannon Thomson at the Country Kitchen Cafe in Nimpo. Geoff is a fund of information on the local trails. I was curious to see a mountain where one can drive to 7200 ft so we climbed Perkins Peak together.

On 8 August Floyd and I drove all the gear to Anahim Lake airstrip and loaded it into the Cessna 172. The flight across the plateau was smooth but once we were in the mountains the plane was thrown around and ice pellets clashed on the windshield occasionally. Air drops are difficult because you want to gawk at the peaks and icefalls instead of doing the job. We had placed three drops out of the five when the engine spluttered and one cylinder seemed to conk out. The engine never did conk out completely but ran rough on the long glide to the airstrip at the Machmell River mouth. We were relieved when the little plane settled onto the rough gravel strip. The exhaust coughed out a piece of metal onto the ground just before the engine was turned off. In a few moments a crummy appeared from the shut down logging camp, driven by Dago Walkus who was temporarily caretaking the camp while the permanent caretaker was out on holiday. Floyd and Dago took the engine apart and assessed the damage. A valve stem had broken and gone down into a cylinder, knocking it out. Floyd radioed back to Nimpo for another plane to pick him up as the 172 would have to stay here for awhile. In an hour Floyd's partner arrived in a 185 and they flew home over the mountains. I stayed with Dago and his girl friend Vee for a couple of days in order to break open the two air drops that hadn't been placed and to decide what to do. I wanted to climb the high peaks on the icecap and thought I might go in that way and climb Mt Silverthrone too. But Mt Willoughby was such an outstanding peak that it became the first priority. I

Mt Willoughby from the 7500 ft peak west of the head of Ankitree creek. John Clarke



decided to start for Willoughby, carrying skis, and when I reached the mountain I'd then consider continuing on around the horseshoe route. Weldon and Penny Munro and the six children flew back into camp from their holiday. They are the full time caretakers of this camp. The children all study by correspondence.

At noon on 10 August Dago and Vee drove me to the end of the Genesee Creek road. After clambering through the slash I moved into the muffled world of moss and big trees. The pack was too heavy. Around five o'clock a year old black bear saw me and, with a gleeful look on his face, rushed straight at me. Just as I was about to jump aside he halted and put his arms around the tree beside me, hugging the trunk. With his big, wet nose right in my face, he began slapping madly at the tree trunk. I hollered away at him until he ambled up the ridge crest in the direction I was going. He stayed around all evening and night and didn't go for good till I chased him off in the morning. Rain and lack of sleep last night kept me in the tent till noon. I broke camp and moved slowly up through wet berry bushes. I visited a tiny lake at 2800 ft and saw a snow depth gauge nailed to a tree on the other side. The ridge became sub-alpine at 3800 ft and I camped on flat grass in a meadow between the two tarns at 4300 ft. I wrote in my log - "bugs incredible".

Driving rain kept me in camp till 10 then I contoured south-east to some wet meadows where aggressive swarms of flies and mosquitoes were the worst yet. It was hard not to inhale them as they were in my nose, ears, and under my glasses. Stopping for a rest was almost impossible. On the open ridge beyond Owikeno Lake showed for its full length and the logging camp and airstrip looked very tiny. I reached 5000 ft in the early afternoon and clouds and rain sent me racing around the ridge looking for a flat enough spot for the tent. I found a place behind some small trees, put up the tent, and went in search of water. The urgent calls of the marmots and pikas in the nearby rock slides seemed to be about the new neighbour on the hill. Cold, grey clouds smothered the view of the lake and rain continued till 10 on the morning of the 13th. I took down the tent, looking at Owikeno Lake peering through floating banks of fog. A hawk flew low over the pika and marmot colonies raising an alarm of whistling and shouting that continued long after the hawk was gone. On the ridge top the insects retreated from a welcome breeze and snowfields meant wearing the skis instead of carrying them. The unlogged Neechanz River valley looked beautiful from here — a real untouched grizzly hide-out.

Looking towards Mt Silverthrone from Mt Willoughby. John Clarke



Farther along I carried the skis again through open tundra where mother ptarmigans with young clucked away almost underfoot and marmots and pikas kept up the barrage of hoots and whistles. I dropped down into the valley to the west and felt ridiculous glissading on the snow with skis on my pack. Half-way down I got within 20 ft of two marmots showing off their two offspring who were sunning themselves on a flat rock. Steep meadow brought me down to camp 4 on a bed of flowers below a small glacier. After washing out a pair of socks in the creek, cloud and wind drove me inside to cook supper on a flat stone brought into the tent.

In the cool, cloudy morning of the 14th I enjoyed cramponning up the small glacier to the 6300 ft pass at the head. From the pass Mts Waddington, Huth, and Silverthrone showed. A family of goats raced off to the east. I skied east down to two tiny lakes in a rocky basin. From here the travelling was through beautiful open, meadows but I was carrying the damn skis again. I hiked east through a rocky valley, cramponned up a small glacier, put the skis on again and shuffled north-east, dropping the pack on a heather bench above the ice. I knew this was as far as the skis were going on this trip! I removed boulders from the little meadow and hauled soil in the cook pot to fill the low spots. Clouds moved in after supper.

In the morning I sorted through everything to reduce weight. I made a cache of the skis, skins, poles, day pack and anything

Glacier table near camp 5. John Clarke



Looking across the Machmell River valley from camp 11. John Clarke



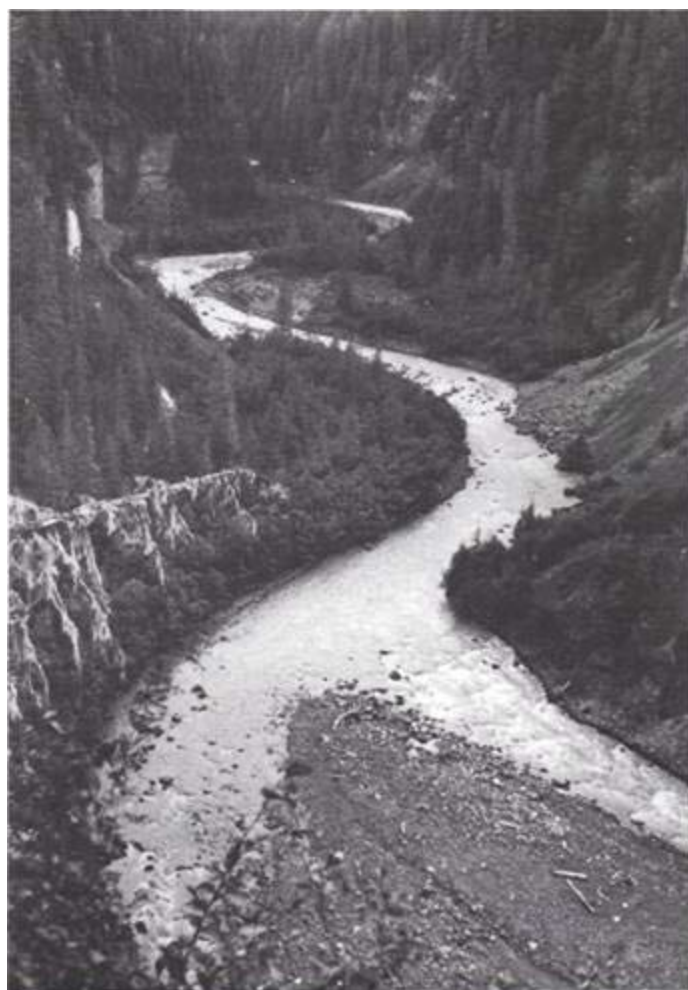
else unnecessary. This meant only climbing Mt Willoughby and not continuing around the horseshoe route. I was disappointed but sure loved the new, light pack! I glissaded down, crossed two tricky creeks that cut V notches into a morainal slope and donned crampons again to cross the snout of a small glacier. The route went on rock and heather to the top of a 6200 ft ridge from where I glissaded east to a flat snowfield below. After threading through and between snow swamps for awhile the route climbed to a higher crevassed snowfield to the north-east. When I got to the rocks beyond the wind picked up and black clouds began dropping fast. There was enough flat snow here but I wanted somewhere more sheltered for camp 6. Everywhere looked grey and desolate — like a black and white photograph — and then it started to rain. I dropped down to the 6200 ft pass but it was too windy there too. I spotted a gently sloping place on the glacier to the north-east and glissaded down for a look. It would do as it was on the lee side of the pass. While digging out the tent platform a couple of ravens passed overhead. They spotted me, folded their wings and plummeted down for a look, landing on the rocks above. They watched while I worked away. I got everything inside just as the rain started in earnest. When the wind started pummeling the tent I wondered what it must be like on the col above. After a supper of porridge the rain stopped and there was enough light left to hike up to the col to see a faint mauve sunset trying to filter through the storm. The icefalls at the head of Ankitree Creek poured out of a black horizontal layer of cloud above them. Very fine droplets of wind driven rain dashed the tent all night.

In the morning (16th) I filled the water bottles from drips in the crevasse behind the tent. A tiny steep meadow below camp seemed to support a family of pikas and their calls filtered up through the mist. A fine drenching fog blew all day with visibility only a few feet. Lentils with curried dumplings beat the boredom in the evening — so did a marmot's whistle. The wet winds stayed all evening and night. I woke up cold and damp at 5.30 am, put my jacket on, mopped up the condensation, and made porridge. Around 11 it got bright and the wind dropped but it was still foggy. I heard small birds tweeting as they flew through the col. In the early afternoon the clouds parted enough to at last have a look at Mt Willoughby. It seemed a long way off still but looked to be a beautiful peak. I could see both high points reached by Tony Ellis and Monty Lasserre in 1964. In the afternoon it was bright enough to expand the platform, repitch the tent, and take everything up to the col to dry in the sun. Mt Willoughby cleared completely — a

fantastic peak. I returned to camp and made more lentils and dumplings. The tent was more comfortable now and without a cloud in the sky I remember thinking, "It really looks like I've got my weather — I only hope it's the long awaited good stretch".

In the morning (18th) I couldn't believe it — clear and no wind. The boots were as solid as wood but thawed quickly over the stove. I broke camp and moved slowly up the heather ridge. I went close to the top of the 7300 ft peak climbed by Tony and Monty and from here saw Mts Monarch and Cerberus. I went north into a snow basin and left the pack to climb the 7500 ft peak. It was an easy climb up the south-east slope followed by a hike to the highest point at the north-east end of the summit ridge. I built a cairn and idled away as much time as I could. It looked like the whole peak could tumble toward the east as this side is oversteepened. I returned to the pack and went north down the easy glacier, through a rocky gap and dropped 500 ft beyond. I hiked east under the north face of the 7500 ft peak and into a 5750 ft pass covered with heather and boulders. The icefalls at the head of Ankitree Creek being closer now looked very wild and Mt Silverthrone looked incredibly snowy across the Machmell River. There was no immediate way down to the glacier to the east so I climbed north-east through the rock and heather - a welcome change from the snow. Soon I was able to drop to the glacier, follow my own shadow across it, and put in camp 7 at the 6100 ft pass beyond. I set out everything in the sun on the rocks and put up the tent. There was a dribble of water

Mt Willoughby, second trip: looking up Pashleth Creek from the lip of the canyon. John Clarke



Owikeno Lake from the ridge north-east of Walkus Lake. John Clarke



in the rocks and I even heard a pika. At sunset I bundled up, sat on the rocks with another bowl of lentils and dumplings, and watched Willoughby and Silverthrone change colours. When I settled in for the night the sky was still perfectly clear and a three quarter moon came up.

At 5.30 am I woke up to rain furiously bashing the tent. I couldn't believe it. Then I remembered the boots had been left out to dry. I dragged them in -no visibility outside. Around 10 I hiked over to the rocks, washed the pot and got water for porridge. In the early afternoon it was just clear enough to travel, so I packed up and headed for the big, flat snowfield west of Willoughby. It was cold and windy and clouds persisted but always hovered just higher than I was. I made great time on the flat névé. Camp was just short of the 6700 ft gap under the south ridge of Willoughby. I put up the tent, got water and checked tomorrow's route. It was still cloudy at 9 pm when I gobbled down yet another pot of lentils and dumplings.

I woke up shivering at 5.30 am. I'm not even sure if I slept. I couldn't believe it was so damned cold till I looked out and saw it was clear. I was sure glad the boots were inside. I thought, "I definitely have to get a new sleeping bag; this one's a rag!" I lit the stove and warmed up, feeling pleased about finally doing the big peak today. First I cramponned down 500 ft into the snow basin south-east of camp and circled around to the glacier east of the lower part of the south ridge of Willoughby. At about 6900 ft I crossed this glacier and gained the warm rocks on the easy ridge to the north. This was easier on the feet than cramponning and the individual blocks on the ridge were so large that I used them to keep out of the fierce wind all the way up. When the rock ridge ran out onto snow at 7800 ft I turned onto the south ridge of the summit pyramid. Big blocks predominated on this final section and a steep step near the top was avoided on the left. The peak was an airy perch that fell away steeply in all directions. After building a cairn and taking photos I looked down and saw the little dot of the tent. Mts Monarch and Cerberus were clear but the Silverthrone area refused to clear despite a powerful wind. I especially wanted to see the big glacier at the head of Morrow Creek as it has a collection of high peaks around it that I wanted to photograph. There was only one trace of logging visible - on the north side of Lemolo Creek in the Sheemahant drainage. After an hour I started down and on the way the Morrow Creek area finally cleared, allowing some photos. I glissaded down the glacier as this was faster than the rock ridge. On the flats below the glare was terrific as the suncups had no shadows in the midday sun. It was a hot 500 ft climb to camp and when I arrived there I quickly shoved everything into the pack and kept going. I wanted to beat the weather back to Owikeno Lake so I raced another three miles and plunked camp 9 in the snow at 6000 ft. After the pink tinges had left Mts Iran and Conery an almost full moon came out, turning everything silver. After lentils and bulgar I left the boots outside to freeze dry. I cursed the sleeping bag again as I prepared for another cold night.

I looked outside early (21 August) and the sky was royal blue with no trace of haze. The sun took a long time coming around to camp but finally thawed the boots. I was being lazy this morning. I got going late but made good progress to camp 10. It was a day of slithering in suncups, swatting horseflies, and wondering if I was going to get out before the weather broke again. From the

6800 ft pass south-west of the 7500 ft peak I couldn't believe the view of Killipi Creek and Mt Silverthrone; remote, majestic and draped with ice. I think it's the best peak the Mundays ever climbed. I gazed a long time and then hiked down the ridge and placed camp 10 on flat dry heather. Setting out everything in the sun I kept looking over at the icecap. I could see the 8900 ft one, the 8700 ft one, and Mt Huth. These were the ones I most wanted to climb - they looked very far away. I was thinking of all those groceries sitting among them and wondering if I'd ever reach those air drops. I was just eating supper and a big full orange moon came up over the south-west ridge of Silverthrone. I dashed outside and photographed it. Then while all the peaks and glaciers were pink and mauve, the moon rolled like a ball up the edge of a ridge south-east of camp. Then it perched on top of the peak for a minute before floating away into the sky. I was shooting the last few photos when a slender little animal like a mink walked past my feet and into the rocks.

In the morning (22nd) the sun came early and I had the luxury of breaking a heather camp. It makes for a lighter load as everything is bone dry going into the pack. Hiking down the ridge I could still see the hollow scooped out of the snow for camp 6. I cramponned up the other side of the col, marched south-west across the crevassed névé, down the steep section and into the snow swamp area. Here the day started warming up and horseflies began arriving in numbers. They remained heavy all day. At the site of camp 5 I picked up the cached gear and skied south-west across an easy snowfield. There was just enough seasonal snow over the dry ice to make skiing possible; it surely beat carrying them. Camp 11 was placed on more dry heather beside the two tiny flower fringed lakes which I had passed on the hike in. This is a beautiful little area of meadows, flowers and scurrying creeks with views across the Machmell valley to Mt Tran. I washed in the lake and, of course, the horseflies went mad when I came out wet. I had to dance a jig all over the meadow to keep them off me. I had porridge and raisins for supper with the leftovers for breakfast. I was up before the bugs. I crawled outside in the pale morning light and noticed the Machmell valley filled liquid level with thick silvery cloud. I broke camp, swallowed the leftover porridge and started up the long boulder field. At the first rest stop I was sitting on a rock and another of those small animals seen at camp 10 walked around my feet. The mosquitoes must have considered me their most co-operative victim ever as I sat motionless for five minutes watching the little fellow. Higher up Mt Somolenko and the snowfields west of it floated on the valley cloud and then Silverthrone came into view. Then Mt Waddington showed faintly between it and Mt Huth. At the 6300 ft pass a mile from camp 11 I stayed high on the ridge to save time. It was fast going with just short grass and heather underfoot. The entire depression of Machmell valley, Owikeno Lake and Rivers Inlet was filled with cloud. Tight flocks of small birds let themselves be blown around in the warm breeze. There is a steep 500 ft drop on this route that I was worried about but it turned out to be a perfect skyline route. The goat trails on this ridge are so regularly and heavily used that they have worn grooves into the soil several inches deep. The next few hours were on open level ridges that resembled northern tundra. Lichen covered rocks yielded some goat wool that I like to collect. Near the site of camp 3, I got photos of Owikeno Lake just as the fog was burning off it. I charged on down through meadows and into the timber to the little lake at 2800 ft. I circled it but the



ground was too boggy to camp there. After a feed of blueberries I moved the pack down the ridge and put up the tent on a mossy bench in deep woods.

Early morning (24th) saw me thrashing down through windfall to the road in Genesee Creek. The heat from the valley floor rose up for the stifling walk to the logging camp. I received a big welcome from the Munros — hot water, hot food, laundry, more hot food; we swapped stories and laughed on into the evening in their little oasis in the wilderness. Penny showed me pictures of an enormous sow grizzly and two cubs only 20 ft from the door of their trailer. I spent the next four days repairing clothes and sorting stuff for an attempt to reach the air drops on the icecap.

On 29 August Weldon drove me to the “back end” in the crummy. The road ends about a mile past Pashleth Creek and it was near here that I started through steep slash and bluffs. The bench above had nice woods with deep pile moss for a floor. The ridge beyond this broke into sub-alpine at only 3000 ft with wet berry bushes the only problem. I camped in meadows at 3500 ft. Through clouds and swarms of insects I saw Mt Willoughby for awhile. Then it rained hard for the evening but stars came out after dark. The next day high clouds created a pale, flat light on the glaciers higher up. The huge nameless glaciers on the other side of Pashleth valley were incredible. One of them, a major valley glacier, comes down to 3000 ft and has no peaks higher than 7400 ft at its head. Camp 2 was like putting the tent up on the front lawn at home. I watched the sun go down on Mts Silverthrone, Somolenko, Kinch, and Squire. The Selman Lake area was nice to see at last as I’d always been curious about it. It is a lake strewn open plateau with flat topped mesas rising out of it and below this Selman Creek pours free over a 300 ft wall.

In the morning (31st) the weather was OK - some cloud and a bit windy. I couldn’t take my eyes off the glaciers across the valley

Mt Silverthrone on the left and Pashleth Glacier with Mt Somolenko above. John Clarke



Camp 4 above the Pashleth Glacier after the storm. John Clarke



— I could have spent a week in this camp. I hiked east, stopping at intervals to gaze at Mt Somolenko and the winding Pashleth Glacier. I left the pack on the shoulder of the 7700 ft peak and climbed to the top and built a cairn. Mt Waddington was visible and even the Comrade Peaks in the Whitemantle Range showed faintly in the distance. There appears to be a sharp rock needle in the vicinity of Squire Mtn. I scrambled back down to the pack and descended on dirt and rock slides to the lake. I hung everything out

The morning of 2 September — white fog and silence. No wind. Cold and miserable looking outside. Then around 10 the heavy rain started again with a furious wind that lasted all day. The tent took the wind beautifully. The powerful gusts made a loud startling noise but not a drop of water came inside except the usual condensation that gets mopped up all the time. Today I wrote in my log, “The snow around the tent is dirty and full of iceworms, so have to get snowballs from 20 yards away and pile them at the

It seems the cold grey dampness of rain on glaciers is even more dismal than when it is snowing. A glance outside showed me what this precious little tent is protecting me from and the idea that hot meals are possible here seems almost hilarious. Storm days are harder on the stores of food than packing days because I get into long sessions of recreational eating for something to do. It rained all evening till I finally slept.

I woke up in pale morning light and was bloody cold till I got some porridge going. Around 10 the fog lifted so I raced up the snow and climbed Mt Storry. Wet lichens on the blocky summit ridge required care. Clouds boiled in the Kilippi valley and Mt Silverthrone cleared just long enough for a photo. I was happy to see it had snowed only on the upper 300 ft of the peak. I tramped over and climbed the 7500 ft peak south-south-east of Storry and glissaded back to camp. I gulped down the cold leftover porridge and made a batch of lentil and flour soup. I broke camp and hiked up to a high, narrow, rocky gap. Smooth glare ice cemented the rocks together here and I should have put on the crampons. I slipped and sprained the little finger of my left hand. I hiked south across snow and left the frame in the rocks then ambled up to the 7600 ft peak above on a low angle ridge of immense blocks. Clouds were blowing from the south-west so I didn't get the look at Mt Huth that I wanted. Back at the pack Mt Kinch and the Pashleth



Glacier popped out of the mist for a moment. I packed down to the pass below and spotted a flat grass and heather bench and put the tent up very firmly on it (camp 4). A little stream ran close by. I was in heaven. Things soon changed though as it started raining again, turning to snow after dark. A single “eh” from a pika failed to cheer me as I pictured the air drops being consumed by the glaciers on which they were resting. I woke up in the morning glad I had anchored the tent so tightly as it was being lashed by wet, wind driven snow. I was almost afraid to look outside to see the accumulation from last night. When I did I saw wet rocks being dashed by ice pellets and rain. The wind was coming in gusts. A flock of little birds passed over later in the morning. The sprained finger was swelling but without much pain. I had plain porridge with bran for breakfast. I was getting low on luxuries and started dreaming about mopping up egg yolks with toast soaked in butter. There was a ten minute lull later on and I went outside, brushed the snow off the tent and went for water but my little creek was gone — the bed was dry and full of snow. Back inside I made another lentil and flour ‘preparation’. There was snow and rain till 2.30 when the sun shone, the pika hollered, and I hiked down to a creek to get water. It was fully clouded in again when I got back to camp and snowing by the time I was inside. Food and gas were getting low enough to start making calculations. I had a small amount each of flour, bran, lentils, chicken stock powder, oats, and sesame seeds. Occasional bright spots were encouraging. It snowed lightly all night with very little wind. “Bet the pika is burrowed deep tonight,” I thought.

The cold woke me early on the morning of the 5th, the inside of the tent loaded with condensation. I was glad there was no wind — would have rained inside if there was. Stayed burrowed in the bag

till 9 then looked out. Murk! At 9.30 the sun started to dazzle for a while so I went out and took a few photos of the tent — Christmas card scene. Tiny sparkles still fell despite the sun. I hiked to the ridge crest but didn’t get a view. Checked a snow patch to find three inches had accumulated on existing snow. If it stopped snowing now I could go for one of the drops - the burlap parcels would still show on the surface. In the evening I wrote in my log. “Colder now and snowing hard damn it. Cold snow blowing and sticking!” By 8 pm the wind was shrieking and quick look out showed blowing powder eddying all along at ground level. The wind hammered the tent all night and it snowed dry powder like crazy. The walls of the tent began pressing in and I kept pushing them back out. Wearing socks, pants, shirt, sweater, jacket, toque, and mitts I was warm enough but couldn’t sleep with the noise and the fact that I’d been in bed all day. I had some raw oats for supper and soaked some lentils for breakfast so they wouldn’t need much gas to cook. A collection of pint size freezer bags are little life savers in these conditions; just pee in them and wing them out the door.

On 6 September I wrote, “Stayed cocooned in the bag till 10.30. Cooked lentils - pretty watery as I’m lowest on flour. Definitely have to walk down the Pashleth valley as the high route is too snowed in. This is the earliest in the season I’ve ever seen this much snow. I’ve gambled successfully with September trips in the past but it isn’t going to work this time. Meal times are an occasion. Sesame seed and lentils tasting better every day. Dreaming of a fire in a grove of big firs in Pashleth valley. Can hardly open the door to throw out the pee bags. Fine powder blown under the tent last night but it’s just sitting there now doing no harm. Tent flapping constantly and fine ice crystals are making a sifting sound as in a sandstorm. 1 pm - had a few mouthfuls of sesame seeds.

Wondering what my table manners will be like for the first week at home. I'm going to have to go out eventually as tent walls are pressing in and straining the seams. 1.30 pm - wind stronger than ever with fine snow sand blasting the tent. There is no water left and I don't want to use the last of the gas yet to make any. I just managed a look outside and the tent has wind cirques around it two feet high! The tent isn't being kicked around so much now because it's so rigidly boxed in by ice. Dreams of pancakes and tea. There are still heather, flowers, and grass under the tent floor. Can hardly see over the big drift in front of the door. 5 pm — wind dropped — still snowing heavily. Then followed the first complete lull in 21 hours. It's bright. This might be it. Bright for a full 30 seconds! When I get home I can have all the raisins I want in my porridge; and milk too! Love to see some horseflies and mosquitoes now. Heard a light aircraft. After that it got very cold and dull with not much wind but snowed heavily."

On the morning of the 7th I dug my way outside. I had to get moving today and mercifully the sun came out. When I did get going there was a large crater where the tent had been. The 2500 ft drop to the Pashleth Glacier took two hours and I was out of the new snow at last. The glacier was immense and covered with broken logs from avalanches. One log even bridged a crevasse nicely. I got to the snout just after midday. The Pashleth River went over a falls inside the glacier just before it charged out of the cavern at the snout. It was a roaring streaming place and surface streams poured over the open mouth of the cavern. Loose boulders demanded caution and farther down the whole outwash plain became a sea of quicksand, punctuated with large eskers. I passed a perfectly circular lake with steep collapsing sides — all made of sand. From here I thought I was going to race down the flat outwash plain but was forced up the steep valley side by more quicksand. In places this was composed of old abandoned ice or unstable columnar rock slide. Below this I stopped at the first small tributary creek and dried out the tent on the bushes. The fly sheet was still full of ice and snow. I ate some sesame seeds for lunch and looked around. A major landslide had fallen onto the big glacier to the south. A single set of large bear prints crossed the sand nearby. In my rush to get into big trees for a fire I fell into Pashleth Creek up to my chest. Islands of thick bush became harder to avoid lower down as the moraines underfoot became older. I stopped in the first grove of big spruce I came to and a little creek provided clear water. It took a while to get a fire going in the soaked woods but by 10 pm everything I owned was dry.

In the morn (8 September) I continued down valley to the two avalanche swathes marked on the map. They turned out to be mostly tall ferns and grass with enormous bear trails straight across. These were bear highways where the ferns were beaten flat for a ten foot width through the thick greenery. Below I hiked through easy woods with just enough devil's club to make it look nice. The sun came out which meant the wood would be drier for the night fire. I went through another area of beaten down ferns and smashed skunk cabbage with many bear droppings. Hollered and whistled all the time, reduced to a hoarse croak by afternoon, only to be livened up again by the sharp snap of a branch up ahead. The five mile long Pashleth canyon is spectacular and would make a separate trip to the valley worthwhile. The vertical walls are volcanic and about 300 ft high for the entire length. On my side of the river a game trail lasted almost all day and hugged the lip of

the canyon. It was almost a park standard trail in places. I crossed a few ravines containing small tributaries that poured over the edge into Pashleth Creek. In these ravines the mossy floor of the cool damp woods was silent save for the thin shrill of tiny birds in the crowns of the trees. Occasionally the trail on the rim was wiped out by windfall but it always picked up again beyond. Camp 6 was at an old timber cruiser's camp, placed here by helicopter. Another big camp fire produced dry clothes and a hot supper.

In the morning I ate some raw oats and started following a sketchy line of tapes and blazes. These disappeared and reappeared all the way to the logging road. I left the pack in the girders under the bridge deck and started down the road at 3 pm. At 8 pm I hobbled into the logging camp to another big welcome from the Munros. I knew I was going back to the Silverthrone country soon but I sure wasn't going to think about that now.

John Clarke

Bugaboos, Place Or State Of Mind?

The sideburns oozed a trickle of oily sweat like a used teabag on a tabletop. He looked up and his emotionless face stared blankly back as he picked up the glass vial and scattered the coarse white powder over the package. "No salt, just vinegar!", I yelled. The little Chinese man shrugged his shoulders and continued to contaminate my chips. I released two shillings into his grasping hands and walked out under a gray smudge sky. My mind raced ahead and I left Britain behind. I thought of the Bugaboos and came up with a plan; a high paced soloing day.

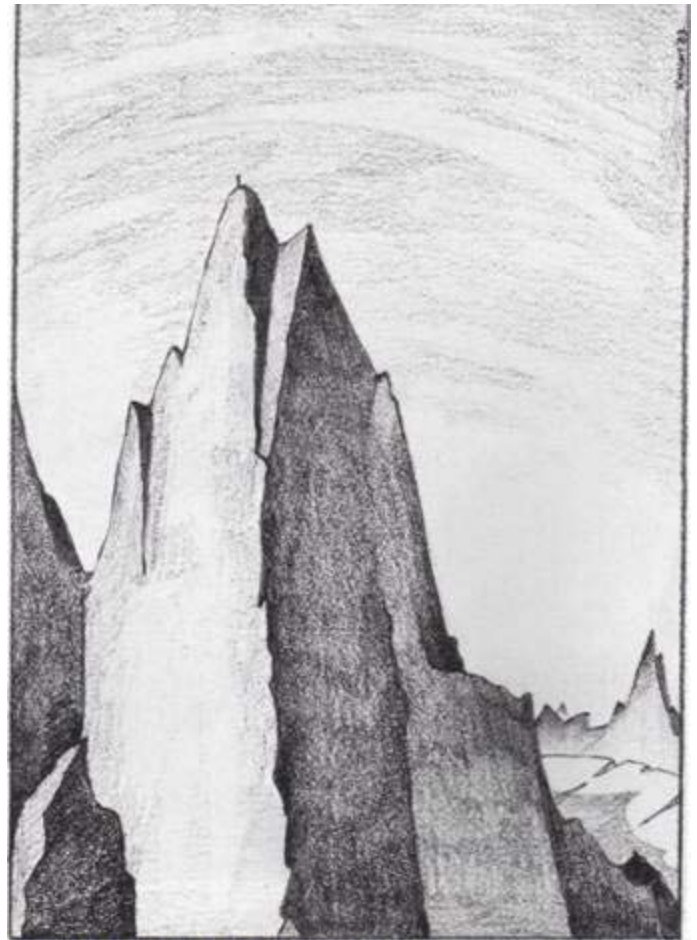
A few weeks later Tami and I were back in Canada and a few weeks later on at the base of the trail up to the Bugaboos desperately trying to shove more digestibles into our packs and then attempting to ingest the rest. The trail was never ending again and that night at the hut there were six rock climbers from Squamish babbling and bubbling while some mountaineers sat in chairs and stroked their beards. Hamish was there and I voiced part of my plan to him. He started to jump up and down almost as much as me so we set the alarm for four and the Chouinard Beckey. Cat like I reasoned that going up would be fine but descending might be tricky as the rappels were set up for double ropes so we decided to climb each with a rope coiled up on our backs. A sort of mutual solo.

Breakfast at four in the dark is always a treat — everything tastes the same and chewing is a chore. This morning was enhanced by another alpinist complaining of bad digestion while we gagged on his fumes. The time to leave had come. I pulled open the door and a cold blast of wind from the glacier greeted me. Only nerves of steel and another blast of hot air from behind urged me out. On account of the hour I soon achieved a dream like trance and booting steps up the steep rise to the Bugaboo/Snowpatch col I actually found I had 'rhythm'. Our two friends from breakfast caught us up at the Pigeon Howser col where Hamish and I changed into our running shoes. Leaving waffle prints and skidmarks we raced down to the base of the buttress.

The climbing and the situation were out of a Gaston Rebuffat book; perfect cracks sweeping up the fine edge with a setting that inspired. A few hundred feet from the top I climbed a tricky traverse on tiny holds and squatted on a tiny ledge, waiting for Hamish. I ground my teeth and clawed at my perch watching him move tentatively across the rock and above the drop but soon we were running on all fours up easy ground towards the summit. Normally when I solo my face takes on a look of keen concentration which some may mistake as blind fear. This time though had there been someone above to see they would have watched a grinning village idiot grope blindly up an off route groove to stand blinking in the sun, legs braced wide on the summit with nothing above to pull up on.

Hamish soon arrived and we began a series of harnessless classic rappels which gave classic burns, ropes becoming drenched in the snow; a soak and burn process with the track pants continually slipping down over cheeks in their bid for freedom. A final searing ride over the snapping bergshroud and we plunged knee deep into the white wet cream of wheat. From there it was a hilarious ten minute Quasimodo like gallop to dry rocks where, like a true participant in evolution, I flopped onto the shore gasping like a herring with wet track pants flapping like fish fins. Upon reaching our gear stash Hamish found that the hut now held new attractions for him and elected to head back and relax. I was getting very keen (rabid) for more mountains but didn't want to commit myself so I tried to be vague about my plans and just made a sweeping gesture towards the other side of the Bugaboos.

Bugaboos, Place or State of Mind? Tami Knight



Plunging along in the snow on the way to Snowpatch I tried to retain my composure, to pace myself, but finally gave in and ran down the hill, arms and legs whirring windmill style with the same sparkle and eagerness as a five year old on 'an adventure: When I got to the west face I scrambled up a treadmill of sliding scree terraces to the McCarthy route. I giggled with enthusiasm as I eyed the line, a huge recessed corner system quite the opposite of the prominent buttress I had climbed earlier that morning. Once again I tied a rope on my back for the descent and started up. The climbing really flowed and I was half-way up when I saw two brightly dressed ants crawling up to the base. I looked out across the creeping glacier which flowed from the Howsers like melted mozzarella then proceeded to get lost on a gravelly face crack. A moment of indecision then, with feet pasted on the smooth wall, I cranked up aways with fingers jammed in shallow pockets to reach some good holds. Sunlit ramps and shadowed hanging corners led me to the crest and then to the top. The two ants I had seen slowly grew to people as I descended via rappels and down climbing. A brief greeting and meeting and I did a final chafing slide down the rope, my parson's nose moaning about how I had violated it and how cheap and used it felt. I agreed with my cheeks and stowed the rope.

Zombie footed I goose stepped down under Bugaboo's east side, keeping out of range of any possible attacks thrown out from the concave face. As I approached the north-east ridge I found I didn't want the day to end so quickly and decided that, although I had done it before, the McTech arête on Crescent Spire would make an excellent indirect start. Accordingly I threw a few handfuls of

muesli at my face and kicked steps rapid fire up snow to the rock. This time the rope would stay ditched in the pack at the base along with a few scrapings of food and a plastic water bottle sucked to collapsing. I tied my mountain boots to my waist and jammed up steep Yosemite cracks with my passenger foot wear swinging about like a pair of Vibram soled buttocks. Upon reaching the top I realized that perhaps climbing is a drug. At any rate I was very eager for an overdose.

Apart from a false start which had me down climbing a couple hundred feet the north-east ridge of Bugaboo was a dream climb with difficult looking easy flakes, delicate traverses, and long, long cracks where you jab fingers and poke toes over and over again as in a slow motion karate class. The summit kept retreating as I swarmed over blocks but I eventually caught up, stood up, and drank in the view.

It was here that I relaxed my mind and ended up flexing my forearms on greater difficulties than anything else I had done that day. Perhaps it was euphoria or an overdose or something but I started climbing down a rappel route. Scrubbing some peanut shell lichen from the crack with soft pink prints I jammed my fingers into some thin slots and lowered my feet down over a small overhang. Very aware of the east 'space' beneath I swung my feet underneath and torqued one of them into a pocket in a small corner. Thirty feet of small holds, thin cracks, and blind alleys with lichen crackling like an electric charge took me down to easier ground and eventually the Right Way. I was soon running down a huge boulder field ridge to afternoon snow intent on swallowing anything that trickled.

The slushy trudge back to my pack and down over ice and dinosaur backs of moraine was a pleasant dream. With the pressure off the jitteriness of the climbing drug had given way to an intense mellowness. The flying streaked walls of Snowpatch went past and I kept spinning on the way down to take in panorama after panorama. It felt like I had been away from the writhing hut crowds a long time when I walked Pinnochio style up the hut stairs and took off my boots. My laughing stockinged feet slid me past good friends and then with energy still pulsing out through my finger tips and face I opened up the food cupboard and set to with all the fury of a black hole.

And the season went on and every so often my motivation would flare up like a bad rash. The Cascades, trotting along in the dusk searching for a trail, failing and bedding down for the night terrified by ferocious grizzlies (ie docile elk) crashing about in the woods. Hiking up past screaming marmots in the morning and climbing in afternoon shade on Dragontail's backbone ridge. The next day sprinting rabbit scared under ice blocks to the toe of Stuart's north ridge. Climbing direct up to and over the Great Gendarme which unfortunately had the effect of tickling the giants' tonsils as waves of vomit cloud came gushing over the shoulder. Two hours effort and a pea soup view.

The same time expenditure on Slesse's north-east buttress but fabulous blue space this time though my lunch was mangled into apple sauce. A lapse of weeks then running up through dark weather to Slesse again, a face plant in a stream and the north rib above the clouds.

Then it was the Valley for serious tanning before the winter. But one morning like an addict supporting his habit I pilfered some dried dates for breakfast from a friend's car and spent an hour and a half enjoying obscene body tantrums up the chimneys of the Steck/Salathe. Back to the valley floor for blackberry yoghurt, burritos, and the north-east buttress of Higher Cathedral Rock where, at two thirds height, a nest of bees (killer) prompted me to inject adrenalin before they injected pain. And then at last the summit, the end of the season, me twirling on top like Julie Andrews while down below waited potato salad, pasta, and headswimming beverages.

Earlier that summer when my sister told a non-climbing friend that Tami and I were in the Bugaboos they asked, straight faced, "Bugaboos, is that a place or a state of mind?" Hmm.

Peter Croft

Mt Columbia

Except for an increasing number of mountaineers, very few people ever see this noble mountain. Very few of the mountaineers who have laboured up on to the Columbia Icefields east of the mountain have laid eyes on the north-west, west, and south sides of the peak, which seem to be veiled in mystery.

At 3747 m or 12,294 ft, Columbia is the second highest mountain in the Canadian Rockies and the highest on the Continental Divide between Alberta and British Columbia. Oddly enough the "Divide" passes over the mountain in an east to west direction.

When Norman Collie and Herman Woolley discovered the Columbia Icefields in 1898, Columbia loomed large to the west. In an attempt to reach the mountain two days later they misjudged the undertaking but did reach the névé of the Icefield and named the mountain. In 1901 Jean Habel saw the mountain from the Athabasca valley — he called it "Gamma".

Collie and his colleagues returned in 1902 for another attempt but they were outmanoeuvred by an up and coming young James Outram, who with Swiss Guide Christian Kaufman made the first ascent by the east face from the Columbia Icefield. This and the south ridge route first done in 1924 are the standard routes today, climbed by an ever increasing number of parties that ski up on to the Icefield during April, May, and June.

The west and north faces require arduous marches to reach. The west rib was climbed in 1951 by George Bell and David Michael, while the north face ridge route held out until 1970, when Chris Jones and Gray Thompson took 2 1/2 days to work their way up the steep flank which rises for 2255 m (7400 ft) above the Athabasca valley.

I hope these photos will give those interested an opportunity to see all the outstanding aspects of this beautiful but rugged mountain. Who knows maybe even inspire a new route.

Glen W Boles



The typical view most mountaineers associate with Mt Columbia
Looking south-west from an evening camp site on the Columbia Icefield north-west of Snow Dome. Glen Boles



Looking south from the Athabasca valley at Mt Columbia in cloud. Glen Boles



The north-east face and north ridge of Mt Columbia from the col south-east of North Twin. Glen Boles



A look at the mountain from the south-south-west with west face at left, the icefields behind the peaks. Glen Boles



Climbing party descending the south ridge. Glen Boles



A look at the mountain from the south-south-west with west face at left. Glen Boles



Looking across from the summit of South Twin at the north side of Mt Columbia. Glen Boles



Looking south from the summit of Mt Columbia

Mt Alberta, Twins Tower, North Twin, South Twin in line with North Twin, West Stutfield and East Stutfield. Glen Boles



Looking from the col west of Warwick Peak in a south-east direction at the entire massif of Mt Columbia. Glen Boles



Postscript To Everest

On hearing of the first ascent of Everest in 1953, Tom Longstaff, the Grand Old Man of mountaineering, said, "Thank God, now let's get on with climbing." Thirty years on, and Everest still paralyses the minds of mountain watchers. Now that the Canadian Everest fanfare has abated let us take a cool look at the whole epic.

Within one week this fall I received two postcards. One, from the Canadian team, pictured the sinister black summit pyramid of Everest towering over the Khumbu Glacier and dwarfing its neighbours, Nuptse and Lhotse; the other card was from four Swiss climbing friends who had scaled Cholatse near Everest, minuscule in size but its dizzy, jagged ridges mightily beautiful and severe. Which team was having the most fun I wondered — for pleasure is the essence of the sport. Over aeons mountains have inspired men, allowing them to rise above the mundane and look on the world with heightened perspective. But men have also been using Everest as the ultimate experience in achieving such perspective for half a century. Although always a marathon labour, Everest has become familiar to the mountaineering world and is no longer the yardstick of climbing skill it once was. The mountain has been climbed by well over a hundred persons from many different expeditions and the solo ascents of Yazuoh Kato and Reinhold Messner in 1980 were made without oxygen.

Still, the Canadian team deserves hearty praise. They suffered misfortune early in the Icefall, with two fatal accidents beyond their control. In the wake of tragedy the team fragmented and their numbers halved; but Bill March, the leader, heroically pulled the team together. Depleted and demoralized they regrouped and switched to the more pedestrian South Col route. They climbed the mountain with professional skill and returned safely.

The massive scale of the expedition required rich sponsors whose dollars allowed exotic training climbs in far-flung ranges. Such patrons are necessary to move the machine but making mountaineering decisions in their shadow and under the spotlight of the media puts unwelcome pressure on the leader of any expedition.

Intense public interest was generated by the Everest expeditions in the 1920s and 30s. Many thousands of armchair mountaineers were given pleasure by following those adventures. The news was distilled in the mail runner's gunny sack as he trotted for three weeks across the Tibetan uplands and down into the steamy forests of the anti-Himalaya to the nearest telegraph station in Sikkim. With this delay the intensity of the ructions among team members was tempered and controversy less immediate.

But in Canada in 1982 the climb was made into a national event. The media gave it agonizing coverage, with CBC news casters drooling over every grunting step, minute by minute comment from the business manager in Kathmandu, and off the cuff speculation by experts dredged up to give varying informed opinions.

Everest has become an international status symbol and Canada followed suit by offering accolades similar to those given to hockey players. Yet mountains share little in common with arenas.

Mountains are places of peace and storm where man battles with himself and with forces that are always greater than himself. He never wins but he may, in the mountain's more forgiving mood, achieve a love and respect, and enjoy the beauty, wonder, and excitement unique to standing on a peak.

Why Everest, when K2 is more beautiful, Kangchenjunga more difficult, and both are only 250 m lower? Because Everest is the world's highest it is accorded all the glamour that goes with being Number One. To be associated with Everest and the famous men who have trodden its slopes is a privilege the most modest man would not pass up lightly.

To mount an expedition on Everest is daunting. Each high camp must be supported from below, so the carriers have to be catered for as well as the lead climbers. The words assault, battle, conquest, bear witness to the military tactics usually applied to such an enterprise. Sitting in our tent on the lip of the Icefall during an expedition to Everest in 1971 a Swiss colleague said to me in a moment of gloom, "C'est pas l'alpinisme, c'est la guerre." Rob Collister, in the *Alpine Journal* of 1979, wrote of the large expedition: "Like Concorde, it will remain of immense importance to those involved, arousing admiration in the ignorant and indignation in the concerned." Small mountain expeditions are no recent invention and, as in the past, they still make the great ranges accessible to more climbers. Tom Longstaff wandered round the Himalayas in 1907 and climbed Trisul, 23,360 ft, with two Swiss guides. At the height of Everest Fever in the 1930s two prominent Everesters, Eric Shipton and Bill Tilman, explored the Nanda Devi Sanctuary — a classic light weight journey. Shipton's avowed preference for small expeditions was ultimately the reason for his being passed over in favour of John Hunt as the leader of the 1953 British party that first climbed the mountain. The Himalayan Committee wanted a military style of leadership to assure success in Coronation year. Shipton was unsuitable because he believed that an expedition that could not be planned on the back of an envelope was too complicated. Tilman, a spartan by repute, described an expedition as "a party that has too many people on it". These two men wrote a new chapter in mountaineering history by their Himalayan journeys as young men and their adventures in wild parts of the world on land and sea in the forty years after they climbed on Everest.

Small expeditions are versatile. Without impedimenta you can travel long distances at speed and see a panorama of the mountains. You live intimately with the porters, learning to speak the language and to understand the culture of the people through whose harsh, yet beautiful land you are travelling, in which, without their expertise, you would flounder. A modest expedition makes many of the great mountain ranges of the world attainable at reasonable cost. Expense runs parallel with size. By choosing a lesser peak in a big range you can enjoy the company of giants, but peak fees and liaison officers are obviated and equipment, food, and insurance costs are kept low. Shipton's ideal party was two climbers with one skilled local porter, each carrying 65 to 70 lbs, all crammed into a two man tent, where they fit easily after a few weeks on reduced rations.

Porters from the Sherpa tribe, originally Tibetans who crossed the range and settled the Khumbu region of east Nepal around

the southern slopes of Mt Everest, have become the alpine guides of the Himalayas. The Sherpas are naturally adapted to living at high altitude and can carry loads at heights where other men gasp for breath. With years of exposure to skilled climbers they have developed their own expertise and, as we saw recently on Everest, they have become leaders on the rope rather than mere porters. Their kindness and sense of fun makes them incomparable mountain companions.

I was the doctor on a big international expedition to Everest in 1971. I met many fine people from across the world and they became friends for life. But I hated the military scale of the party that moved at a snail's pace like a cumbrous machine isolated from the land it was traversing. By contrast some years before my wife and I explored Hiunchuli Patan, a beautiful peak of 19,000 ft which stands detached from the Dhaulagiri range in west Nepal. We spent several weeks finding a route to the base of the mountain through deep and complicated gorges in wild country. We equipped our Sherpa and Tamang porters with clothing for high altitude from the hospital's 'missionary barrel' and with boots from the local market. Despite being such an amateur outfit we managed to climb a small neighbouring peak and we mapped the approaches which enabled another party to climb the spire shaped mountain.

This experience of Himalayan travel gave us the confidence to traverse Bhutan where we were invited later by the king. Our family spent five months crossing some of the most remote and inaccessible of the Himalayas. The party comprised my wife, two children under the age of four, a Bhutanese boy, and a Sherpani nursemaid. In a book I wrote subsequently one passage summarizes for me all the joys of small expedition travel.

At the top of the pass, marked by a number of tattered prayer flags, I saw peak on peak of snow-capped mountains ringing the horizon in an unbroken line and crowning the Bumthang Valley stretched out below me. The mountains lay on the border of Tibet, so far distant I could not identify them, but I knew somewhere in that direction the Monlakarchhung pass cut a way north to Lhasa. I guessed the highest group was Kula Kangri but none of these mountains has been mapped. I was looking at the least explored part of the great Himalayan range where not a single mountain top has fallen under the foot of man. The thrill of that moment was intense and I remembered Eric Shipton's words in Nanda Devi:

"I had a mighty longing...to wander with a small, self-contained party through the labyrinth of unexplored valleys, forming our plans to suit the circumstances, climbing peaks when opportunity occurred, following up our own topographical clues and crossing passes into unknown territory."

In a world shrinking so fast with air travel, where man's inquisitiveness is pushing him to every distant corner of the globe, it was a rare privilege to view this tract of virgin land; not just a few mountains but range upon range as far as the eye could see."

We achieved no great mountaineering feats on this Bhutan trip but it remains the 'Everest' of our lives.

Peter Steele

The Coast Mountains

In these mountains the many obstacles to success serve only to firm the resolve of the climber who has a peculiar fascination for them. Despite persistent effort peaks tried many times remain elusive. Through forested valleys he hews the way to his well guarded goal. Emerging from the tangled greenery the reward is a silent, all white landscape of marvellous beauty. In this snowy no man's land he may even forget for a while that he is anywhere in the temperate zone. Perched on a summit he will linger as long as he dares, cold but fascinated. A high distant peak may emerge briefly from a veil of cloud. His next adventure is decided.

John Clarke

North-east of the head of Narrows Inlet
Looking south-west from the ridge south-east of Tzoonie Lake. John Clarke



A 7000 ft peak west of the lower Satsalla Glacier, north of Kingcome Inlet. John Clarke



The Coast Mountains: the sharp 7500 ft peak at the head of the Apple River above Loughborough Inlet. John Clarke



West of the Toba Glacier, Peak 9475 from Peak 9501. John Clarke



The Ha-iltzuk icecap looking south from Mt Somolenko. John Clarke



North-east of the head of Narrows inlet
Three gentle 6800 ft peaks south-west of Phantom Lake. John Clarke



The Heakamie Glacier John Clarke



Toward Mt Good Hope from peaks south of Doran Creek. John Clarke





McKinley 1982-High Times And No Tent

In June 1982 Bill Durtler, Paul Ritzema, and I left for Alaska with the express purpose of climbing McKinley, but not by one of its more popular routes. I had read enough articles on McKinley to know that it was one of the most popular high mountains in North America, if only because it is the highest. The 'Great One' seemed to be all things to all climbers. While the vast majority of guided and unguided parties trudged up the West Buttress route the climbing record clearly revealed that a much smaller percentage of climbers attempted the other established routes on the mountain. Fewer still actually made it to the top, due to problems with weather, route, and altitude. We decided that either the West Rib or the Cassin offered the best possibilities for a small party.

We stayed with old friends in Anchorage on 25 June. Rick and Chris were most helpful and patient considering the off hour schedule we were operating on due to time zone changes and airline schedules. Rick had attempted McKinley himself a few years earlier, so could provide us with some first hand experience. We took the train to Talkeetna the following morning and met Roger Robinson at the Ranger Headquarters. Our next stop was Talkeetna Air Taxi and Doug Geeting. With hardly a breath to spare we were flying into the Kahiltna Hilton in Doug's Cessna 185. The flight was met by the near legendary Francis who runs the radio communication from the Kahiltna. The 2180 m elevation and above freezing temperatures in such a spectacular setting was

very much to our liking. We soon bumped into Peter Hackett who provided us with a lot of very current information on the upper part of the mountain, having himself just returned from a medical camp at the 4000 m level.

On the 27th we skied up the Kahiltna with some supplies and to check out possible routes and conditions. Snow began to fall as we returned to camp. This soon turned into rain, much to our disgust. About three in the morning a terrific wind hit base camp, damaging our three man Stephenson. Fortunately we also had a three man pyramid tent. We spent the 28th drying out and getting ready to leave the landing strip area, fast becoming a miniature international airport.

The weather improved on the 29th so we moved up the glacier for good, passing a small group of sodden Yugoslavs along the way. The storm had not only buried them but also our supply cache. By 2000 hrs there were at least three other parties camped around us including a large group of Chileans. McKinley suddenly cleared off, revealing the spectacular West Rib. We were camped at the entrance to the north-east fork of the Kahiltna, code name 'Death Valley'. A climbing party of four from the Toronto area, led by Dave Carroll, had disappeared without a trace somewhere up the Fork just two years earlier. Paul and I knew at least two of the party and their disappearance had come as quite a shock. This access to the base of the West Rib had us a little worried but we started to mark a route in just the same. While we negotiated the crevasses at the entrance the weather deteriorated so that we couldn't see each other on the rope. We were looking at the front end of another heavy snow storm. So far we were not terribly impressed with the access possibilities of our chosen route. It continued to snow on the

30th, dropping a good 20 cms of fresh snow at our 2400 m camp in less than 12 hours. This was a prime avalanche condition.

On 2 July we decided to modify our plans somewhat by skirting the north-east fork and continuing up the West Buttress route until we could cross over at the 4300 m level to regain the West Rib. We reasoned that we would thus avoid a possible avalanche hazard and not lose anytime on the ascent. Our decision was reinforced by a search and rescue chopper looking for two Norwegian climbers last seen on the Cassin a few days before the storm.

We reached our camp 2 without any problems but after a rather long day. Our camp was located at the 3100 m level where the -10°C nights were noticeably cooler than those at the previous camp. July 3 dawned the proverbial perfect day as we discovered the Chileans and Yugoslavs were once again our neighbours. Our camp 3 was located at 3460 m and was really a lovely sheltered location. For the first time we were able to make radio contact with Francis, with our portable CB.

In spite of some lethargy we managed to make the 'great grunt' up the headwall above us on 4 July and were delighted to leave our skis behind. It was a wise choice as snow gave way to ice. It was crampon time as we approached Windy Corner. It was also time for another change in the weather. By mid-afternoon it was becoming rather difficult to stand up, let alone see. The Chileans and Yugoslavs decided to solve this problem by digging in. I managed to convince everyone in our party that conditions would be better higher up and so we pushed on, another living example of how man's reasoning ability is sharpened by the altitude.

Above Windy Corner the winds did seem to abate somewhat but it was now getting darker and snowing more heavily. We soon reached a plateau which we thought must surely be the next camp site. In the gathering gloom the only feature I could make out was a small igloo. We ventured towards it, the three of us on a tight rope. I felt a slight tug and looked around to see what had happened. Bill had disappeared, leaving only myself and Paul on either end of a tight rope. Bill's ski pole appeared from the ground. He had stepped into my tracks and fractured a snow bridge. Fortunately he had been stopped by another bridge just below the surface.

About one hour later we reached the real camp site. Along the way we passed a solitary Japanese on his way down the mountain. We searched his inscrutable face for a sign that he had been part of a larger expedition. At this point winds were gusting to 100 km/hr and the temperature was -15°C. It was definitely time to call it a day. And besides it was nearly midnight. Suddenly out of the mists we were greeted by a figure who waved us towards an old snow cave suitable for three. The snow cave provided us with much appreciated shelter and a good night's rest and in the morning we discovered that the entrance had snowed in. The weather had once again completely cleared off and the altimeter was now registering 4435 m. July 5 was beginning to look more and more like a day for R & R. We set up the tent and decided to have an additional acclimatization day while we rechecked the West Buttress. On 7 July the Chileans and Yugoslavs arrived, looking a bit worse for their stay at Windy Corner. We took another rest day as Bill continued to recover from the altitude.

On 8 July we finally moved out of our icebox camp 4 and broke a long route on the south-west face to the West Rib route proper. A six hour ascent under conditions of poor visibility brought us to the 4980 m camp 5, by far our best camp location. The views of Foraker, Hunter, and the surrounding peaks were unmatched for sheer beauty. Our radio contact with base-camp, as well as with parties on the West Buttress route was nearly perfect. The route below us to the north-east fork was visible in great detail and looked easier than the route which now lay above us.

In nearly perfect weather we began the steep climbing of the upper part of the West Rib, passing many frozen fixed lines along the way. We moved as a rope of three, using our ice hammers and ice axes and an occasional ice screw for protection. Everything was running smoothly until, out of the corner of one eye, a blue object blurred past my field of vision. I suddenly realized that part of our tent which Paul had been carrying had somehow come loose. We watched it fall for what seemed like many minutes. It fell a long, long way, finally disappearing as a tiny blue dot on the glacier 1000 m below us. No one volunteered to retrieve it. I was happy it had not been anything more serious. It was soon discovered that Paul's package contained the poles and fly. The good news was that his pack was now lighter and that we no longer had to worry about setting the tent up.

Optimistically I suggested that with lightened loads we could now make the summit in one push and that we would also save time by not having to level out tent platforms. I was amazed to find that there was general agreement to my astute analysis of the situation. The route eased up a little but we seemed to be spending a long time on the upper part of the face. Fatigue began to slow our ascent, then the dark, then the rising wind and howling snow. Hardly able to see my companions much less talk to them, I shouted that I thought it might be best to stop for a while and brew up some tea. How about a bivouac? My altimeter read 5900 m in the gusty -20°C air near midnight. It was beginning to look like another late day on the mountain. Under the conditions it did not seem overly wise to venture onto the summit plateau although we knew we were now fairly close. Our bivouac site was not very comfortable but we were able to use the tent shell for some protection. Unfortunately there was no level ground on this rocky wind swept slope and so no one dared sleep for very long. Worse, only one of the stoves would work which meant that supper drifted on into the early hours of the morning. I kept waking up every half hour to check my feet or to make sure I was still slumped on our ledge. I knew that if we weren't blown off the mountain during the night we would probably have an early alpine start. The storm abated as the dawn arrived and we slowly organized our departure. The bivouac had been fun but now it was time to run along. The summit awaited the gentle tread of our numb feet. Before we could leave however Paul treated us to another version of 'how to lighten your load'. While he photographed our bivouac site his fully loaded pack fell off the bivy ledge before our unbelieving eyes. At first we thought the pack would go all the way to camp 4, thereby relieving us of any further unnecessary packing. Instead it spilled its contents all over the immediate 40 m of slope below us and we were obliged to retrieve everything except Paul's spare water bottle.

Soon we popped over the face onto the summit plateau to reach the summit at 1000 hrs on a sunny 10 July. The air was a cool

—15°C with only a slight breeze and a sea of cloud below. We were able to communicate with Talkeetna as well as the Kahiltna Hilton. It was a nice place to be. My altimeter read 6200 m and I felt that this view point had been well earned. Our descent was by way of the West Buttress route. We decided not to risk descent via the Japanese Express route variation of the West Rib in view of our fatigue. We were also curious about the standard route and felt that it would make a nice descent. On the way down we met our Chilean friends who had made the summit on the previous day then our Yugoslav friends who were still on their way up. We reached the site of our camp 4 late in the afternoon.

Relieved of the responsibility of setting up the tent we simply selected vacant snow holes for shelter. In one of these caves I found a fully inflated female mannequin. The owners I later discovered were a group from Seattle who claimed it was their mascot. July 11 saw us moving down the mountain in a more or less organized fashion. Below our old camp 3 we passed an elderly Italian lady who, it was rumored, had tried to solo Mt St Elias just a short time ago. Later we heard that she had been arrested by the Kluane Park Wardens for climbing without a permit. If they could only see her now.

On 13 July we flew back to the ‘flesh pots’ of Talkeetna and spent an additional week touring Denali Park and taking in the views of the ‘Great One’ from the north.

Kevin O’Connell

Waddington Divide Ski Traverse

A four week, 200 km ski traverse, with ascents, through the Pantheon, Waddington, and Whitemantle Ranges.

Une traversée a skis de 200 km pendant quatre semaines, avec ascensions par les chaines de Pantheon, Waddington et Whitemantle.

“For me there is only the travelling on paths that have heart, on any path that may have heart. There I travel, and the only worthwhile challenge is traverse its full length. And there I travel looking, looking, breathlessly.”

Don Juan

In April I bought a new pair of sun-glasses. They were cheap with plastic frames but the lenses were tinted to bring out contrast. They were just begging to be tried out.

It was late in the afternoon by the time Mike King dropped us off on the shore of Middle Lake in the Chilcotin. As he turned his truck around he peered into the disarray of branches and bush in the forest then, looking at the four of us and our heavy packs with skis, he grinned and said “Well, have a good time!” We asked if he would like to come. He said no thanks, he’d just been there. Earlier that day we had flown down past Mt Waddington and placed three food caches along our route.

The Homathko and Klinaklini Rivers have their headwaters on the interior side of the Coast Mtns yet both flow right through the heart of the range to empty at the head of two long narrow fiords. Squeezed between the two canyons cut by these rivers is a long mountainous divide with Mt Waddington at its apex. Our intended route was to ski this divide from the Pantheon Range in the Chilcotin, south to Loughborough Inlet. This would cut a cross-section through the centre of the range and would provide a contrast between the different sides of the Coast Mtns. Though only 200 kms this would take us through some very rugged terrain and would require over 50,000 vertical ft of elevation gain. We would allow four weeks for the journey.

The ice had gone from Mosely Creek a few weeks earlier and the ground was covered with crisp dead leaves from the fall. The grass was brown and the buds had not yet started for the new season. Our fire crackled under a large Douglas fir into the night as dark clouds billowed around the peaks. In the morning, on 3 May, the trip begins.

We stumble off up the hill and walk back into the broad U shaped valley of Hell Raving Creek. The bush is generally not bad, though sometimes a bit branchy for skis. At the end of the day we hit snow and camp near 1400 m. In the distance the rocky peak of Siva looms through the tree tops. Earnest skiing and a few spectacular creek crossings take us past the head of Hell Raving Creek and onto the Siva Glacier. Spring is almost one month ahead of schedule this year. We spot a goat who has already moved to the high rocky ridges.

Early morning light on day 3 leaves our camp in dark shadow while flutings on the north face of Vishnu glisten in the soft light. There is time for a quick ascent of Siva Mtn with views of the Waddington group towering through the mist. An enjoyable ski run down the Siva Glacier drops us like cheerful children at Nirvana Pass — an apt name. The Pantheon Range is spectacular. This is the interior side of the Coast Mtns. We ski south, following fresh grizzly tracks, down the broad U shaped sub-alpine valley of Twist Creek with narrow rocky peaks and snow faces drifting by.

As we climb out of the south fork of Twist Creek a grizzly sow and cub are spotted on the opposite side of the valley. They see us and decide to “escape” at breakneck speed, disappearing over a pass. The unsettled weather of the first week tightens up and day 4 is spent in the tent at Bifrost Pass while powder snow builds up outside.

The next day dawns clear and cold. We head for the Scimitar Glacier. A sea of morning fog bubbles on the floor of the pocket valley and mist streams up the 1100 m north face of Umbra Mtn. The slide alder hell hole of a pocket valley is covered effortlessly in ten minutes on a firm snowpack and the fog has gone when we reach the Scimitar Glacier. Yee-ha! Cross country ski terrain, the Radiant Glacier rises in a series of abrupt icefalls for 2600 m to the summit of Mt Tiedemann. The broad sub-alpine valleys of the Chilcotin side have been left behind as we ski up the deep chasm of the Scimitar Glacier surrounded by granite faces and tumbling icefalls. A nice rhythm develops between the heavy breathing and the effortless trail breaking through sparkling snow. The first food cache lies waiting on a moraine below Fury Gap.



Day 7 sees several inches of new snow and in deteriorating weather we kick steps up Fury Gap rather than risk being trapped on the Scimitar. The 600 m climb steepens to 45 degrees near the top but goes easily with the Hornet breaking trail. We camp in strong winds and driving snow amidst grey.

Early morning shivers bring smiles to our faces; it is very clear and very cold and very early. Spread out below us is the huge expanse of the upper Franklin Glacier. There is a stillness spread over the landscape. The air is calm and the early morning light glows orange on the peaks with the shadow of Waddington darkening the icefield. It is not surprising the Mundays returned to this area many times during their explorations.

Over the next four days the four of us charge around in ecstasy. The sky is a deep rich blue without the slightest trace of haze. The snow is firm and fast yet deep pockets of powder can be found nestled between séracs on north facing slopes and views to the horizon are free from even the smallest cloud. The Hornet and I begin with Mt Chris Spencer before stretching out across to Mt Finality and Bezel Pk, while Brian and Chris set out for the north-west peak of Waddington. After superb ridge climbing in ideal conditions they are stopped just short of the Angel Glacier by a steep exposed drop which is too long for their short rope.

While crossing the Dais Glacier to a camp on the Corridor Glacier we dally beneath the impressive south face of Waddington, its summit etched in white against the dark blue sky (the sunglasses!). We take time out to climb Cavalier and play in the soft snow on its north slopes.

From our camp on the Corridor Glacier we follow the historic ski tracks of the Mundays (long since blown over) and reach the peak of Mt Munday before lunch. At 3367 m this is the high point

of our trip. We are awed by the scale of contrast surrounding us: flat against steep, white against blue, smooth against broken. There is an incredible turmoil in this range. The rugged youthful vigour of the sharp peaks and icefalls is juxtaposed against the tranquility and age of the large smooth icefields. The scene is at once both restless and still. To the south the peaks of the Whitemantle Range and the rest our route fades off into a maze of icefalls. Beyond lie the summits of Vancouver Island. After a long period on the summit a likely ski run is spotted on the slopes of Ice valley. A last look at the sights and we trundle off, tucking several large basins in our uphill tracks. There is a pause at the head of Ice valley. It's so beautiful it hurts! A short traverse below some crevasses takes us to the top of a superb run through the séracs in deep powder and like cawing ravens we race back to camp.

Day 11 dawns clear again but it is warmer and the pressure is on its way down. We pack up early and howl down the Corridor Glacier on the morning crust almost tripping over our skis for the view and the odd crevasse that disappears quickly into the wake. A storm is approaching very quickly. We stop briefly at our second food cache at the head of the Repose Glacier, loading up and moving south to a camp just north of Dauntless Mtn where we are pinned down in a driving blizzard. In the morning the tents are half buried and day 12 is spent sleeping, reading, and eating.

Day 13 miraculously dawns clear. The storm has left deep snow on the Dauntless Glacier. Heavy trail breaking takes us to the Dauntless/Vigilant col. Dauntless is an excellent class 3 and 4 climb on mixed snow and rock. Not only is the new snow deep it is also unstable; one footstep on the edge of a gully fractures the slope and far below we see the runout. The last few moves to the summit are over a narrow ledge above the steep north face. This peak was first climbed by the Mundays in 1930. To our north the entire upper Franklin Glacier lies spread out below Mt Waddington. This is the

heart of the glaciated central Coast Mtns, discovered and explored by Don and Phyllis Munday only 50 years ago. To our south lies the Whitemantle Range stretching through to Loughborough Inlet. This is John Clarke territory. Most of these peaks were first climbed by him during the 1970s and have not been visited since.

We drop down a steep gully from the Dauntless/Vigilant col and traverse across the head of the Jambeau Glacier. We climb a short steep slope north-west of Barb Mtn. Our calculations prove correct — Brian Finnie and I are caught in a small slab avalanche and carried about 15 ft. Above this we use the rope to cross a treacherous looking snow bridge on a large crevasse that splits the entire slope. Camp is set up north of the Comrade Peaks (names on map sheet 92 N/3 are wrong here).

Day 14. We are all a little tired. We climb Whitemantle and the eastern Comrade Peak. A storm engulfs our camp and a day later we remove the tents from their own privately sculptured wind cirques and push on. The valleys are buried under a sea of fog but the peaks and glaciers are under clear skies. A narrow divide winds south directly to Mt Stanton. Past Cornette Peak (2760 m) a sharp pinnacle must be by-passed. The snow-pack is still unstable on some slopes. A snow pit is dug and after much discussion we drop off the west side of the narrow divide. Once off the upper slopes our worries are over and a beautiful run through deep powder follows. We climb back up to the divide. On these higher wind packed slopes the snow is again unstable. Twice we dodge small slides but by late afternoon the sun has softened the snow to sticky pig sloop.

After eleven hours of skiing with the packs we make a side trip to Pk 2760 m, 3 kms north of Mt Stanton and one of the few remaining unclimbed peaks in the area. From the summit we sit in awe looking at the scenery. The view south to Mt Stanton and Hidden Peak is perhaps the most spectacular I've seen anywhere in the Coast Mtns. There are no words to describe the feeling of skiing through an area such as this. The depths of one's resources are but a ripple in contrast to nature. The air is eerily still. Our packs below are engulfed in fog, high cirrus have given way to a dull band of cloud to the west, and the pressure has dropped. The calm before the storm?

Day 17. No storm! A slightly groggy start to another long day. We climb Mt Stanton after by-passing another tricky spot on the west. Far to the east we see the smooth mass of the Homathko Icefield draining into the broken Heakamie and Jewakwa Glaciers. After lunch below the summit we drop through an icefall to traverse across the Brew Glacier near 1600 m and then ski down past the first trees we have seen in weeks to the snout of the "South Brew Glacier" at 1100 m. The terrain has changed noticeably. The broad sub-alpine valleys and small pocket glaciers of the Chilcotin side that gave way to the tall summits rising from the vast icefields at the heart of the range have now given way to deep canyons valleys surrounded by slightly lower peaks that are draped with tumbling icefalls. As the evening draws near we have a snack. Opposite the fractured blue walls of ice on the Brew Glacier are squeezed between steep slabs of smooth rock. A last push for the day gets us to the third food cache at 5200 ft on the south Brew Glacier. We sleep well after a glorious feast. The glacier groans as it moves and a small crack opens up under Brian's head. The next

Mist rising from Pocket valley. John Baldwin



Waddington Divide Ski Traverse. Ruth Baldwin/M Irvine



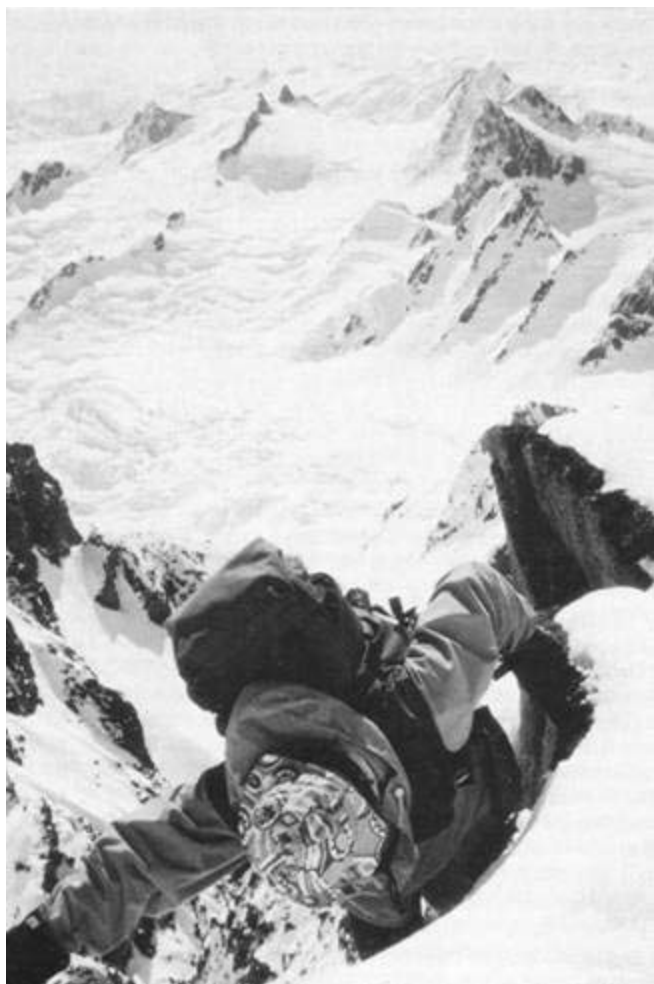
day we remain at the food cache and it rains all afternoon.

Day 19. Another perfect day. The Hornet gets us up at 5 am. The snow has not frozen very well. We hurry to get over some steep slopes before they begin to slide in the afternoon sun. Pk 8266 ft is climbed en route before dropping down two very steep icefalls and around several questionable crevasses. This puts us in the Bear River valley early in the afternoon and we camp near 3500 ft. By now it is mid May yet there is still almost 11/2 metres of snow here. Grizzly tracks are everywhere. The afternoon is spent sun tanning and drying gear.

The next day we are again away early under clear skies. Climbing narrow ridges with gentle crests and deep coastal valleys on all sides we head south-west onto the divide north of the Apple River. After climbing Pk 6935 ft for a last look north at Mt Waddington and the peaks and glaciers we had come through over the past three weeks we doze in the afternoon sun on an exposed patch of heather. While eating an enormous pot of spaghetti we peer down into the depths of the valley below. It is spring and the air is full with the sound of running water pouring over cliffs and rushing through canyons everywhere. After dinner we contemplate our luck briefly before throwing our fortunes to the Apple River.

The convex slope steepens steadily as we ski down. First to the edge of tree-line and then moving between the trees the slope steepens to 35 degrees. Lower down skis are transferred to our

Looking towards Barb Mtn from Mt Dauntless. John Baldwin



Camp on the upper Franklin Glacier with Mt Cavalier in background. John Baldwin



packs. Spring is in full bloom! The hues of green in the forest are stunning after three weeks on the snow. In the valley bottom we pick up the remains of a logging road that has been abandoned for only five years. Chris fords the Apple River and the rest of us and our gear come across on a tyrolean traverse with dry feet.

Day 21, clear and warm. In no hurry now, we tread out the abandoned road gazing with open mouths at the incredibly lush vegetation. The “road” is a well used narrow bear trail that winds through 2 and 3 m alder trees. At times we walk for several kilometres down a knee deep creek and at one point the only avenue for progress (still the road) is a waist deep beaver pond. The last of a never ending series of bends rounds a point overlooking the river estuary. A gentle sea breeze rustles the marsh grass and a lone white swan swims near the tide line. The shore of Middle Lake in the Chilcotin seems like an era from a past century. We collapse on the shore of Loughborough Inlet and soak our weary feet in the ocean. Our part of the journey is over.

A local prawn fisherman picks us up and the next day we fly out to Campbell River.

John Baldwin

Trip members were John Baldwin (leader), Brian Sheffield, Chris McNeil, and Brian Finnie.

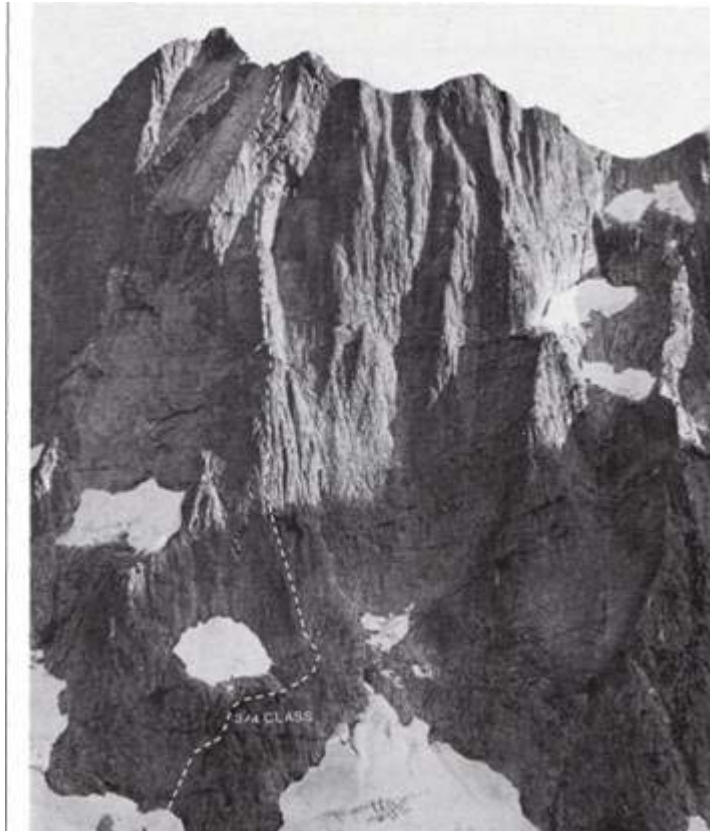
We would like to thank Sigge’s Sport Villa for providing three of us with cross country skis, avalanche poles, and ski wax.

Viennese North Face

Cessna cruising, flying low, searching for that elusive perfect wall. The one with fractured, knobby rock, no bush, and a pure line. In the south-west Coast Mtns could it exist? End running around a treed ridge and then the hunch becomes real — the north side of Viennese is a big, beautiful, sweeping wall of granite.

A year goes by. John breaks his ankle, it rains, or I was gone. Only the memories of that glimpse and the classic, haunting black

North face of Viennese Peak with route, bivy, and crux marked. Scott Flavelle

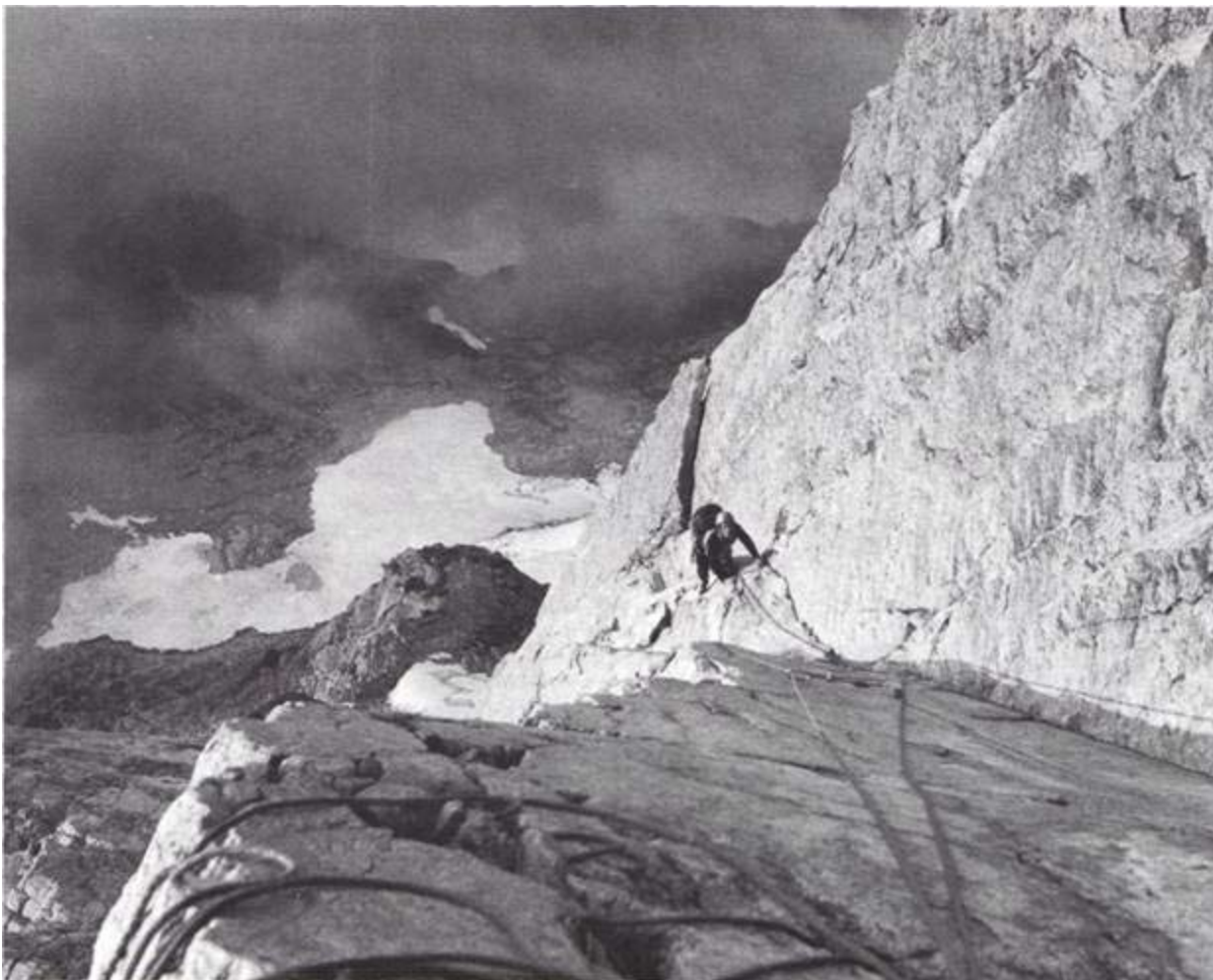


and white photo remain. But by autumn, with time running out, we had already hiked to the base once, though the rain beat us there. Another few weekends pass and we start to lose those pure and intangible motives that power us towards the climb. Slug like tendencies, the Smoke Bluff syndrome, and socially accepted activities lure us away, postpone our inevitable appointment with the wall. But we begin to feel obligated to try this thing, though nauseous at the thought of struggling through bush and grappling with cold rock. Who knows if it will even go free?

Anxiety lurks as we pack. Not as inspired as we once were we leave the car, me with hands stretched out hoping for that age old excuse, rain. And that is how it went until we began to climb and realized, as much as anyone ever does, why we were there. The climbing was simply superb - long leads up shallow corners on slabby Chehalis granite. In the late afternoon we pulled up beneath the dread 70 m headwall and cowered in its shadow. This was it - the cause of our anxiety. Many moments were spent eyeing a line — perplexed we chose one. Well it went — and was “not too bad” as they say — fortunately that can mean just about anything. There we were, bewildered but perched on the immense slab. Our imaginations had run wild - the vision of a glacier polished, glass smooth, impossibly steep slab, vanished. We were as good as up. Now it is over. It hadn't been a monster wall. Just an enjoyable good quality, alpine rock climb. Another plum in the Chehalis is plucked.

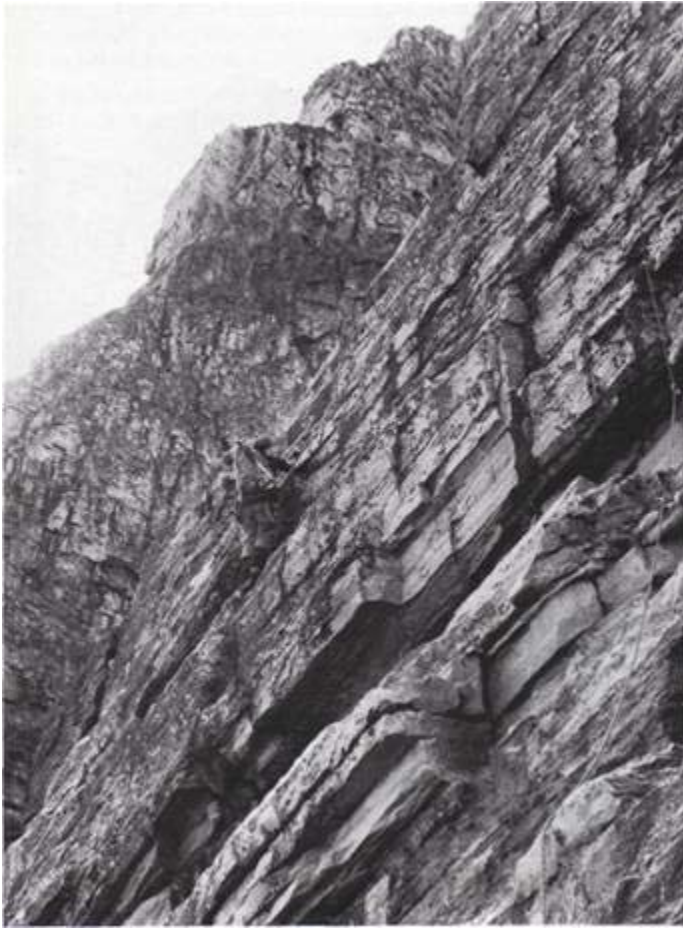
Scott Flavelle

John Howe on headwall pitch (11th). Scott Flavelle



First ascent
north face
Viennese Peak,
Chehalis Range.
Grade IV, 5.10,
700 m. Scott
Flavelle and John
Howe. 23 and 24
September 1983.

Mt Sir Donald: Bruce Fairley traversing below the hanging ice face.
Hamish Mutch



Mt Sir Donald East Face

Direct

In August 1983 Bruce Fairley and I finally climbed the east face direct on Mt Sir Donald, on our third attempt, spread over a number of years. We bivouacked at Uto col and next morning descended the Uto Glacier until we could cross under the east face. The lower icefall was steep and broken and caused some route finding problems. Above this a steepening snow slope led towards an obvious couloir. Ominous sounds of rocks rattling down the couloir prompted us to choose the wall on the right. This wall became steeper with each pitch, until we were confronted by a band of overhangs about 200 ft directly below the central hanging ice face. Bruce had just finished a difficult traverse and was starting to move up again when the ice face decided to introduce itself. Alerted by the crack of splitting ice I cowered under the overhangs as my belay spot of seconds before disappeared under almost two feet of broken ice. Fortunately Bruce was sufficiently to the left to avoid being hit by anything large enough to do any damage. Overhangs can sometimes be useful! Above the rock wall we climbed together up the ice face which lasted forever. Eventually we reached the rock and ice bands which lead to the summit. Two rock pitches later it was dark again. Including the two previous attempts I now settled in for my fourth bivouac on Sir Donald, feeling confident that I would finally reach the top.

Mt Sir Donald: Hamish Mutch finishing the last pitch. Bruce Fairley



The next day a series of steep rock and ice pitches led us to the ridge about 100 ft below the summit. We could have cramponned directly to the cairn but enough is enough. We gave ourselves a break and scrambled up the last few feet of the south ridge instead.

Hamish Mutch

The route follows the summit fall line 2500 ft vertical of which one third is rock up to 5.8 and two thirds is snow and ice. Time taken was 1 1/2 days up from Uto col. An interesting climb.

Sky Pilot

A late night, a late start, a two and a half hour trudge, and here we are. Already it's twelve o'clock noon. Doyle is in serious need of a blood transfusion, a miracle, or the sure-fire cure for a hangover if that mythical potion exists. Lately I've realized that alcohol is a false god. I abstained from worshipping the methylated spirits at the Canmore bar last night. I'm feeling good.

Kevin and I agree that I should take the first pitch. Kevin crawls into a dark corner to belay and suffer. His eyes are so bloodshot I tell him to put on his sun-glasses as a precaution against blood loss and possible rigor mortis from haemorrhaging of the eyes. Content that he is in a position ensuring continuation of his life sustaining functions, and more importantly that he can belay, I start up the first pitch.

The first pillar is freehanging for 70 ft. The angle is 90 degrees or more. This is too much for my impotent arms this early in the season. A whole bunch of umbilical cord sitting is going on. After four hours of desperation the first pitch is over. The time is 5 pm. Daylight will abandon us in an hour. I rap off leaving a rope fixed to come back to tomorrow. We ponder over the ethics of using siege tactics (Doyle is capable of thinking coherently now). Screw it, we've worked hard for this thing and we want to get up it.

Marching back to the truck in the dark I make Kevin promise that tonight we get some sleep. To get back at me for all the abuse I've heaped on him today Kevin starts to narrate some episodes from my darker drunker past. Episodes that I'd managed to forget. "And what about that time in Vienna Blanche?" I take this as a cue to increase my pace. Kevin demonstrates his aerobic abilities by continuing his narrative while running beside me. "And last year at the Calgary Mountain Club dinner guy?" I resign myself to being slandered for the last hour's walking.

Sunday is an improvement over Saturday. We get an early start and manage a sober time of two hours for the approach. Jumaring the fixed rope takes time. The jumars get clogged with snow and slip. At 10 am I'm on top of the first pitch. Kevin seconds the pitch. He rests on the rope several times. This action convinces me that this sucker is steep and that it is early in the season for this stuff.

We climb the second pitch free. Kevin leads the last pitch in what looks like a monsoon torrent. The sun has come out causing the route to run with water. The climbing is comical. Our boots are full of water and our pile clothes are soaked through like huge J cloths. On top Kev tells me that he had to climb bow-legged to keep the drenched ropes from dragging his harness off. Soaked to the skin we trundle down and head back to Banff to a friend's house and a dryer.

The route, Sky Pilot, has subsequently been climbed all free by at least one party. Later in the season Kevin and I climbed harder routes free. Upon reflection we felt confident that we could return and climb the first pillar free but neither of us was willing to drink that much for a grade five waterfall.

Barry Blanchard

First ascent of Sky Pilot, a 500 ft grade five waterfall on the north-east face of Pilot Mtn. Kevin Doyle and Barry Blanchard. 8 to 9 January 1983.

Buildering At Queen's University

Buildering or building climbing is a pastime, but more a training activity that has fallen under the public eye in recent years and is sadly misunderstood. Ever since George Willig climbed the World Trade Centre in New York in May 1977 buildering, and particularly ascents of the world's tallest buildings, have acquired an aura of sensationalism and the practitioners have been stereotyped and labelled by a misinformed public in a very a priori and often uncomplimentary manner. All of this of course stems from the

early years of publicity stunts when circus performers, stunt men, and even mountaineers were hired or persuaded to climb large buildings to attract media coverage.

The reporting of subsequent ascents has tended to amplify and reinforce popular attitudes. The press arbitrarily designated Willig a 'human fly', but when Dan Goodwin climbed the John Hancock Centre in Chicago in November 1981, he deliberately invited the alias 'spiderman', along with its ridiculous connotations, by wearing a suit similar to that belonging to the comic book character. Media attention paid to the attempted ascent of the CN Tower in Toronto in June 1980 by Dave Smart and Gerry Banning, as well as to climbs made by others in San Francisco, Tokyo, and again in Chicago (Sears Tower, August 1980), only added to the disparaging hype.

The problem is subjective, inaccurate, and incomplete notions based on media perspective alone; but at least the public is predictably growing somewhat indifferent owing to the dwindling novelty of this exposure. It seems the public cannot separate the idea of climbing a tall building as a publicity stunt or prank from the idea of climbing a building that is similar to the rock environment for practice, pleasure, training, challenge, and all those other vague excuses for climbing that climbers find hard to verbalize. The truth is most people do not know what buildering is about.

Despite the gossip and criticism within the climbing community regarding buildering — and of course these are no strangers to more conventional ascents of rock and ice — many climbers currently utilize buildings for training purposes and have done so for many years. Buildering is a natural extension of rock climbing. Witness the employment of artificial climbing walls (like those located throughout Great Britain and the one housed at the University of Calgary). Even several renowned climbers have used stone walls and buildings for their training regimen (recall the early training habits of Reinhold Messner, as described in *The Seventh Grade*).

Buildings are usually a part of one's place of work or school and the opportunity to climb regularly is readily at hand. Buildering is a relatively inexpensive recreation and an effective and convenient method of training. It also offers one obvious benefit to society in general, possibly a few more. Many of the techniques and safety procedures adapted for buildings easily lend themselves to high rise rescue practices. But buildering holds a reputation for not being a legitimate, acceptable, and rational activity, and this stigma diminishes any sort of credibility and reduces the possibility of exchange between climbers and fire/rescue groups or departments. The purpose of this article is to, in some small way, draw attention to the serious nature and justifiable aspects of buildering by outlining some of the climbing that has occurred in Kingston, Ontario, over the past decade.

Queen's University and its vicinity have been witness to a progressive evolvement in local buildering resulting in a steady increase in climbing standards, a specialization of certain free climbing procedures, as well as a modification in safety techniques accompanied by some innovation. The years of development have produced over 300 routes on the limestone and concrete walls and Queen's has rapidly gained a reputation for being one of the best buildering spots in Ontario, particularly for improving face



climbing skills.

The potential for climbing on campus was first investigated by Rob Chisnell in the early seventies and initial evening excursions were carried out by Al Dunham and Chisnell between 1973 and 1975. Many of these original ascents were performed rather surreptitiously and some locations still require a judicious sense of propriety and timing. Consequently those climbing areas are not popular.

In those early years periodic day time forays often resulted in humorous circumstances. An indiscreet rappel during class hour could disrupt a lecture momentarily. Sometimes even the frequent night time climbs brought surprises. One particular cool autumn evening is occasionally recalled -while top roping a buttress route on Jackson Hall in the twilight a clear and rather unexpected view was acquired of a medical student busily examining a cadaver in the adjacent Old Medical Building. This was most disconcerting considering that the best and most unavoidable perspective of the activities within were afforded at the crux moves of the climb.

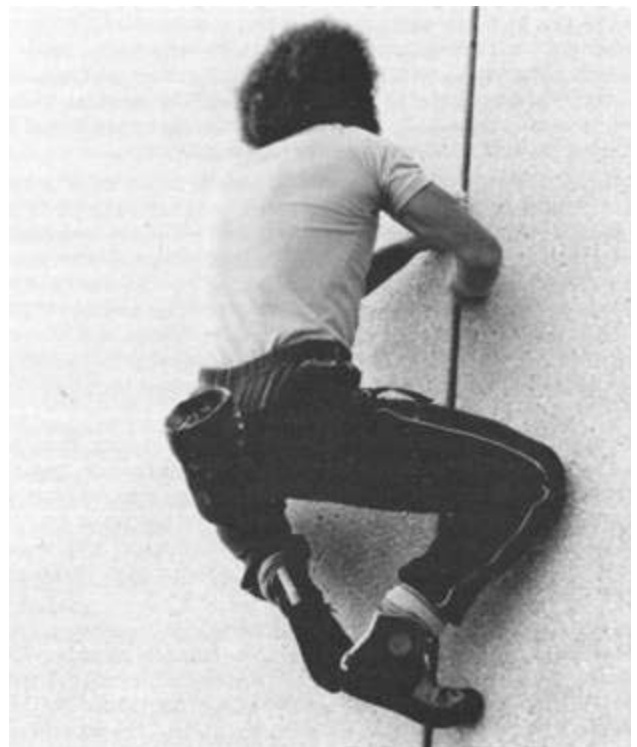
The primary goals in that formative period were to obtain quick access routes to the tops of buildings so that the harder routes could be top roped, in addition to establishing trouble free exits or descents. Many unorthodox and decidedly hairy procedures became common place. Dunham developed a knack, even a penchant, for throwing sky hooks over roof top flashings - in grappling hook fashion - and jumarring up an attached line, sometimes as high as three stories; of course he always took the precaution of having a spotter. Often this was the only way of getting to the top but as climbing standards rose in the area this technique became some-



what antiquated.

Al Dunham had quite the ongoing relationship with sky hooks. There are several former aid routes around that were done with just two sky hooks, a pair of stirrups, and no rope. Al's most embarrassing moment came as classes were changing one April morning. A sky hook slipped off the edge of a brick during an aid move on Harrison Le Caine Hall and he was abruptly precipitated into some bushes just when student traffic was heaviest. The bushes were uninjured.

The pace picked up in the middle seventies, with significant contributions by Ian McKay. Chisnell and McKay made most of the first ascents on the more conspicuous walls of the Physical Education Centre, mainly during the summer months. Al Dunham, occasionally accompanied by Dave McWhirter, added to the growing list of routes up until his departure in 1978. Prior to his leaving Al produced the first guide to routes on campus; 38 major





climbs were listed therein.

In the late seventies there was a consolidation of technique as ethics, style, and the climbing approach evolved while the rate of development accelerated. Between 1979 and 1983 Brian Baxter contributed substantially to the finding of new areas and the production of new lines, climbing regularly with Rob Chisnall. He was primarily responsible for recognizing the training benefits of long traverses on the many limestone walls around campus in addition to the convenience and safety. At the beginning of the eighties climbers like Tom Gibson, Rob Rohn, and Mike Tschipper, residing in Toronto at the time, visited the area. Queen's students hailing from Alberta and British Columbia dabbled on occasion, and climbers from the Ottawa region, like Pete Riley, dropped by as well.

Ongoing activity and growth were constantly fuelled by Chisnall's involvement and motivation, as demonstrated by solo first ascents (roped) of Douglas Library, St Mary's Cathedral, and a crack route to the roof of Botterell Hall. By diligently recording new locations and routes Chisnall managed to update Dunham's initial guidebook with revisions and addenda on a regular basis. More recently Dave Smart and Michelle Lang did much for the direction and progress of crack climbing development, seeing the potential offered by the modernistic concrete walls of Dupuis Hall. Momentum arising from this interest was quickly carried over to the slender finger cracks on Botterell Hall. Of late Alistair Foreman and Chris Lloyd have initiated a rock climbing club at the university and members make good use of the available routes for practice and learning in a controlled setting.

The buildings at Queen's University still hold a great deal of potential for future climbing developments in the area. The sustained and difficult face climbing of the longer vertical buttresses on the Physical Education Centre will be tackled with growing frequency and the number of red pointed routes will increase. Also the outstanding vertical finger cracks located on Dupuis and Botterell Halls, and the flared off width cracks on Mackintosh-Curry Hall offer much in the way of training goals and a means for refining

crack techniques.

Many of the face routes on campus offer uncompromisingly sustained moves of aesthetic and technical excellence. Thin, smooth sided cracks situated in vertical walls that are devoid of any holds quickly educate one about the pain and subtlety of climbing finger cracks. The featureless nature of these cracks and the consistency of small holds on vertical faces can magnify difficulties unrealistically sometimes beyond that encountered on similar rock routes. Often extreme problems can take several days to work out.

Many of the potential routes teasingly exist just beyond the possible. There are ample lines to satisfy and frustrate, to illuminate and obscure the feasible in relation to one's abilities. Unfortunately there are not a lot of routes ideally suited for novices. The climbing tends to be too unobvious and sustained for initiates and certain kinds of holds and moves are characteristic only to these buildings.

Body specificity becomes more apparent on the harder climbs. Tall people can make long reaches to distant holds but their higher centre of balance hinders them on fingertip mantles and low underclings. On the other hand smaller folk are able to sink their narrower fingers deeper into the sharp edged cracks of the newer buildings. Everyone has weaknesses and strengths by virtue of their body shape and the unique nature of a specific route can be a powerful unequalizer.

It is not surprising that certain lines bear ratings that become the subjects of much disagreement. Where possible a rating is an average of several assessments. Newcomers tend to find some of the face climbs underrated initially because the peculiarities of the limestone blocks have to be experimented with and familiarity yields a specialized repertoire of techniques. Despite the lack of naturalness in the climbing these unique techniques have applications on actual rock faces.

The following hierarchy of safety priorities has been adopted and applied to local building ethics.

1 - Safety of spectators, pedestrians and building occupants is foremost.

2-damage may be caused to any building or the surrounding property and structural problems should be reported immediately.

3-the personal safety of any climber comes third but it should not be compromised in order to satisfy the first two criteria and simultaneously maintain standard climbing ethics. Top roping should be favoured over a dangerous or even dubious lead or solo.

This obviously puts a limit on the style in which many routes can be done. Attempting to acquire safe running belays while avoiding building damage can present conflicts. The advent of Ray Jardine's Friends allowed climbers to lead many climbs that had always been top roped previously. The proximity of windows, conduits, wires, flower beds, and so forth also prohibits leading on many routes. But careful adherence to this code has resulted in a spotless record. No injuries have occurred; misjudgments in those initial years allowed local climbers to learn and quickly adapt their safety habits to the demands of the building game. No building has ever



been damaged, although some unsightly deposits of chalk have been a recent problem. The cleaning of heavily travelled routes with a wire brush every now and again alleviates the situation.

The most popular climbing spot is the Physical Education Centre and officials have quietly permitted climbers to use the building's walls, accepting the now commonplace occurrence of EBs, chalk and ropes, though the university does firmly indicate that those climbing there do so at their own risk. They probably realize that climbers will continue to use the walls for training, no matter what university policy is.¹

Kingston seems to be a locale animated by conservative notions but it is not really that unique to encounter those who are eager to ridicule anything out of the ordinary. Since Ontario is not a mountainous region this situation is aggravated by the lack of an obvious climbing tradition; the small climbing population here is far from being a high profile group. Most visiting climbers find the climbing enjoyable enough to ignore passing comments. The tone and inane content of pedestrian heckling and derision has not slackened nor changed over the years despite some objective media coverage. There is a high percentage of non climbers who cannot even relate buildering to any sort of climbing and who do not see it as a training activity; anything that smacks of individuality or unconventionality is eagerly attacked or mocked. Most university employees are very reasonable and tolerant but certain officials can be downright abusive and even aggressive. Thankfully confrontations are infrequent. All in all these are relatively insignificant discomforts to endure for such high quality and accessible climbing.

Rob Chisnell is currently preparing a new guide to the buildering at Queen's which will be quite thorough but concise. Although of limited distribution it is felt that the existence of such a guide will serve to maintain safety and climbing standards, promote ethics and building preservation, and minimize university concerns over the latter.

Although there are several indoor locations that are utilized in

the winter months, the presence of climbers in these areas is not appreciated. So an indoor climbing wall is planned. Permission has been granted to construct such a wall in the Physical Education Centre, and the Queen's Climbing Club will be funding the project. No firm date has been set for the commencement of this climbing wall.²

The last ten years have demonstrated to local climbers that buildering is an extremely effective training tool. As climbing popularity increases, more individuals will builder in spite of the attitudes of an ill-informed public and uninterested administrators. Perhaps authorities should accept buildering activity and strive to condone or promote climbing practices that preserve the buildings and enhance safety. Why should not climbers be accommodated with training facilities like any other athlete? The existence of ideal climbing surfaces on many schools and gymnasiums precludes the need to build specialized, expensive climbing walls. Where the need warrants it climbing features could be incorporated into the architecture of new structures. But the kind of outlaw connotations that buildering has associated with it will be very hard to shake and non-climbers need to be educated about the very real degree of security that exists when one climbs in a controlled, artificial setting. Attitudes must change.

Climbers on the other hand should at least attempt to seek permission to climb on any building, waiving owner liability. Owner and occupant interests should be respected through the careful selection of climbing sites. Builderers should temper their behaviour with the knowledge that their actions very often reflect directly back onto the climbing community as a whole. Those who climb buildings for practice and training should also follow a strict code of rules that takes into account safety, building preservation, and ethics.

Robert Chisnell and Ian McKay

FIFTY BUILDERING ROUTES ON QUEEN'S CAMPUS

The following is a sample of the most significant and aesthetic climbs in ascending difficulty. For each route listed the pertinent information is cited in this order: route name, rating of difficulty, first ascent date, location, nature of the route. It should be noted that this list is a combination of traverses, leadable climbs, top roped routes, and bouldering problems.

Frostline, 5.3, 1975, Frost Wing, chimney.

Jugs, 5.4, 1974, Physical Education Centre, inclined face.

Minute Waltz, 5.4, 1979, Dupuis Hall, vertical hand crack.

The Walk, 5.5, 1974, Physical Education Centre, inclined face.

One Chock, 5.5, 1976, Physical Education Centre, inclined layback.

MacCorry Chimney, 5.5, 1978, Mackintosh-Corry Hall, shallow chimney.

Ian's Route, 5.6, 1979, Physical Education Centre, inclined face.

Lesser Evil, 5.6, 1979, Physical Education Centre, inclined face and layback.

Forever and a Day, 5.6, 1976, Physical Education Centre, inclined layback.

The Grinch Who Stole Christmas, 5.7, 1978, Physical Education Centre, vertical layback.

Sur le Point, 5.8, 1977, Physical Education Centre, outside corner.

Humphrey Hall Traverse, 5.8, 1982, Humphrey Hall, vertical face.
 True Grit, 5.9, 1977, Physical Education Centre, vertical face and layback.
 Lend a Hand, 5.9, 1981, Dupuis Hall, outside corner and vertical crack.
 Polymorphus, 5.9, 1981, Dupuis Hall, open book.
 Therapy Hand Crack, 5.9, 1983, Donald C Burr Wing, hand crack.
 Quark, 5.9, 1976, Sterling Hall, vertical face and flared hand crack.
 Bricks, 5.9+, 1977, Dupuis Hall, outside corner and vertical crack.
 Exomorphus, 5.9+, 1980, Dupuis Hall, outside corner and vertical crack.
 Murney Tower Traverse, 5.9+, 1978, Murney Tower, slab and inclined face.
 Grand Traverse, 5.10a, 1979, Physical Education Centre, inclined face.
 Oberon the Gym, 5.10a, 1981, Physical Education Centre, vertical face and outside corner.
 Trapeze, 5.10a, 1977, Physical Education Centre, inclined face.
 Brian's Route, 5.10a, 1981, John J Deutsch Centre, vertical face.
 Exact Sequence, 5.10b, 1978, Physical Education Centre, inclined face.
 Clark Hall Wall Traverse, 5.10b, 1981, Clark Hall, vertical face.
 Ocelot Slot, 5.10b, 1983, Donald C Burr Wing, overhang and fist crack.
 Botterell Crack No. 1, 5.10b, 1983, Botterell Hall, vertical layback and finger crack.
 Nose I, 5.10c, (harder variation), 1978, Physical Education Centre, inclined face.
 Twinkle Toes, 5.10d, 1978, Physical Education Centre, inclined face.
 Pig Avenue, 5.11a, 1979, Physical Education Centre, inclined face.
 Leonard Hall Wall Route No 5, 5.11a, 1982, Leonard Hall, vertical face.
 The Only Solution, 5.11a, 1983, Donald C Burr Wing, solution pockets.
 Dance Hall Route, 5.11a, 1979, Physical Education Centre, vertical face and layback.
 Leonard Hall Wall Route No 15, 5.11b, 1982, Leonard Hall, vertical face.
 Oberon Buttress Direct, 5.11b, 1983, Physical Education Centre, vertical face.
 Jumping Jack Flash, 5.11b, 1982, Fleming Hall, vertical face and open book.
 Dave's Crack, 5.11b, 1982, Donald C Burr Wing, finger crack in dihedral.
 Rob's Traverse II, 5.11 b, 1981, Physical Education Centre, vertical and inclined face.
 I See the Light, 5.11c, 1982, John J Deutsch Centre, vertical face.
 Plaque Route, 5.11d, 1981, John J Deutsch Centre, vertical face.
 My Shattered Category, 5.12a, 1983, Physical Education Centre, vertical face and outside corner.
 Future Crack, 5.12a, 1982, Dupuis Hall, finger crack.
 Future Shock, B2, 1982, Dupuis Hall, finger crack.
 Botterell Crack No. 2, B2, 1983, Botterell Hall, finger crack.
 Botterell Crack No. 3, B2, 1983, Botterell Hall, finger crack.
 Beta, B2, 1983, Dupuis Hall, finger crack.
 Dance Hall Traverse, B2, 1983, Physical Education Centre, vertical face.
 Fleming Hall Traverse Left, B2, 1982, Fleming Hall, vertical face.
 Tapestry Traverse, B2, 1982, John J Deutsch Centre, vertical face.

FOOTNOTES

1. Just prior to the submission of this article, permission was revoked. As of November 1983 climbing on the buildings at Queen's University is banned. This is a rather disheartening step backwards for the Kingston climbing community.
2. It has not been determined yet whether or not the climbing ban will affect this project.

From The Orford River

A traverse from the Orford River to the Raleigh/Gilbert complex and out to the Toba.

Une traversée depuis la rivière Orford jusqu'au complexe Raleigh/Gilbert et encore jusqu'au Toba.

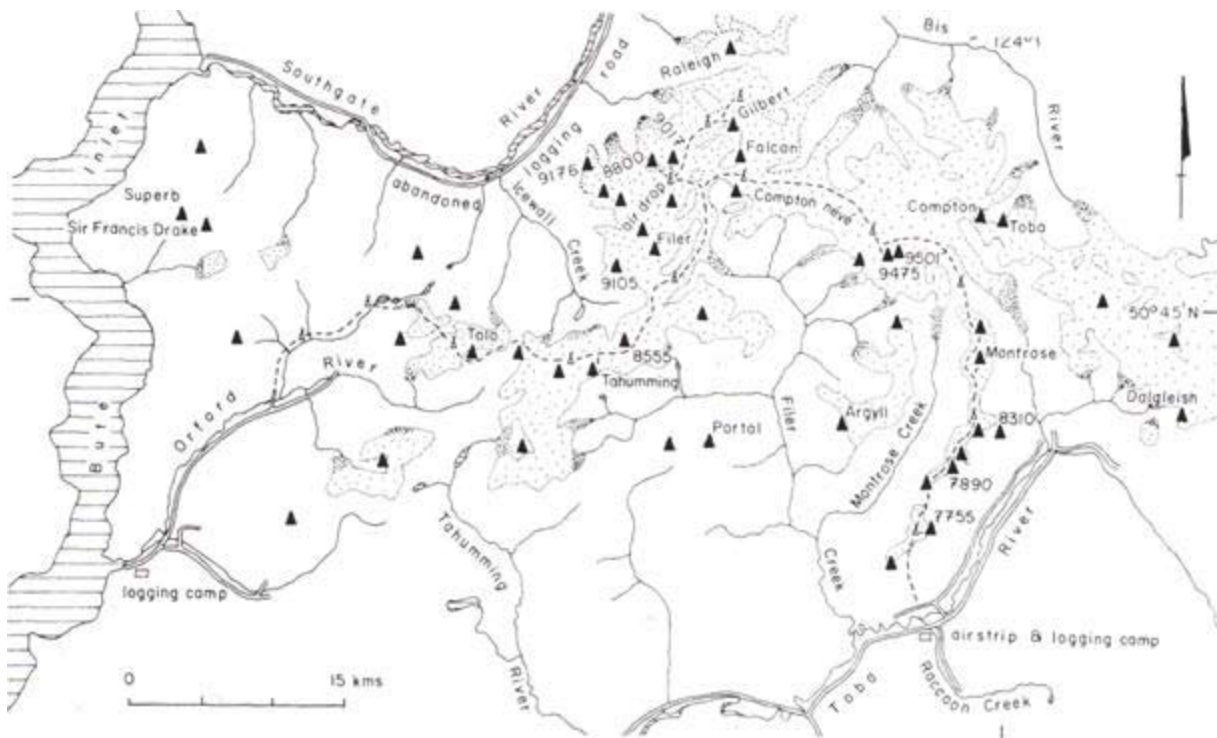
"... for this is the Coast Range, and before a summit can be attempted, one must first attain the bottom."

Alan Melville, CAJ 1953

The pioneering explorations of the Coast Mtns conjure up

images of strenuous relay packing up rugged coastal valleys through thick bush and across difficult torrents of water to reach huge icefields and high summits. The classic attempt to climb Mt Gilbert in 1952 (CAJ 1953:105-114) was one of the last of these trips. After a week of almost insurmountable difficulties in the valley of the Southgate River the party had time for only one crack at the summit. And so for nearly two weeks of bush and canyons they were rewarded with only a false summit. This marks the end of an era in climbing in the Coast Mtns. Air support was to play a key role in the subsequent first ascent of Mt Gilbert in 1954 (CAJ 1955:1-9) and many other summits in the Coast Mtns.

Thirty years later things have changed. Logging has come



Mt Raleigh and the Cleaver. John Baldwin



Looking south into Headwall Creek. John Baldwin



The Filer Glacier with Mt Gilbert in left background. John Baldwin



and gone to the Southgate River leaving an extensive system of overgrown roads. The major peaks in the area have all been climbed but Mt Gilbert is still there and the glaciers continue to flow slowly towards the salt water. The region is rarely visited. The minor unclimbed peaks remaining are an insufficient drawing card for most climbers, the cost of helicopter flight to the area is prohibitive, and a foot approach is a lengthy proposition.

On 24 July 1983 our party of four flew from Squamish to the Weldwood logging camp at the mouth of the Orford River on Bute Inlet. On our way we tossed two weeks of food out of the heavily

loaded Beaver onto a 7500 ft pass south-west of Mt Gilbert. This left us on the shore of Bute Inlet with a week's food. We had attained the bottom! The camp was closed but amidst the array of massive machines we found the caretaker who agreed to drive us up the main road on the Orford River, a distance of about 20 kms. We camped on the road that night.

In the morning prospects were not too rosy. It was raining. We packed up and penetrated the wall of bush at the edge of the road and headed up the north fork of the Orford River. The river was in flood and its glacial waters raged down the narrow valley surrounded by large hemlock and spruce trees draped in a thick coat of moss. Under this canopy a magnificent proliferation of ferns, Devil's Club, and slide alder juggled for the remaining light and soaked up the endless supply of moisture. Between shrouds of mist the occasional glimpse of a glacier snout was had looming not far above the timber. Travel was slow, very slow. A difficult side stream ate up several hours and the end of the first day saw us 3 kms from the road.

The second day gave much improved travelling. A thick carpet



of moss and some blueberry bushes interrupted by a few stretches of slide alder took us to a camp on the shore of a beautiful lake at 4100 ft. Here an 800 ft sheer cliff adorned with twin waterfalls necessitated wading the outlet to walk up the south side of the valley. The rain continued for the next few days as we traversed several glacier bowls and icefalls. Occasionally we were tantalized by a distant icefall peering through the mist. The summer had been wet and we were plagued with heavy trail breaking.

Day 5 dawned clear. We packed up our camp at the head of the Tahumming Glacier and scurried off across the frozen crust. Jean and I made a side trip to Tahumming Mtn while Bruce and Rob kept on. On the summit we built a cairn and peered off in all directions. The cloudy confines of the previous four days had now given way to magnificent views of distant peaks. We dared not dally though for the sun was rapidly softening the crust. Many jerky footsteps caught us up to Bruce and Rob. Directly to our south was the most impressive Headwall Creek. A small glacial lake lies surrounded by granite slabs. Opposite a small pocket glacier tumbles from a 7800 ft peak, its snout hanging on a steep smooth slab down which the meltwater runs before pouring over a 1000 ft cliff. Nearby a 5500 ft slab rises in one clean swoop directly from the valley bottom.

On day 6 we dropped down onto the main trunk of the Filer Glacier and trod up between its numerous medial moraines to climb a 2500 ft icefall to our air drop. Tentatively we waded around in the deep snow extricating one box at a time until miraculously all were recovered. We rested the following day, sorting out our food and making plans. There is no doubt we had stumbled into an area with some fine climbing. We were all eager to try first for Raleigh and Gilbert but high cirrus blew in leaving question marks.

A storm set in on day 8 and for three days the sound on the tents alternated back and forth from rain to snow. During a lull Jean and I climbed Pk 9017 ft just north of our camp. There was no cairn so one was built. Bruce and Rob explored some sharper peaks to the west and climbed a steep snow gully to a sharp rock notch.

At last an improvement in the weather saw us charging off towards Mt Gilbert on day 11. We dropped our packs in the basin west of the summit and climbed over steepish snow slopes to gain the peak from the northwest. To the south-west lay our route of the previous ten days while to the south-east we could pick out our exit route from the confusing array of peaks and ridges. From the summit we separated into two groups. Jean and I headed off towards Mt Raleigh while Bruce persuaded Rob to have a go at a nearby "obvious line."

Dawn on day 12 was not promising. Bruce and Rob managed 16 pitches of first rate climbing before the prospects of bivouacking in a blizzard turned them back. Meanwhile Jean and I had abandoned Mt Raleigh and post holed our way back to the air drop.

The following day was clear with low fog boiling in the trough of the Filer Glacier. Jean and I climbed a sharp 8800 ft spire just north of the Tavistock Glacier. Our route was up a V in the south face which proved to be nine pitches of enjoyable climbing to 5.7. The final summit block was surmounted after a difficult boulder problem and a short airy traverse a cheval. We built a cairn before rappelling down the east side to a sharp notch where we found Bruce's and Rob's tracks from the previous week. Bruce and Rob walked back to the air drop, climbing Pk 9017 ft on the way.

On day 14 the weather had stabilized somewhat. We climbed Pk 8547 ft south of camp before packing up and moving down onto the Filer Glacier. The impressive 3000 ft south face of Mt Gilbert rises directly from the upper reaches of the glacier.

Day 15. We headed east on our walk out but made a detour up the pleasant south-west ridge of Mt Falcon. This involved some class 4 climbing on very nice rock. A fast bum glissade down the tail end of a wet snow avalanche took us back down to the head of the Compton névé where we had made camp.

We packed east across the Compton névé with the best weather of the trip. Dropping to 5000 ft we crossed bare ice before climbing back up to 8500 ft above the divide between the Compton and Toba Glaciers. There we once again encountered the knee deep trail breaking that had plagued us at the higher levels above the Filer Glacier.

From the summit of Pk 9475 ft we looked down the long divide

between Montrose Creek and the Toba River This was travelled extensively by John Clarke in 1981 (CAJ 1983:43-48) and after seeing his pictures of the area there was no question that this would make a fine finish to our trip.

We spent two days travelling down this narrow divide. At times the crest narrowed to ten feet, dropping steeply for thousands of feet on either side to the deep coastal valleys. We crossed steep icefalls, rounded narrow goat trails, and ate dinner on a wide heather draped ledge. The fog billowed from the valley bottoms. We detoured to several summits but by day 19 we had reached the end of the ridge. 7500 ft below was the main Weldwood logging camp on the Toba River. With a bit of groaning from our knees we descended through the steep timber to the roads in the valley bottom. After a refreshing dip under a waterfall we were revived enough to walk into camp. A plane picked us up on the gravel airstrip behind the camp that evening and we flew back to Squamish.

John Baldwin

Trip members were: Jean Heineman, Bruce Fairley, Rob Driscoll, John Baldwin.

A steep approach is necessary to gain the Valsorey Hut, Classic High Level Route. Murray Toft



The Swiss build huts in the most imaginative locations. As witness this bivouac hut on the south side of the Grand Combin, Classic High Level Route. Murray Toft



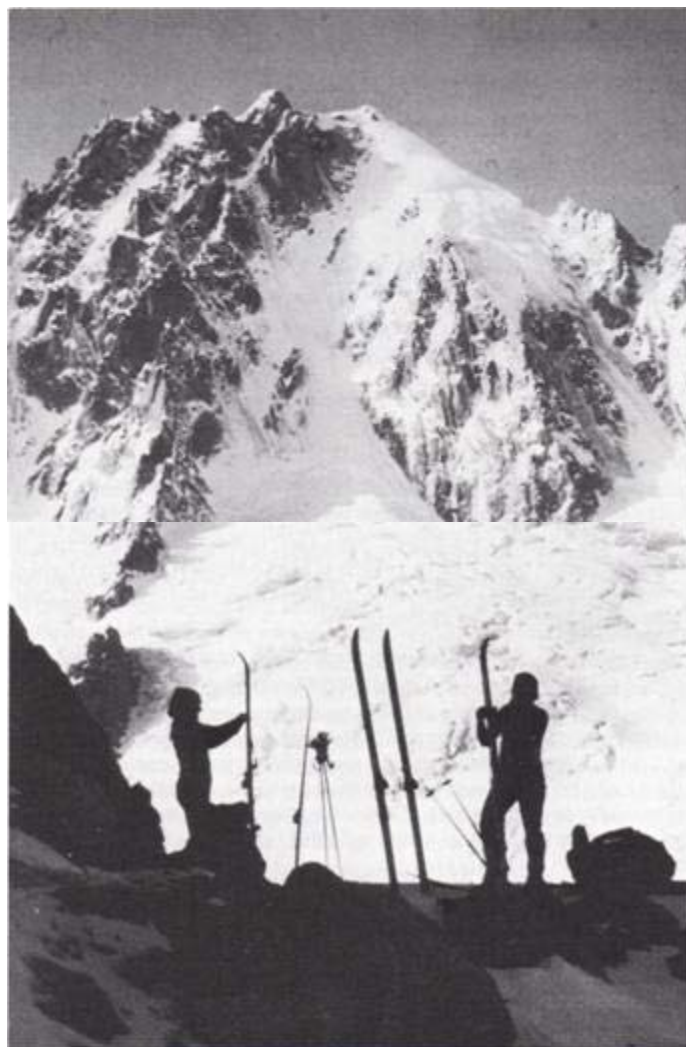
High Level Tours In Norway And The Alps

The winter of 1983 was a profitable one for three of us. In spite of a lean snow year in Europe we managed to ski two classic high level tours.

The first was located in Norway, about 150 kms as the crow flies, north-east of Bergen. Known as the Jostedalbreen, this huge icecap is in fact the largest in continental Europe with an area of some 500 sq km arranged in a long 5 km by 100 km pencil shape. At least 26 outlet glaciers drain the main ice plateau from an average altitude of 1500 m down to almost sea level. Some of these tributary glaciers make excellent nordic downhill runs such as the Tungsbergdalsbreen which is 14 kms long with an elevation loss of some 1200m.

By train and ferry we duly arrived at the small village of Fjaerland from Oslo on 25 February. We were overwhelmed by the impressive snout of the Supphellebreen Glacier high above us, spilling over from the main icefield and down into our approach fjord. A large icefall appeared to make impenetrable defenses for the main icefield above. Would we be able to find a way?

Skinning up for the climb to the Col du Chardonnet on the Classic High Level Route. Murray Toft





Under azure skies we skied an easy 7 kms the first afternoon up to the head of the fjord to a small farm - Oygarden, beneath the approach glacier. Spending the night with the local farmer cum self-appointed mountain guide, Anders Oygard, was our first in depth encounter with Norwegian hospitality. Anders gave us the necessary maps we hadn't been able to find and helped us fill in the missing blank sections. Lucky for Judy he had an extra foam sleeping pad to replace the one which had blown away on a short training shakedown tour a few days earlier.

Our first day out was a real knacker, staggering under 20 kilo rucksacks up a steep 1200 m vertical rise to Anders' hut, Flatbrehytta, on the edge of the icefield. Handmade from materials he'd carried up on his back over 964 ascents, the small hut is a palace and testimony to the stamina of this hardworking Norwegian. The climb to Flatbrehytta was our major elevation gain and provided a secure advance base from which to leave in a centred state for the main icefield crossing.

The following seven days were typical of high glacier tours: the feelings of self-satisfaction from being self-contained and in control in an empty desert like expanse; the anxiety of sitting out the weather wondering when it will break; the pure joy of being in a high place on clear days and seeing wave on wave of other high places rolling away to each horizon; the teamwork necessary to build the igloo at the end of each day or work out a compass course in order to move in a whiteout; the introspection and philosophizing one does about his future; not to mention the physical high of just being, skiing there. One element was definitely lacking on this tour however, no doubt due to our timing. And that was the heat of the mid afternoon, so typical of tours done later in April or May.

Crossing the Col du Mont Brule en route to Zermatt, Classic High Level Route. Murray Toft



Instead we had that infamous Norwegian wind which makes for a great incentive builder. You just have to keep moving and dealing with it and for this reason we decided on igloo shelters. Several nights we would not have slept if we have been in a tent. It would have flapped our brains out but the security of a foot of snow all around assured us warm quiet nights. We slept like babes.

On 5 March we skied off the icefield and into the first settlement - a small village of a thousand people - Folvan. Our first encounter with a person in a week was unique. As we skied through the outskirts a farmer came out to greet us and inquire to see if we were Canadians and alarm us by announcing that the police were looking for us. Apparently 100 rescue personnel plus the largest rescue helicopter in Norway were at the ready to come and get us! Our friend Anders at the south end had misunderstood our plans and when we failed to contact him by phone two days earlier had sounded the alarm. A bit of bad weather had had us pinned for a day and for another day and a half we had to travel in semi-whiteout.

All the commotion had resulted in us making the Norwegian national news on TV and press and when we came to our little pension for the night it was jumping with reporters. The girls were famous — the first time women had crossed the Jostedalsbreen icefield in winter! The reporters were quite pleased at being able to tell the story and finish it with a happy ending.

And so we lived happily ever after and trained our way to the deep south, eventually arriving at Chamonix (Argentiere) to start the world famous Haute Route. I should mention that the Classic Haute Route which spans the Alps from Chamonix, France to Zermatt, Switzerland was completed first in January 1903 by Alfred Simond and three others. The ski equipment of the time was extremely basic — remember that that was still the era of the one single long ski pole! But the significant point is that they had no means of fixing their heels to their skis. Today practically all who make this tour use downhill equipment adapted for ski mountaineering. If this tour through western Europe's wildest terrain, which crosses nine high passes to elevations of 3600 m with a net elevation gain and loss in excess of 14,000 m (46,000 ft), could be managed in 1903 on free-heel gear then we most certainly should be able to ski it in 1983 as a token celebration of its 80th anniversary and a salute to Monsieur Simond and company.

So it came to pass that we left Chamonix at the crack of noon on 19 March, caught the train to Argentiere, caught the teleferique to the Grands Montets, caught perfect snow on a downhill piste to the Argentiere Glacier, caught and passed a guided party heading in the same direction, and had time to sit on the veranda of the Argentiere hut to catch the evening light reflecting off the great north faces of the Argentiere basin - Les Courtes, Les Droites, and the Verte. Total skiing time one hour, fifty minutes. What a hard introduction to ski touring in the Alps! Lifts are everywhere and, combined with the prolific hut system, make for a very civilized experience.

In spite of the support systems the weather still holds the upper hand and on the second day we were abruptly shocked back into reality as a storm rolled in. A recurring pattern of three bad to each good day was to plague us continually over the route. Desperation

got so bad at one point that we took a cultural side trip to Barcelona to see some Picasso, hoping that when we returned the weather would improve. Not to be, as we continued on our return to inchworm our way from hut to hut. Eventually the Easter crowd caught us up and we enjoyed (he lied), four steamy international days and nights in the same hut with the Brits, Germans, French, and Swiss, all taking patient turns at the dice and single scrabble board.

As Siddhartha claimed — everything comes to him who can read and wait and think. Always our good day would come through in spectacular form — the storms giving us brilliant powder to enjoy that wonderful telemarking high as we carved down glacial runs up to 7 kms long. But the Haute Route is not without its technical moments as well. Although we didn't use the rope for skiing as much as we possibly should have, we were very glad to have it along. Several of the high cols are technical enough to require the use of crampons, ice axe, and belays. Happening or lowering off is a sure bet in at least a couple of places and more than twice does one carry the skis on the pack. Just when you get in the plodding rhythm an icefall, col, or band of crevasses comes along to keep things interesting.

One of the new encounters for me on the route was the psychological drifting that can so easily happen when one becomes a follower in a large group. One gets his awareness numbed with the old 'strength in numbers' myth when you are number 12 in a group of 23. It's very easy to assume that good old number one out front knows what he's doing. On more than one occasion we found ourselves breaking out of the groove and forcing ourselves to make our own decisions as to route finding. Number one out front wasn't always right and one day in a whiteout it was good that we woke up to save ourselves and later the group! Language barriers prevent group input sometimes!

On 11 April we walked the last 2 kms into Zermatt. It was spring like, the dandelions were blooming next to the crocuses, and one could see the snowline creeping up the hills by the hour it seemed. The funny wind at our backs was the Foehn and that night it put down another metre of snow high up. How lucky we were to be finished after 24 days. In fact the only ones who finished out of the original group we started with were ourselves. All the others had dropped out along the way either due to being short of time or money or patience. In the end the endurance test was not from the skiing but from the waiting to ski. The Chamonix guides assured me that the weather had not been this fickle for seven years so if anyone goes next year to try their luck here's hoping things are back to normal. A highly recommended cross country tour through some amazing scenery. Just be sure to do it without a guide to keep the interest level up!

Murray Toft

Participants: Judy Biggar, Murray Toft, Wendy Whitaker.

Ski To The Sea

Five landlocked Yukoners realize fantasy and make the 140 mile downhill run from Mt Kennedy in the St Elias Mtns to the Pacific Ocean at Yakutat Bay, Alaska.

Cinq Yukoniens sans accès à la mer réalisent un rêve et font le cours de 140 milles, depuis Mont Kennedy dans la région des montagnes St Elias jusqu'à l'Océan Pacifique à la baie Yakutat en Alaska.

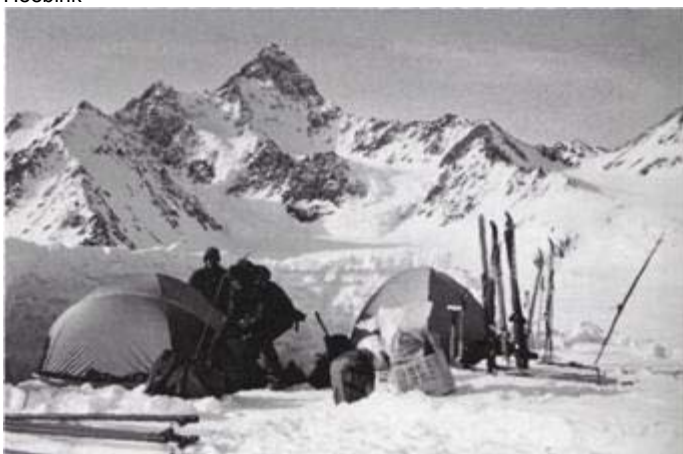
We arrived by helicopter three miles south of Pinnacle Peak near the source of the Lowell Glacier to engage in our traditional last minute portfolio responsibilities and consume all our overweight treats. We were particularly anxious to use up the bags of firewood and marshmallows before hoisting our packs. After the 'unglacierlike' marshmallow roast, breakfast, and with our weight down to 120 lbs each we surged down the Lowell and South Lowell for five days in a generally south-westerly direction to the head of Art Lewis Glacier. This leg of the trip was characterized by near ideal weather and reasonable snow pack. There was only one navigational deviation to negotiate a col by-passing the icefalls at the intersection of the Lowell and Dusty Glaciers.

We were stymied by a head-on collision with an Alaskan coastal storm and progress became that of a slow moving glacier. We endured a week of total whiteout, metamorphosing in our tents. Only broke camp three times for something to do and to avoid being buried alive in the six feet of new snow. After consuming our entire supply of rum, becoming overly acquainted with each others' idiosyncrasies, and establishing the definitive hierarchy of card playing abilities, we slogged our way down the Art Lewis Glacier. The bottomless snow reduced our kick and glide mode of travel to the methodical plodding of a mule train. We resorted to three persons travelling relatively light, packing a track for the trailing locomotives dragging the freight — six loaded pulks.

Since we were in semi-whiteout we saw little of Art Lewis Glacier and Nunatuk Fiord until the imposing mountain peaks appeared before us and the snow firmed up beneath. After a cozy camp between a rock and a hard place on the lateral moraine of the Art Lewis we sped on up the East Nunatuk Glacier with renewed spirits and a diminishing food supply. Cresting the top, we raced down the Yakutat Glacier for the lush forests of Harlequin Lake where we fantasized that a hoard of boaters would be waiting to whisk us across the lake and into town for a beer.

How naive we were. After an uneventful Cakewalk off the south-eastern sole of Yakutat Glacier we camped on gloriously beautiful but depressingly deserted Harlequin Lake. We celebrated

Camp on upper Lowell Glacier with Pinnacle Peak in background. Peter Heebink



our reunion with animate life and cheery campfires then hoisted our 85 lb packs of now obsolete equipment and began our thrash inland, detouring the rugged shoreline by wiggling our way porcupine style through Devil's Club and slide alder for two very eventful days.

We finally reached a shore and soon a very straight gravel road. With the prospect of 30 miles of road walking we promptly called a cab on our sideband radio and continued our trek toward town. We were forced to reluctantly don our skiing garb once again when we encountered a five mile glaciated section of road ten miles from Yakutat. After we dug out our forsaken taxi, hopelessly stuck with its meter running, we cruised into town to allay the traditional post-trip cravings. Fun and misery were had by all.

Peter Heebink

Conrad Baumgartner, Marianne Darragh, Boris Dobrowolsky, Peter Heebink, David Manzer. 6 to 26 April 1983.

The Master And Neophyte - A Winter Play

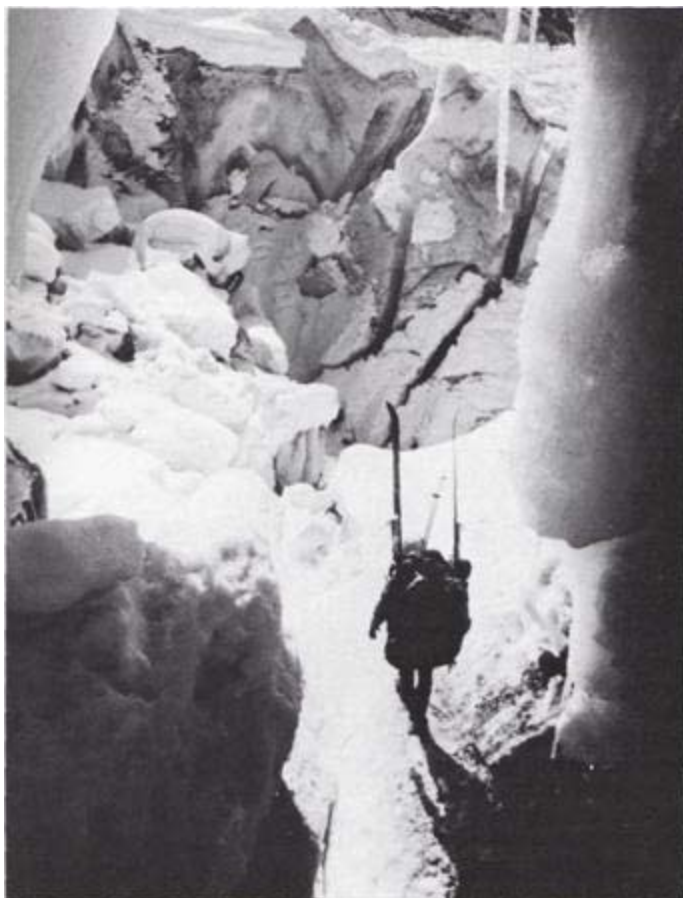
CAST OF CHARACTERS

The Master — Winter Waddington. The Neophyte — Don Serl and Joe Bajan. School Master - Mike King and his Jet Ranger II. Special Cameo appearance by "Sherpa Joe".

High point in the upper alcove on the south face
The Corridor Glacier oozes towards the Franklin and the sea with the
Whitemantle Range in the distance. Don Serl



Ski touring through the lower icefall of the Franklin Glacier. Don Serl



PROLOGUE

"Waddington in the winter? It will be a slice."

It's late October, the nights are getting longer and the armchair mountaineer is again thinking of plans for the winter. Don Serl calls up Joe Bajan and says "I hear you are talking of Waddington for the winter." Well this is enough to send a dedicated armchair climber into a frenzy. "A real trip." "Dm...we should think about it some more." Elbows are bent, beer is swilled, jaws flap, and the pact is sealed — it's the two of us up against Waddington's south face.

Winter arrives, the food and equipment lists are done. While Don is sorting out the helicopter transport in, I'm building some sleds to tow the gear out to the coast.

ACT I

It's January 1983 and it's raining, in fact it's been raining for about two months. Roads, towns, even the mountains are flooded out in the annual coastal monsoons. February ditto. Our departure date arrives in the rain and a decision is made that it is better to wait beside the helicopter than in Vancouver. "Besides the food might mildew." Don arranges with Mike King to meet us at the ranch on 21 February, hoping to fly in the next couple of days. Failing all of this Don and I would end up in the Rockies as a consolation prize.

As Jenn King of White Saddle Helicopters greets us with her cookies and tea she says "It's nice to see you again Don, but where's Mike?" (the pilot). My stomach turns into a knot. "Mike's not here?" We go to sleep nervous and Robson seems to loom.

Morning arrives with the clouds and nervous stomachs again but Mike had arrived. "Do you think you could get us in today?" ask the inquisitive school boys of the head master. "No I think it looks a bit too dicey." Damn there go the stomachs again. Next morning the clouds are still here and we start to resign ourselves to fate again. As we sit down to morning coffee with Jenn and her husband Charlie, Robson looms over us again. Mike strolls in and says "Can you guys be ready in 30 minutes? The weather looks good enough for a try." The coffee is gulped and 29 minutes later the school boys are standing dressed beside the helicopter. The school master is asked "Are we really going today?"

On lift off my stomach is nervous from the mixture of flying machine, people, clouds, and mountains. I don't think I would have flown today if I was pilot in command. But as the flight goes on I relax just by watching Mike; you somehow know that he is the head master and this is his schoolyard. Don and Mike name the peaks and valleys but it's all alien to me on my first coast range trip. As we round Fury Gap we enter my version of heaven - sunshine, blue sky, brilliant white virgin snow, and the mountains. "My god what a sight." We're setting down on the exact spot hoped for. This moment is difficult to comprehend - a short while ago we were in a different world. The cameras start to take in the sights and Kodak's stock rises.

Waddington's south face stands 1000 m above us plastered in white from recent storms. Our spirits are higher than the peak as camp is set up. Talk centres around not the second winter ascent of Waddington but what to do for an encore.

We are awake at 2 am to start the climb but our hopes are down. There's a storm outside and it's tearing at the tent to get at us inside. By 8 am one of us has to get out to shovel and redo the guy lines and the weather is worse.

By noon it's sunny and calm. That afternoon we ski up to

In the great couloir. Don Serl



the face — Kodak's stock rises again. That night we prepare for another 2 am start but a storm arrives as we sleep and the same cycle repeats itself.

ACT II

The following morning we set off at 8 am with heavier than expected packs. The first obstacle of the climb is the exposed bergschrund; there's only one good looking bridge in our area. While I am clearing a path across the bridge Don becomes restless and chooses a different route. He is rewarded with the nice whoomp of the bridge collapsing beneath him. I turn around to see Don hanging over the edge more in than out of the bergschrund. "Would you like some help?" "Sure if you have the time." After getting out of this Don is rewarded again with the honour of having to go back inside to the bottom to retrieve one of his skins. This spot is appropriately named "One skin hole". The skis are cached at the base of the couloir and the next six hours spent wallowing in snow up to our waists. Lead changes are done every 20 to 25 steps - "Nice ice climbing." Near the top of the ramp we rope up for two pitches as the snow seems unstable. The sky is turning red as Don sets off on the first real lead of the climb, the traverse into the triangular snowfield. We named this the "Traverse of the Gods" due to it's exposed nature. It was two leads of loose blocks covered in powder snow with bad protection. Don led the worst of it; for my part I wished Don's rope had been 50 m longer. We reached the triangular snowfield in the dark. We had hoped to be 200 m higher by the end of the first day.

Our next job is to dig a snow cave for the night but two hours later we give up in frustration, ice or rock uncovered in all spots. We end up hacking an ice ledge large enough for the two of us to sit on. "It's going to be a long night." Our supposed sleeping positions are sitting upright in our bags with our backs against the ice, feet dangling into the night. We're tied in with our harnesses, ropes going across our chests and under our feet. In the morning we discuss if either had had a worse bivouac.

Today we set off with only day packs as we are only 350 m from the summit. The three leads across the snowfield are done in short order which lead us to an ice choked chimney. This 20 m of steep water ice was as nice as one could ask for anywhere; too bad it was the only nice pitch of the whole climb. Don then set off on a pleasant ice ramp which turned nasty for the last half when he traversed out onto holdless rock under snow. The rock steepened about here when my lead came up. The climbing technique used was first clear away up to 60 cms of snow feathers in search of ice to sink in the tools but the ice disappears back at the start of Don's last lead. After the rock is exposed search for a crack into which the ice tools are placed. Then torque the tool across till it holds in place, pulling up as in ice climbing. Failing cracks, search with by now duller ice tools for a niche or knob of rock to hook onto with the axe picks. On this lead I placed some 15 pieces of protection of which 10 were aid. Don then led over the last 20 m of rock then onto the upper snowfield. I lead out till the end of my pitch when we realize that we are off route by a pitch. It's about 3 pm now and a thought starts to form that "We can't make the summit today." Only Don has bivy gear and we have no food or etc, etc. It becomes easy to justify turning around when you've failed. At our rate we would need two to three more days to climb the last 200 m of hard climbing. The last 150 m has taken us six hours and this



was to be the easy section. As we discuss the idea of backing off and trying again in a couple of days we are treated to a huge crack and rumble. My first thought is that the snowfield we're perched on has let go, second thought that the headwall above has let go, but nothing is moving except for our hearts and adrenalin. We then realize that it's a jet from CFB Comox coming from around the north side of Waddington level with us. It's a kilometre away and breaking the sound barrier. We rappel back to the bivy site and as we're packing up at sunset the jets send our hearts racing again.

Rappelling down the ramp all of our pins get used up and the rope jams twice so neither of us feel left out by having to climb back up. The crossing of the bergschrund was eventful for me as our bridge collapsed sending me to the bottom. This way I didn't feel left out over "One skin hole." The climax of the evening came as I watched Don do a series of sit turns skiing down to the tent. We arrive back at 11.30 in an uttermost exhausted state. That night we realize that we are in no condition to attempt the south face again in the time left.

ACT III

The next day is devoted to drying gear and replenishing a couple of wornout bodies. We decide that Waddington will be tried again tomorrow but this time over the Waddington/Spearman col and then the standard route up the chimneys. In the morning 10 minutes after leaving camp and on the leeward side of the ridge we find ourselves in front of a 2 km long slope, poised to let go in the very near future.

ACT IV

We quickly decide to head for the coast, maybe climbing something along the way. That afternoon Jenn and Mike King fly in for a visit and kindly take out some of our ropes and hardware.

The journey out turned out in many ways the best part of the trip. Don chose to pull the overloaded sled first. During the next half hour we lost a lot of elevation by going straight down the crest of the ridge. I was quite proud of my sleds. But as soon as we traversed the sled turned over and died. We tried every possible trick to keep it upright but it would always turn over and die. The only alternative was to hire "Sherpa Joe" to carry a double load. The first two attempts to hoist this load ended with his face buried in the snow with the two tonne monkey on top. With the bribe of additional stipend he was convinced to try again which succeeded and then carried the monkey into the pass. We felt he had set us up.

The following day was memorable as we pulled our sleds down the Corridor Glacier dressed in our underwear. The terrain was easy enough to cover 5 km in some two hours. At the first icefall we had a choice either to by-pass this by skiing 5 kms around or take a short cut of 1 km. Naturally we chose the short cut. Here we totally destroyed our sleds but managed to laugh about it all the way. That night we camped at the junction of the Augur and Franklin Glaciers where we ate as much food as humanly possible. We had decided to cache the remains of the sleds and high tail it for the coast with two days of food.

ACT V

The skiing along the Franklin provided us with another personal

first — a 5 km long schuss without once using the poles. Getting off the glacier terminus proved a bit tricky but manageable. Then another day was spent before a couple of tired and sore climbers entered the logging camp on the Klinaklini River.

EPILOGUE

A lot of talk has been spent over a return engagement but actors and climbers talk a lot of rewriting failed scripts.

J Bajan

A \$300 grant was received from the ACC expedition fund.

Ashlu Impressions

"Rebuffat," I mused. "It looks like something out of bloody Rebuffat." I lazed back into my harness and watched Dave preparing to follow the traverse. He was sharply silhouetted against the icefall in the valley below, his red wind pants, yellow harness, and blue pack vibrant in the slanting sunlight. Tantalus soared in the background behind the spires of Porterhouse. The glaciers of Jimmy Jimmy and Chimai bulked across the southern horizon. The Straits burnished under Coastal cumulus. Yellow rock arched upwards into a band of roofs and corners from above which icy shards occasionally whirled by. Cold breezes intermittently dispelled the sunny afternoon calm then bliss returned. "Would have been a better finish to climb straight up through those roofs," I thought,

South face of Mt Ashlu
Route is up buttress just right of centre then shadowed corner below summit. Don Serl



"but time's pressing." "OK, come on across," to Dave. "Good move here," Dave shot across. "I climbed down a bit on this side of that pillar. You'll find a big flake on the wall for a handhold," I replied. The rope drifted in, breezes puffed and waned, clouds filtered by the distant hills, the sun arched towards the west. "Isn't the rock incredible?" "This seems like something out of Rebuffat."

Then again...

"Watch me close. This corner's blank. I can't get up it. Shit! I don't know if I can reverse this. Watch me." No damn jams. Loose blocks. Vertical and overhanging corners and ribs on the headwall. The haul line jams. I clip it into the rope, unable to twist around to get it into the piece at my feet, unable to pull it up to get it into the piece just above me. Pull, pull, hip and toe, bridge way out, hop up a couple of moves, into the corner again, get a couple of fingers, stem left onto the arête, tuck in behind a thigh bar, take a rest. "Shit, all the pro is manky. Watch for these flakes on your way. OK, here goes. Watch me." Ice clatters down from above. Ice in the back of the cracks. Icy fingers. The sun sags towards an icy night. Thinking, "Gotta do this. Gotta get out of here. Come on. Go. Go. Take care Go!" Aloud, "OK, watch me here, Dave. Think I've got it. Just another 20 ft."

You know what I mean? Do you climb? Do you like new faces?

Don Serl

Impressions of the first ascent of the south face of Mt Ashlu.
Dave McNab and Don Serl. 10 October 1983. 300m, 5.9, 6 hours.

A Visit To The Monarch's Court

Mt Monarch does not so much rule as simply dominate the surrounding mountain realm. Entering into the lands within the mountain's sway however is a matter of little difficulty; one has merely to decide to go. This accomplished, half an hour from Nimpo Lake Floyd will deposit you in the anteroom at Success Lake. A short afternoon's walk up the moraine to the south leads one to a fine tarn on the bench above, overlooking the chambers of power, so close...

But the chambers are defended with every kind of mountain barrier, the first of which is weather. August, and still the Pacific holds the ear of the Monarch with legions of cloud and rime and squall flaunting their positions of supremacy. We temporize and walk across the Talchako Glacier to visit some of the citizenry, but are rebuffed. Perhaps we are too foreign for this wild land?

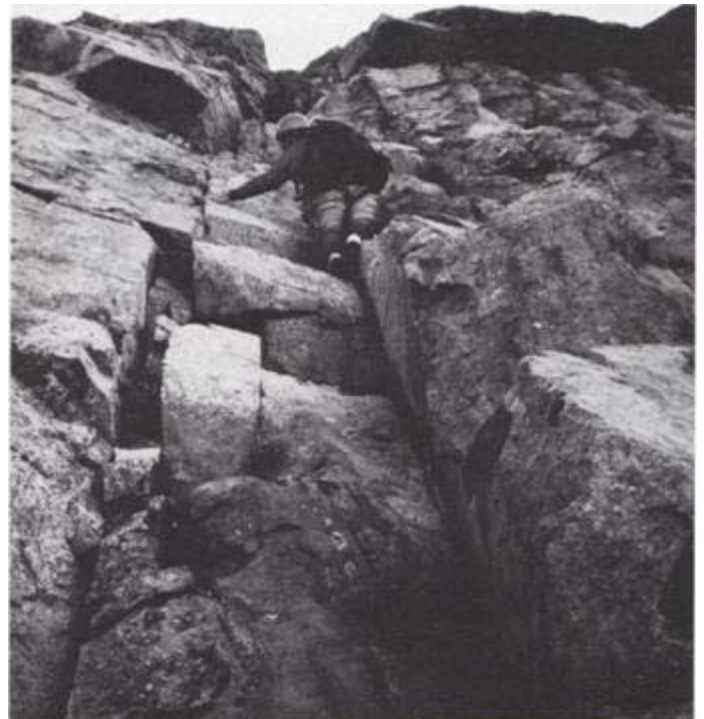
Back in camp however we notice the Concubines beckoning for a morning tryst. We discover the way through the second barrier, the guardian icefall, and we learn the secret of access to their hearts; they dwell in the shelter of the Monarch and the legions of the Pacific have but little effect on them. How we savour the snatches of sunlight on the summit. Too soon we must hurry back to our little tent below.

Now we have gained the knowledge necessary in order to enter into the vast central court room and we move camp up onto the rognon of the Horseshoe Glacier. Our attention is immediately drawn by what we at the time take to be the Serf who offers us appealing routes on the north and east ridges. We choose the latter, suspecting treachery lurking in the snows of the former. A

Pretender (east ridge on left) with Monarch behind. Don Serl



First pitch on the north ridge of the Throne. Don Serl



thousand feet of medium difficulty rock is followed by another thousand feet of snow slopes interspersed with short, athletic rock steps. The summit lies just at the fringe of the power of the Pacific lord but we tarry to examine the impregnable lower facades of the Monarch. His upper reaches remain hidden deep within his cloaks of storm and we come away disheartened, having abandoned our plans to reach his very pinnacle. It is only upon return to our homelands that we discover that we have unwittingly visited the Pretender whom all others have passed by, and not the Serf who huddles in the lee of the Throne.

To the Throne our attentions now turn. Only once before has the Throne been occupied and never has access been gained by the domineering north ridge, let alone via the precipices of the west face. We find ourselves temporarily befuddled by the vagaries of the weather and by the more subtle defences: logistics, time, and difficulty. It is a 'crack of noon start' when we begin to climb but at first all goes well. Steep corners and cracks take us about a third of the way up the ridge but to no avail. The time has flown; snows billow around us; the rock turns slabby, wet, and slippery. We cannot tarry - we must leave on the morrow. Down we go, rebuffed.

The morrow, as always with these things, dawns crystalline. We wander about the courtroom photographing its splendours, full of awe; then we hurriedly pack and head for home. The icefall seems poised to wreak vengeance for our intrusions and we note blocks thrown down in anger at our tracks. We are happy to reach our high sanctuary at the tarn and we laze about until great haste is called for to reach Success Lake by the appointed hour. Five minutes after we emerge from the bush onto its shores Floyd emerges from the skies and we are transported from the realm, only partly satisfied. Look well to your defences, O Monarch. There is unfinished business in your kingdom.

Don Serl

Northern Concubine via east ridge, 3 August 1983.

The Pretender, 9900 ft, 1st ascent via east ridge, 5.7, 5 August 1983.

The Throne north ridge attempt, 5.8, 6 August 1983.

All Joe Buszowski and Don Serl.

Missing Lynx On Kennedy

I think it was the glorious photograph of Mt Kennedy in The Mountains of Canada by Randy Morse (page 76), which sparked the interest for Bob Jickling's Missing Lynx Expedition. Ron Quaife and I flew from Calgary to meet Bob and the fourth team member, Kathy Nilsen, in Carcross, Yukon with a view to making ski/mountaineering ascents in the South Lowell Glacier area of the St Elias Mtns.

We flew from Kluane Lake's Arctic Institute in Andy William's Helio Courier; a spectacular flight with views of Logan and Kaskawulsh Glacier. An even more spectacular landing in an undulating bowl below the Weisshorn had the glacier coming up too fast! Digging out and hand turning the plane for an hour and a half at rather an abrupt angle gave rise to Andy's parting remark,

From the saddle the east ridge climbs the right summit skyline. Allan Derbyshire



"Well lads, I won't be back in here to pick you up!"

Have you ever seen an inquisitive lynx? We did when one came wandering into our camp next morning, apparently motivated by a much larger though indiscernible animal miles down the glacier. "But what would it come here for?" Black humour. Would it stay? Not long. And with its eventual departure we had the name for our expedition.

Our main objective was the unclimbed east ridge of Mt Kennedy - "an infernal mountain, cold and treacherous" — and the approach itself proved a worthy adversary. An immense icefall, complete with its maze of lightly bridged crevasses and threatened by an ominous hanging glacier, reminded us of a mini Khumbu. Next was another danger zone - a veritable Valley of Death. Hanging ice to the left of us, avalanche and rockfall to the right; we camped in the safety of the upper basin and considered our chances. 1000 m would take us to the upper saddle and another 1200 m to the summit.

A huge rockfall on the right devastated the whole area and hoping that it may be the last for some time (?), we approached cautiously using the protection of various buttresses to the saddle after midnight. Most of our climbing was done late into the evening and night as prevailing warm conditions rendered daytime activity necky to say the least.

From 'Cornice Camp' on the saddle Ron and I took seven hours to the summit. "Hey up, youth, this is longer than we thought."

Left to right Allan Derbyshire, Kathy Nilsen, Bob Jickling, and Ron Quaife. Allan Derbyshire



An unintended bivouac two metres below the summit had us discussing the values of the 'latest' equipment and why we didn't have it with us.

Our ascent ("Assassination Ridge") had included much hard steep ice and snow, incredibly loose tottering blocks of rock, and sustained difficult climbing - not a flat spot on the whole ridge! Down climbing took as long as the ascent with many belayed pitches and rappels. It rained the night after our ascent and avalanches and rockfall again thundered down into the upper basin.

Descent to the base camp included a broken thumb for Kathy (rockfall), a tour of the depths of a crevasse for Allan (weak bridge), and ski acrobatics for Ron and Bob down steep ice (uncontrolled wand collecting).

A couple of days down the South Lowell had us camped by a perfect turquoise meltwater lake below the north face of a spectacular looking rock peak - unnamed. Despite heavy rain overnight Ron and I climbed the north ridge via a steep snow couloir and good rock to 5.6.

As another major peak in the area is Mt Ulut (named after the Eskimo woman's knife) we felt that Kakiwak (an Eskimo's fish spear) would aid continuity in the nomenclature for the area, Can Perm Comm of Geo Names willing. Bob and Kathy meanwhile made another notable ascent nearby at the junction of the Fisher Glacier.

It was decided that the expedition had been great training for higher things but back to the lowlands for now.

Allan Derbyshire

TECHNICAL DATA

From map produced by the Survey and Mapping Branch, Dept of Energy, Mines, and Resources, printed 1967, 1:250,000- Mt St Elias, 115Band 115C, Edition 2:

FS1290 - Mt Kennedy, east ridge ("Assassination Ridge"), VIF6, climbed 23 June 1983 by Allan Derbyshire and Ron Quaife;

FS3779 - Unnamed Peak, ("Kakiwak"), north ridge, III F6, climbed 29 June 1983 by Allan Derbyshire and Ron Quaife;

4th Class, climbed 29 June 1983

FS3373 - Unnamed Peak, north-east face, II by Bob Jickling and Kathy Nilsen.

International Chitina Glacier Expedition

On 31 July 1897 the Duke of Abruzzi, with his entire climbing team, reached the summit of Mt St Elias. This lofty vantage point allowed him to recognize the great mass of Mt Logan as well as Mt Bear, previously named by IC Russell. To these he added the names Bona and Lucania for two other great peaks to the north. Not until 9 July 1937 was Lucania climbed by Washburn and Bates. Since then there have been fewer than seven additional ascents of Lucania by three different routes. On the eastern side of the great St Elias Range JJ McArthur in 1900 sighted three great peaks to which he gave the names Steele, Walsh, and Wood. The

peak named in honour of Inspector Sam B Steele of the North West Mounted Police was first ascended on 15 August 1935 by a party consisting of the Wood brothers, Forbes, and Fuhrer. Since that time Steele has received about a dozen ascents mainly from the east and south and one winter ascent.

In June of 1973, I and a small party of friends climbed Wood, Slaggard, Macaulay, and Strickland all by new routes and had our first glimpse of the great Steele/Lucania massif from our vantage point to the north of the Chitina Glacier. We were so impressed with these and other unclimbed peaks in the area that we hoped to return some day. On three separate occasions I tried to organize small, lightweight climbing parties to go into the Steele/Lucania area from the north and attempt these and other peaks from the Chitina. Not until 1983 was I successful in getting together a very strong party of six to go into the area.

The first party to set foot on the Chitina was led by RG Biersted and was flown in by J Wilson on 16 June 1968. They first tried to reach two unclimbed 14,000 ft peaks to the south of Slaggard but were avalanched off the east face. They managed to complete the second ascents of Macaulay and Slaggard and then to climb Steele and the east, central, and main summits of Lucania via north-west rib. On 19 June a party led by J Halpern also landed on the Chitina and made the first ascent of the north-west rib on the great unclimbed north face of Lucania/Steele. From the summit plateau they made the second ascent of Lucania and the third of Steele. This brief history gives some idea of how little attention has been given to these peaks, especially from the north. In the following years more attempts were made on Steele and Lucania, with more success being recorded on the former than on the latter. None the less by 1968 there had been only three ascents of Lucania and four of Steele.

In February 1983 I convinced Stephen Bezruchka to help organize a small, light-weight expedition to the Chitina to attempt some unclimbed peaks and Steele and Lucania by new routes from the north. By May we had assembled a very strong and compatible group which would probably ensure some success, weather and other factors permitting.

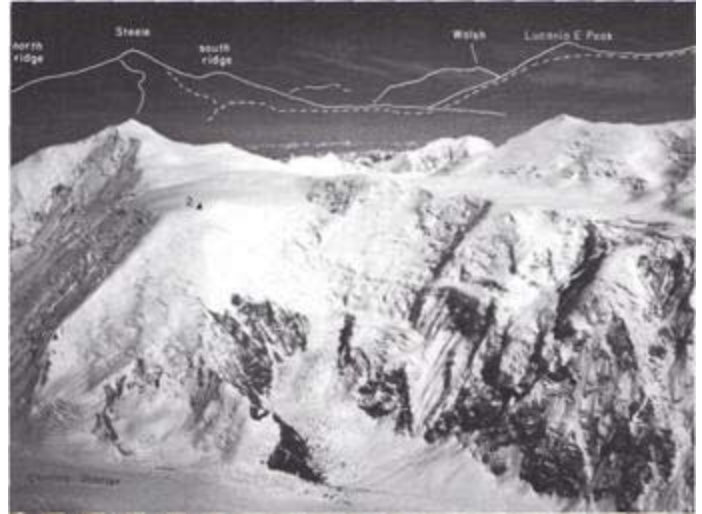
In the meantime Steve had secured some excellent Washburn photographs which laid out in graphic detail the immense north wall of Steele/ Lucania rising over 6000 ft from the Chitina. We finalized the expedition early in May and were prepared to go with five climbers, one more than the minimum number required by the Kluane Park Service. Steve and I met in Calgary and finished purchasing and packing the food in Helmut Microys' basement by 8 June. We then flew to Whitehorse and upon arrival were met by Sarah Steele who, along with her husband Peter, were our gracious hosts for the next few days. Martin arrived the following day and Brad and Peter the day after. On the morning of 10 June, while making our final arrangements to leave for Kluane Lake, Peter phoned from the office to ask if he could join our expedition. I was a bit taken aback but delighted to have him along.

We now had three medical doctors and three climbers with experience on Everest. If nothing else we would certainly have a good time at base camp. Peter's family was a little surprised at the turn of events but approached the matter somewhat philosophically. His daughter Lucy was heard referring to her

Mt Lucania from west, 6 August 1938
Route followed indicated; Chitina Glacier lower left. Bradford Washburn, Boston Museum of Science negative 1296



From west-north-west over Chitina Glacier, 6 August 1938
Route followed and camps 1 and 2 indicated. Bradford Washburn, Boston Museum of Science negative 1300



Dad as having taken leave of his senses but all in good humour. Peter somehow managed, with considerable help from family and friends, to be ready by mid-afternoon. With some fanfare, and thunder showers to announce our departure, we left Whitehorse. At the Warden's compound at Haines we checked out our party and obtained our landing permit. We were also presented with an official Mountaineering Expedition Certificate, suitable for framing I might add. Everything was going so well at this point it seemed that it might hardly be necessary to climb any mountains. We soon arrived at the Arctic Institute, a familiar sight to a few of us, and quickly located Andy Williams who we hoped would pilot a Heliocourier for us into the Chitina.

Andy William's Heliocourier on the Chitina. Kevin O'Connell



Since the first flights into the Chitina in 1968 there has been increased reluctance to land on the northern side of Lucania due to the difficulties with reliable weather observations for the area. In addition heavily crevassed sections on the upper Chitina make it difficult to attempt a landing by fixed wing. Since the landing site is a good 80 miles by air one wants to be reasonably certain of landing before flying out of Kluane. The relative remoteness of the northern part of the range stands out in contrast to the more popular Mt Logan, 40 miles to the south of Lucania, where there is often a party on the mountain able to spot the weather for a flight. Fortunately for us there was a party on the Steele/Walsh col which was able to report on weather conditions on the south side of the mountain.

Above camp 1 to the summit plateau. Kevin O'Connell



We spent from 10 to 15 June sitting around the air strip at the Arctic Institute in relatively good weather waiting for a flight into the Chitina. Each day we were told the weather conditions were not right. A frustrating situation but we accepted our pilot's good judgment and kept ourselves busy. During our wait we explored parts of the Slims River, Silver City, climbed Mts Sheep and Wallace, dined out, and did a lot of reading. By the 15th it was beginning to look like we were running out of time and that the expedition might split up even before we got off the ground. Then on the morning of the 16th Andy judged that conditions were about as good as they would ever be and the first 50 minute flight was off.

Brad Neiman and Peter Cummings at camp 1. Kevin O'Connell



The flying weather seemed to be excellent as we flew up



Wood/Steele pass east side from above tributary of Steele Glacier
6 August 1938, Wood out of photo to right; Steele Glacier lower right. Bradford Washburn, Boston Museum of Science negative 1318

Martin Zabaleta on Lucania summit; Logan in background. Kevin O'Connell



The high level route to Lucania's summit. Kevin O'Connell

the Slims River and Kaskawulsh Glacier leading onto the great icefields. We continued just west of Mt Walsh and then swung due west just south of the Steele/Lucania massif. With the 10,000 ft south face of Lucania before us we continued on around its west peak with the Centennial Range on our left, and viewed the Chitina as we flew in from the west. As we descended to the landing site at the head of the glacier we were quite mindful of the massive north wall which was now steadily rising above us. I selected a landing spot and Andy skilfully brought us down at about the 8500 ft level. The aircraft was quickly unloaded in perfect snow conditions and Steve and I had a little time to enjoy the isolation and silence before the next two flights brought in our companions. Just as Andy left for the last time an enormous avalanche came off Steele and seemed to be heading straight for our camp. Once camp was set up we then had to decide on our first objectives.





By this time a number of our expedition members were feeling the pressure of work commitments that now lay only two weeks away. Martin and I were much in favour of attempting the two unclimbed peaks just above the glacier and south of Slaggard and so we set out on a reconnaissance on 16 June. We were able to determine rather quickly that the area south of our camp was heavily crevassed and that the snow bridging these crevasses was quite weak. Even with skis on we were breaking through the crevasses and it appeared that it would be extremely dangerous to set up an advance camp below Slaggard. With equal difficulty we returned to our base camp but chose a route as close to the north face as possible. The north-west rib or spur appeared to be quite feasible although access to the start was through a nasty looking crevasse field. Back at camp we reported our observations and all agreed to attempt Steele and Lucania first and leave the rest until we had a better idea of how much time would remain. On the morning of the 17th visibility was very poor on the glacier but conditions were firm and so we started off towards the north rib. Brad and Peter were about 20 minutes ahead of us but invisible in the poor weather. As Steve and I approached the base of the rib we could see only one person standing still. We quickly realized that someone had fallen into a crevasse with a heavy pack on. A few minutes later we determined it was Peter Cummings who, held by Brad, had fallen in about 20 ft. Peter was uninjured but had landed in a water filled crevasse which seemed bottomless. He managed to get his pack off and get above the water but had lost one snowshoe. We managed to extract him quickly but a somewhat shaken Peter headed back to base camp to recover and dry out while the rest of us continued on up the rib to find a location for camp 1.

Peter Steele and Martin led the way initially while Steve and I laid out some fixed line. We were all carrying heavy packs and we encountered a number of steep and icy headwalls. Steve and I

continued the lead through to a suitable camp at 10,200 ft. Here we carved out some tent platforms and stashed our loads. On the 18th we prepared to leave base for camp 1 and managed to make radio contact for the first time. The weather improved and we reached camp 1 at 1500, setting up three tents on a spectacular eyrie. On the 19th we broke a trail in rather poor snow conditions above camp 1 to the Steele/Lucania plateau and established camp 2 at about 13,500 ft. We returned to camp 1 for the night but poor weather the following day kept us tent bound. Avalanches thundered down around us most of that day while we relaxed and waited for the weather to improve. On 21 June we left for camp 2, arriving before noon under fine weather conditions. We rested then prepared to climb Steele that evening. Although the summit looked to be quite close from camp 2 it was over three miles away. Steve, Martin, and I reached the summit four minutes before midnight. There was a strong wind and the measured air temperature was -20°C . Another party had preceded us, perhaps that same day and probably by the south-east ridge. Peter Steele, Peter Cummings, and Brad Neiman reached the summit 30 minutes into 22 June. There was still

Chitina Expedition: Kevin O'Connell/ M Irvine



enough light at midnight to take photographs of Lucania, Logan, and of course ourselves at the summit. Peter Steele realized his dream and our ambition fulfilled we now all turned our attention to returning to camp 2. The way back along the west ridge seemed almost longer than the ascent but the last party arrived by 0500. June 22 was declared a day of rest.

On 23 June Peter, Steve, Brad, and I started for Lucania's summit about 0800. We used snowshoes, as we had on Steele. The weather was clear and progress was steady until we reached the steep snow slopes of the north-east ridge. Here the snow was deep and progress was slowed by the steepness of the slope. We kept reasonably close to the ridge, then traversed out across the northern slopes, by-passing the eastern summit. Soon afterwards Peter and I roped up together, this time leaving Martin, Steve, and Brad to lead across the north slopes to by-pass the central summit. Peter and I reached Lucania's summit at 2000 shortly after the other three. There was virtually no wind and the air temperature was about -5°C. This prompted Brad to actually take off his shirt for a few minutes and pose for the cameras. The views were even more spectacular than on Steele's summit. The great mass of Logan lay 40 miles to the south. We could see the entire Centennial Range; Steele to our east, Slaggard, Strickland, Macaulay, and Wood to our north and possibly Mt Bona. Beyond Logan and to the south we could see St Elias, Vancouver, and the Kennedy/Alverstone/Hubbard group. It was the most perfect and spectacular day I had ever seen in three expeditions to these mountains. The journey back to camp 2 where Peter Steele waited was a long one. We were all pretty tired and quite mindful of falls and avalanche hazard. We were off the mountain by midnight and back into camp by 0300 on 24 June.

We took a well deserved rest on the 24th and on the 25th, with the weather now clearly deteriorating, we started our descent. Cloud soon covered the mountain down to the 13,500 ft level. The sections of fixed rope we had left proved very helpful as we descended to a much changed glacier. At 1900, I managed to contact CJQ 755 as well as Martyn Williams' party on the Steele Glacier. With time running short for the two Peters and Steve and with the poor surface conditions on the Chitina there was some real concern about flying out. Martin and I were prepared to stay a little longer if necessary but on the 26th we radioed Andy to come in to pick up Peter Steele and Steve. Andy arrived at 0730 and taxied in on what appeared to be a solid surface. We loaded up the aircraft quickly and soon Andy was starting down the glacier. Suddenly about 200 ft from camp the aircraft's skis dropped below the softening surface crust. As the right ski plunged even further in and the right wing came to within a few centimetres of the surface Andy cut the engine. I feared that the aircraft would be badly damaged. We soon discovered that it was not damaged nor was anyone injured. However it was apparent that unless we extricated the aircraft very quickly it would melt further into the surface, freeze, and be impossible to remove. Rather than become a legend Andy urged us to dig out the skis and with the help of two of our ropes, one attached to each wing, we managed by a combination of pulling plus assistance from the propeller to raise the Heliocourier from its shallow grave. Andy stayed for only a few more minutes then elected to leave, this time without passengers. We were all relieved to see the Heliocourier take off but somewhat disappointed not to see any of us on it. It was now pretty obvious that we would not be leaving by fixed wings.

The next few days were frustrating as we waited for a combination of available Jet Ranger and good weather, for now the latter had decided not to co-operate with us. We had excellent communications with Kluane and with the group on the Steele Glacier, even as the weather deteriorated and the anxiety level reached new heights among our group.

On the morning of 30 June a great 'suckerhole' began to clear just over Steele but the chopper was not available until just after lunch when the weather began once again to look rather ominous. Suddenly, to our delight, a Jet Ranger piloted by Doug Makennon roared over the Macaulay/Steele ridge and made a nice landing on our five day old stomped out chopper pad. Peter Steele, Steve, and Martin took the first flight out and were dropped off at the Steel Glacier camp then the pilot returned to pick up the rest of us. The weather was looking pretty grim by the time he returned but with the chopper's blades screaming in protest we made the hop over the divide and out to Destruction Bay. The weather was closing in fast and the pilot confided that the extensive weather system on its way would certainly have kept us pinned down for another five days. Doug returned to pick up the rest of the crew from the Steele camp and we soon found ourselves all reunited back at Kluane. We were fortunate to be out on the 30th as many in our party had airline tickets for 1 July. Needless to say we had a suitable celebration at the Steele residence that evening.

All things considered it was a good trip and a successful expedition. Not only did we have an excellent climbing party and good company but we managed a probable eighth ascent of Lucania by a route which, as it turned out, had been used twice before. Our ascent of Steele was the eleventh or twelfth and probably the third by that particular route. Considering the tremendous delays flying in and out we were indeed fortunate to have climbed what we did. Steele and Lucania had both been climbed within eight days of our arrival on the Chitina by a moderately difficult but none the less challenging route. We had made a formal attempt on two lesser peaks and had the weather co-operated at both ends we would most certainly have made several first ascents. The Chitina has only been visited a very few times and it is as remote and committing an area to land in as one can imagine. It is rather unlikely now that fixed wing aircraft will attempt future landings on the upper Chitina and the more expensive helicopter seems to be the only alternative. More routes and unclimbed peaks remain for those prepared to accept the challenge of the more remote areas of the St Elias Mtns.

Kevin O'Connell

The team was comprised of Martin Zabaleta, Peter Cummings, Steven Bezruchka, Brad Neiman, Peter Steele, and Kevin O'Connell. Martin, a Basque climber, was on the Spanish expedition to Everest. He created quite a fuss in the Spanish press by unfurling the Basque flag on the summit. Peter Cummings is a well known climber with much experience in both South America and the Himalaya, including the second ascent of Hiunchuli. Steve had recently returned from the 1982 Canadian Everest Expedition and had climbed Muztagata in 1981. Brad had climbed extensively with Peter in both North and South America. Peter Steele was doctor on the International Everest Expedition. Kevin has climbed extensively in Canada, Mexico, and South America.

An Alpine Style Ascent Of Gothics North Face In Winter

The Adirondacks are considered by many North American climbers to be just a minor group of high peaks in the north-eastern part of New York State. The High Peaks region is a deservedly popular backpacking and rock climbing area with many new routes awaiting first ascents on excellent granite. In the winter months excellent ice routes may be found on waterfalls and cliffs in close proximity to major roads. Pokomoonshine is one example, with its well known "Positive Thinking" and the popular Chapel Pond area is another. As technical ice climbing has gained in popularity, the number of ice climbers on the more popular routes has greatly increased. This has resulted in many successful ascents of the more remote ice climbs such as those on Golden above Avalanche Lake. In recent years there has also been increased attention paid to alpine style ascents of these 4000 ft peaks by difficult routes. Many climbers who have tried the high peaks in winter have found that the weather conditions often make up for the lower summit elevations of the eastern Cordilleras. Indeed one can easily draw parallels with Scottish ice climbs as training for the Alps, and Adirondack winter climbs as a means of training for the ranges of western Canada. In many cases an alpine winter ascent of an Adirondack peak is as remote and certainly more difficult than many popular ascents of peaks in the western Canadian ranges.

The north face of Gothics in the winter is a good example. Ten years ago this peak was often climbed in two day trips from the "Garden" parking lot located just off route 9N. The round trip to the summit is about 13 miles, with an elevation gain of perhaps 3000 ft, most of which is to be found on the northern slopes and face of the mountain. While the approach via Johns Brook is relatively easy many parties have found to their dismay that once off the main track conditions can rapidly deteriorate. The usual access lies up Ore Bed Brook along a trail which leads to the Gothics/Saddleback col and eventually to the summit. Shortly after the Ore Bed lean-to one turns off the trail and bushwhacks up some tributary streams which lead to the base of Gothics north face. Under most conditions snowshoes are a necessity, if not up to the bushwhack certainly afterwards. The hard packed trail often

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start off nine in the morning and degenerate into high winds and swirling cloud, obscuring all but the most immediate details on the climb. Conditions vary so considerably that one can repeat the face route year after year and never really encounter the same conditions twice. The face can vary from excellent mixed snow and ice, to rime plastered rock, and sometimes little or no snow and ice - only frozen moss and frosty bush. The climb starts most often just at the righthand edge of a prominent arch and then continues more or less straight up to the summit. The first pitch is steep ice around 55 degrees. Ice screws and bushes provide the best belays. The lower pitches present moderate difficulties with reasonable pack loads. The middle pitches tend to be mainly steep snow with the occasional ice step. The final exit pitches are often on rime plastered rock with only psychological belays at best. Parties usually stay roped for the entire ascent for a fall anywhere on the face would be a serious matter. I have witnessed at least one spectacular fall on the lower pitches which was held by a belay. To encounter an Adirondack storm while on the north face ascent is to be subjected to the fury of a storm in the high mountains where one can barely stand on the summit ridges. Visibility can often be so bad that parties have been completely turned around in orientation on the summit and descended the wrong side of the mountain, as I did once while following the tracks of an earlier ascent party. In short no one can take the ascent or the descent off a winter climb in these mountains for granted.

In more recent years most parties have made the ascent in one long day, covering the 13 mile round trip in eight to twelve hours. This represents a fairly strenuous undertaking for a roped party of two but offers the advantage of a second day of ice climbing at lower elevations as a suitable reward and recovery. The north face route on Gothics is a popular and classic winter north face ascent and a rewarding climb when using alpine techniques.

Kevin O'Connell

Miscellaneous

About the Archives

The ACC Archives are housed with the Archives of the Canadian Rockies at the Peter and Catherine Whyte Foundation in Banff. The Banff Art Gallery and Banff Library have also been housed here for a number of years but now are to move elsewhere and space at the Whyte Foundation is to be used to develop an important centre for the display of mountaineering material. It will include the library of the Alpine Club of Canada which, owing to the interest of members in collecting mountaineering books and journals from the founding days of the ACC in 1906, is now one of the great mountaineering libraries of the world.

Some very interesting old cabins, among them one of Bill Peyto's, are being preserved on the grounds of the Whyte Foundation. They are to be used to store and display bulky items such as ice axes, skis, ropes, material from expeditions, etc.

This article is an invitation to those who have archival materials pertaining to activities in the Canadian mountains - whether of Club, Section, or individual activities, wherever climbers have sojourned together, written records, pictorial records, personal journals, maps, newspaper clippings, etc - to donate these materials to the ACC Archives.

The ACC has not really made a concerted effort to build up its Archives. It seems that the Club as it grows larger will change its character. Climbing and climbing gear of course have already changed radically. We need to preserve material that will tell us what membership in the ACC was like in the first 50 years of its existence. I have a theory that those of us who went to the GMC year after year took our camp and mountain experience for granted. We assumed that it followed what seemed to be an established pattern. But at that time few other people had the experience of trekking far up mountain valleys, setting up high camps, moving across glaciers, gaining expertise which would be shared in many ways. There was a different tempo...camp fires and singing and humour...many good raconteurs, legends of the early guides, of first ascents.

As I look for mementoes of this period I am taken back to some very special events, like the weekend we officially opened the Tantalus Hut on Lake Lovely Water in the Coast Mtns. A float plane flew in senior old-timers which included Phyl Munday and Harry Green, then ACC President. The rest of us - and there must have been 60 members there - were ferried across the Squamish River in our single row-boat and then picked our way from sea level to almost 4000 ft at the cabin. Most of the long time members of the Vancouver Section had made an effort to be there. The occasion was special in that it was the first ACC hut somewhere out in the Coast Mtns (the Mt Seymour Cabin was by 1961 less than an hour's drive from home) and it had been an achievement to lift materials and volunteer workers up to the site. So the day brought together all the generations in the Section including climbers who had made many of the first ascents in the Tantalus and Garibaldi Ranges. We could imagine climbers on Tantalus and Dione, two remote challenging peaks somewhere above us. Was Neal Carter there? He's not in the picture but I can hear him recalling the first climbing there, years before. I remember sitting on top of the Black Tusk in 1943 on a climb led by Neal. It was a lovely day and in our minds he took us along the skyline to the east of the Sentinel Pikes telling us about the first climbs in 1925 of a number of craggy tops and how these, especially Phyllis' Engine, were given their names. We took a picture of the old-timers and the reminiscences went on all weekend.

We would lose the Seymour Cabin when the parking lot of a Provincial Park put it on a public throughway. There was a memorable last gathering there, dozens of us as well as the old-timers recalling the good activities that originated at the cabin — New Year's Day ascents of The Peak (Seymour has three peaks), training sessions on rock and snow, work bees, parties. And we photographed four old-timers on the porch.

The Archives will welcome mementoes of these occasions, and similar ones with other Sections in other areas. What I find as I recall such occasions is that my mementoes only start to tell the story and I need complementary items — mementoes and reminiscences from other members.

Mary Fallis

Material can be sent to:

The Archives of the Canadian Rockies, Box 160, Banff, Alberta TOL OCO;
The Alpine Club of Canada, Box 1026, Banff, Alberta TOL OCO;

Last gathering at the 'big' Mt Seymour cabin

Front row Neal Carter, Roy Howard, Harold O'Connor, Eric Brooks; back row Jo Howard, Frank Smith, Peggy Carter, Amy Dalglish, Emmy Brooks, Bea Martin, Bill Wheatley, Mary Fallis



Tantalus hut opening ceremony 1961

Front row Phyllis Munday, Bill Mathews, Bert Brink; back row Eric Brooks, Ken White, Bea Martin, Tom Fyles, Jim Hudson, Major White, Mary Fallis



Or given to a member of the Archives Committee or to a Section officer. Sections will have a supply of accession forms that will be used to turn material over to the Archives.

We particularly ask members to let their families know about material they would like to go to the Archives.

Julia Henshaw Photographs Sought

Altitude Publishing Ltd. of Banff is seeking original photographs by Julia Henshaw for a forthcoming book on the wild flower illustrations of Mary Vaux Walcott, Mary Schäffer Warren, and Julia Henshaw.

Julia Henshaw, FRGS (1869 to 1937) was an original member of the ACC, joining in 1906. She attended many annual camps up until the mid 1920s and was Honorary Secretary from 1910 to 1912 and from 1914 to 1920. She became a skilled botanist, giving the wild flowers of British Columbia her special attention, and published several books on mountain wild flowers illustrated with her own excellent photographs.

Anyone having original prints or glass lantern slides by Julia Henshaw or knowing the whereabouts of such material please

contact Carole Harmon by letter to Altitude Publishing Ltd, Box 490, Banff, Alberta T0L 0C0, or by phone (call collect) 403-762-4548. Any assistance given will be greatly appreciated.

Mountaineering and the Ethics of Technique

In the summer of 1983 John Baldwin invited me to join Jean Heineman and him on a climbing trip to the somewhat unfrequented section of the Coast Mtns which lies between Bute and Toba Inlets. This was to be another in a series of long and original traverses out this way which John has put together over the past few years and it was intended to feature his preferred mode of access. We would be walking in and out. Rob Driscoll, a young climber from Vancouver, also joined the party.

We began with a sopping two day bushwhack up the Orford River. This was followed by two more days of drizzle and fog, and a further two days of wallowing in heavy snow as we plodded on towards our first air drop, in admittedly better weather. We did little actual climbing, nothing whatsoever of a technical nature.

Rob and I chafed a little under this inability to 'grapple' with the peaks. We wanted to get onto some steep rock or ice and put our technical skills to work; it was slightly frustrating to have to pass by possible challenges because there wasn't really enough time and we had to keep moving. But John and Jean seemed almost indifferent to weather or poor snow conditions; they cheerfully stormed ahead no matter what the conditions.

One night we had a discussion about mountain lovers versus those who love only climbing. The conversation induced a slight feeling of guilt in me. I wondered if I was worrying too much about achievement, losing the sense of beauty in the mountain environment through an obsession with technique. I thought of the early explorers of the range who had cheerfully invested weeks just to climb one remote peak.

The explorations of John Clarke were also much on our minds during the expedition for he had pioneered some of the ground we were going over. My attitude to this enigmatic climber had always been ambiguous; I wondered if he was missing the point by not concentrating more on technical ascents. But John's and Jean's conviction that Clarke was the real exponent of true mountaineering ethics in the Coast Mtns set me reappraising my conclusions. For Clarke it was simply being in the mountains that mattered.

Issues in mountaineering ethics have occupied my thoughts for some time since. The narrow scope of the debate carried on sporadically in the journals aroused my fascination. In the mountains climbers of outstanding promise were dying by the score. One need only count the toll in the English speaking world over the past dozen years; Ian Clough, Leif Patterson, Gary Ullin, Escourt, Hasten, Patey, Al Givler, McKeith and Lauchlan, Unsoeld, Burke, Boardman, Tasker, Grassman, Jotterand, Alex McIntyre, Sorensen, George Manson and his companions.¹ The price of climbing in the forefront of modern alpinism has now become the willingness to risk one's life in the pursuit of greater and greater difficulties. In the American Alpine Journal we now have a new

category of reportage to accommodate the statistics; "Ascent and Tragedy", and two to three dozen climbers are reported as dying in the Himalaya each year, while in the European Alps the fatality rate is reportedly close to 1000 deaths per season.

Yet in the journals this commitment to extreme boldness does not seem to have provoked much comment or reaction. The situation may be contrasted with the willingness of writers in an older tradition of mountaineering to see a moral failing in such total commitment. Writing in 1954 James Ramsey Ullman labelled the first climbers of the Eiger North Face as individuals with "more luck than sense". Speaking of the situation which prevailed in the Alps during the thirties he wrote: "Competition was everything Competition literally to the death...seldom has there been an unhappier example of how hysterical and perverted nationalism can infect even the most unpolitical of activities."² And Henry Hall, returning from Waddington in the thirties, suggested that any attempt on the main tower would be foolish and likely fatal.

One would expect that such a staggering expenditure of brilliant talent and human potential in the modern expedition game might at least provoke a little intelligent soul-searching in the journals. I have been unable to find anything of this nature taking place. The hotly contested ethical question is still the use of the bolt.³ I wondered if this was right.

A second question concerned me. What relationship exists between modern alpinism and our society's publicly held sense of values? Are modern extreme climbers to be regarded as iconoclasts, rebels against the stifling mediocrity and boredom of technological existence? Climbers often seem to take precisely this view of themselves. Or are they, in fact, the ultimate representatives of technological society — those who have assimilated most completely the public beliefs of western society? I thought that the second question might answer the first.

Before going any further, however, I should explain my use of the word "technique". Climbers refer to a climb as technical when it is seen to involve difficulties which require the use of artificial protection beyond iceaxe and rope. A broader use of the word however will be more frequently employed in this essay. In this sense technique is an attitude, a way of perceiving and organizing our lives. In his book *The Technological Society* Jacques Ellul uses the word in this way and I am accepting his definition. The concept is a little elusive. Ellul's definition was "the totality of methods rationally arrived at and having absolute efficiency (for a given stage of development) in every field of human activity."⁴ What Ellul distrusted was the complete ascendancy of the standardized programme, the agreed upon procedure, the flow chart —in short mechanized thinking —to achieve results which had been predetermined. Technique is the enemy of the spontaneous and irrational, the casual and the carefree. It seeks always a better way of doing things and works toward the eradication of disorder through system.

Climbing literature has used technique in both senses of the word. In North America the issues have been framed around practices in the field of rock climbing, most specifically with regard to the legitimacy and use of various kinds of protection, to a lesser extent with the validity of certain routes. Concerns over

guidebooks, first ascent fever, aircraft access, commercialism, publicity and soloing are also part of the debate.

Commentators have zeroed in on questions of “pro” so completely however, that many see ethical issues materialize the moment one reaches for a chock. John Lauchlan for example, writing in CAJ1982, spoke of relief at not having to follow the “ethical” lead of a climber who was attempting to lead a difficult ice pitch without resting on his tools.⁵ I fail to see that any truly ethical issue was involved here. A decision to use non destructive aid may be crucial to the question of style, but not to the tightness of human conduct. Ethical standards arise from interaction between persons. Robbins explains the point in the second volume of Rockcraft:

Although a climber may set as a personal goal the ascent of a route in as good or better style than the first ascent party, it does not follow that others should feel constrained to follow that example...it is a bit much to expect anyone to climb for any reason other than his own pleasure. If someone wants to use aid on the normal route of Higher Spire, that surely is their business and no one else's. Let everyone climb as they please, as long as they don't interfere with the right of others to do the same, (my emphasis)⁶

Issues of clean climbing are not the same thing. To widen a crack by the use of pitons is unethical in that others are affected by the act; it makes the climb easier for them, different in character from the first ascent.

While these distinctions are easily accepted by most modern climbers, the more interesting question is the relationship between the developing rules of protection and our public sense (as climbers) of what is valuable and important in our sport. The argument for a rigorous code of protection, for example, runs somewhat along these lines: avoiding questionable practices (excessive bolting, placing pro on rappel, etc) keeps standards of climbing high, prevents the over development of cliffs with its consequent trivialization of the finer lines, and maintains the quality of the experience.

Yet thoughtful writers have questioned that it is somehow intrinsically better to climb at the highest standard. Andrew Gruft, writing in CAJ 1973, observed that it could be more rewarding for a weaker climber to struggle up a peak in mediocre style than for a stronger climber to climb it in fine style. And in a brilliant essay called “Mountaineering's Real Values” Dick Sale suggested that the modern obsession with difficulty threatened “the basic roots of climbing”. “We are led to believe,” he said, “that only the opinions of the leading climbers are relevant...the net result is a pervasive impression that hard climbing is all important.” Sale rejected the idea that mountaineering values could be founded on technique; like Gruft he plumped for the sum total of the experience. He compared the literary treatment of Hermann Buhl and Dougal Haston:

The exploit of Hermann Buhl on Nanga Parbat was impressive, not because it was an ascent of awesome technical difficulty, but because it required an inner fire that most of us cannot hope to emulate. In the years since Buhl's climb we have had commentaries on his life, and they have usually touched on the human aspects of his ascents. But, if his death had been more recent, would he have received such a tribute? Or would he have received, as did

Dougal Haston, merely a catalogue of climbs, as though that was all life comprised.... When I read his obituary, I was left with the vaguely hollow feeling that his life had amounted only to a handful of climbs, with no human significance.⁷

Conclusions one reaches about these ethical questions follow from the assumptions one begins with. It will be useful here to outline some of the assumptions behind my arguments.

Like George Grant and Jacques Ellul, on whom I am drawing heavily for this discussion, I assume that a fairly homogeneous sense of values exists in western society; most people believe in roughly the same things. George Grant identifies this shared ethic as the belief in liberalism, which dictates that man's essence is freedom and that therefore his business is to overcome and shape the forces of nature which restrain him from doing as he wishes. This belief is obviously a long way from ancient or Eastern philosophy which views man as part of a larger order, not essentially affected by human action. The chief tool in the shaping of the western world is technology but so pervasive is the spirit of conquest over the irrational and random that technique becomes more than just machinery or applied science. Life itself becomes in essence a search for efficiency and results. The highest form of human activity becomes that of problem solving.

Many social critics looking out over the phenomena of crime and terrorism, the decline of political institutions, cultism, “the flight from feeling”, and the exhaustion of workers, have condemned the liberal ethic as too inward looking to ever produce a whole or healthy society.⁸ I am not going to elaborate these criticisms because the complaints against technological society are quite familiar. What is interesting however is the extent of the conviction among climbers that, in the mountains, they can transcend these problems. Yet the record of modern extreme alpinism may well testify to the opposite conclusion.

Consider the problem solving aspect of Himalayan mountaineering: the logistical and organizational burdens which bury spontaneity (it is rumoured that the recent Russian ascent of the south-west face of Everest involved 1000 persons); the obsession with results and tendency to measure achievement not in human terms but in technical progress; the exaggeration of difficulties to attract and publicize sponsors.

The equating of mountaineering conquest with spiritual victories is seen as somewhat old fashioned and even embarrassing. Yet Herzog's account of the French ascent of Annapurna remains a masterpiece in the literature of mountaineering precisely because of the spiritual victories accrued. Herzog wrote:

Together we knew toil, joy and pain. My fervent wish is that the nine of us who were united in face of death should remain fraternally united through life.

In overstepping our limitations, in touching the extreme boundaries of man's world, we have come to know something of its true splendor. In my worst moments of anguish, I seemed to discover the deep significance of existence of which till then I had been unaware. I saw that it was better to be true than to be strong. The marks of the ordeal are apparent on my body. I was saved and

*I had won my freedom. This freedom, which I shall never lose, has given me the assurance and serenity of a man who has fulfilled himself. It has given me the rare joy of loving that which I used to despise. A new and splendid life has opened out before me.*⁹

Somehow this passage has a ring of truth which is missing from Messner's "the higher I climb the deeper I see into myself". I do not wish to denigrate Reinhold Messner, a man of immense courage and one of the world's greatest climbers. But I wonder if he has ever achieved the kind of spiritual victories that Herzog found (thinking in particular of Herzog's very full life after Annapurna). There is something terribly abstract and cold at the heart of Messner's climbing philosophy. For some the break with Habeler was sad and unfortunate. The break of course was necessary to an ethic which regards technique as the ultimate pole of value — a solo climb of Nanga Parbat satisfies the thirst for "absolute efficiency" which I have suggested has become a measure of "the good" in modern times. Yet it is possible to feel slightly disturbed at any credo which suggests that solo climbing represents the ultimate mountaineering experience.

This is a point of view which men like Geoffrey Winthrop Young would not have understood since it was "the ideal social fabric" of the halcyon years — in other words the friendships — which he believed gave especial value to mountaineering exploits. And it was Tom Patey's dictum that "good climbing and good company often go together; each is essential to the enjoyment of the other".

If we are not to view ascents as mere technical achievements we must have an ethic and a vocabulary with which to judge them. At present the standards focus on results and grow out of the ideology of technique: was the summit attained, was the difficulty extreme, was efficiency high? The question, for example, was any garbage left on the route, is seen as slightly ridiculous; the issue does not enter into the question of success in any way. Two avenues deserve discussion.

The first concerns the value distinction George Grant draws between science and the attitude to knowledge in western civilization when he speaks of modern scientific investigation as representing the victory of "power over wonder."¹⁰ This distinction is invoked by Royal Robbins in the fascinating interview published in *Mountain* following the Harding/Caldwell ascent of the Wall of Early Morning Light in Yosemite. Robbins' original objection to the climb stemmed from its technical emphasis; he felt that El Cap had been bolted into submission and that the technical thrust of the climb overshadowed the spiritual qualities shown during the ascent — the stubborn perseverance of spending 27 sometimes stormy days on a wall. In contrast Robbins offered Peter Haan's ascent of the Salathe, by then an old route in Yosemite. A solo climb by one who had never done a grade five route. Obviously the climb represented no "technical" advance (Robbins had already soloed El Cap) but, as he said, "the whole climb turned on a question of the human spirit".

Current mountaineering literature does not seem to regard "wonder" as sufficiently valuable however unless it is harnessed to "power". Writing in *CAJ* 1982 Geordie Howe finds Paddy Sherman's book *Expeditions to Nowhere* unsatisfactory simply because the climbs are not impressive enough. Mountaineering

books today are expected to describe extreme ascents; the human story is insufficient. There is no attempt to relate Sherman's travels to earlier traditions represented by the likes of Shipton and Tilman.

The trend is exemplified especially in the journal of the American Alpine Club which now publishes little other than the cream of the world's most spectacular technical mountaineering accounts. The commitment to history, science, or poetry is small. One ferrets through 247 pages of the 1983 version to discover an exceedingly brief account of the alpine adventure story of the year—Peter Hillary's brilliant ten month traverse of the Himalaya. Did the editors fail to pursue the author for a fuller account of this grand journey because Hillary did not solo any grade six alpine walls en route?

Attitudes to the human dimension coalesce around the issue of death on an expedition. Although at times continuing the climb following a fatal accident may be the ethical thing to do (undoubtedly Harlin would desperately have wished Hasten and Kor to realize his dream on the Eiger), the drift of current practice is to consider death as simply one of the challenges to be overcome on a route, something akin to a piece of overhanging ice. The leader of the Canadian Everest Expedition expressed this view as clearly as anyone. "A death on the mountain is simply an event, a logistical problem — just as getting up a tricky rock band is."¹¹ Here is the ethic of technique in its most naked manifestation. But if death is simply "a logistical problem", then human relationships at best are non-committal and utilitarian, and the act of continuing a climb despite fatalities affirms that the passing of friends makes no difference to our goals or aspirations.

Related to the traditions of wonder is secondly, the idea of simplicity. Here Chouinard has some thoughtful comments to offer in his handsome volume *Climbing Ice*. How, Chouinard asks, can we maintain the challenge of modern ice climbing given the degree to which technology has advanced? He observes:

*Modern man, enslaved by his technical imagination, is shovelling coal to a runaway locomotive. But technology should set him free, opening choices instead of dictating them. Declining a possible technology is the first step toward freedom from this bondage - and returning human values to control. The whole direction of climbing moves against the technological gradient. Here personal qualities like initiative, boldness, and technique are supported rather than suppressed by the tools of the trade.... This is the technological inversion: fewer tools applied with increasing delicacy. I was rewarded for walking this edge by seeing more sharply what was around me, and I felt more deeply what comes boiling up from within.*¹²

Although it is tempting to comment on the recent Canadian Everest Expedition in the light of these criteria, my comments are really directed at the big expedition game in general. It astonishes me how the participants in such exercises misconstrue their activities. They seem not to realize that large scale ventures of this kind are essentially organizational exercises, with radio calls replacing office memos, supply build ups mocking corporate strategies, and problems along the way being sorted out through bureaucratic procedures. To expect the human dimension to shine

through in such circumstances seems naive in the extreme. Nor does it seem accurate to me to suggest that problems or unhappiness on a venture like the Canadian Everest Expedition can be laid at the door of the expedition leader. In such a game the methods of technique provide the real leadership. Climbers are there to achieve a predetermined end by applying the methods of efficiency. The expedition is a success if the summit is attained and the technique applied was efficient in the eyes of modern climbing technocrats.

Who can look at the death toll in modern alpinism and deny that objective danger is now a necessary feature of “important” climbs? I do not think such a situation can be reconciled with the claims of “freedom” or spiritual transcendence which mountaineers invoke in support of their activities. To me the trend seems much closer to the pursuit of record breaking which trivializes modern international sport.

Nor are such climbers “free” in the most limited sense of choosing to go or not go. A British climber today hoping to establish himself as a professional is simply not free to turn back from the objectively hazardous. Witness Bonington’s candid comments in Everest Southwest Face as he agonized over the decision to remain in the International Expedition of 1972.¹³ yet Bonington knew the climb was doomed from the start and could only be a disaster in human terms. His agony was over the commercial situation; the impact the wrong decision might have on his career.

Before I leave the subject a word on the vogue for so called “alpine ascents” is in order. While these ascents are in many ways simpler than large expeditions, the decision to use or not use alpine style does not seem to me to be crucial to the question of whether technical or human values will be emphasized on a climb. Technique is not simply bolts and friends and fixed ropes; it is a whole way of perceiving experience. One can be just as bound up with the ethics of technique on a small endeavour as on a massive expedition. On a recent alpine style ascent of McKinley the party chose to go for the summit, leaving their companion who was suffering from oedema, at high camp and to his own devices.¹⁴ It would be fatuous indeed to praise such climbers because, after all, they did not use siege tactics.

The wisest words I have heard on this topic came from Peter Boardman:

It is the vogue nowadays to praise small, compact expeditions. Nevertheless, the self-appointed, armchair guardians of the ethics of Himalayan climbing should show more tolerance in their judgments. Actions, in climbing, speak far louder than words, but people do get killed with appalling ease in the Himalayas when ambition drives them to follow lines on photographs. It isn't always necessary to achieve a stylish ascent that can be related historically to the advancement of standards in the sport. The Himalayas, 1,500 miles long, and with countless objectives, offer one of the last spiritually expansive areas of modern mountaineering. Here, you can really feel that you are going where your nature leads you, instead of being pressurized in your ambition by ethical squabbles. In the Himalayas, the star to follow should be the attainment of a sense of personal satisfaction and enjoyment, and the sole guideline should be the preservation of the identity of the area and its inhabitants, by avoiding insensitive invasion and preventing desecration of the

*area's sanctity with litter, bulldozers and bolts.*¹⁵

I must conclude with some defence of my own status, for some may feel that this kind of discussion should be left to those who have the most at stake — the hard men themselves. Don Serl criticized Anders Ourum as a “dilettante” when he sought to enter the debate over the mounting of the Canadian Everest Expedition.¹⁶ The argument would be that only first hand experience of life on the extreme edge can render one competent to discuss these questions. The point has some validity. But my point is equally valid — how many of the best climbers have read Jacques Ellul or FH Bradley?

It might be asked what answers I propose for what I have characterized as an ethical dilemma. Are modern climbers supposed to stop taking chances? I do not suppose that this is likely to happen, or that the spate of spectacular ascents (and their resultant “tragedies”) is about to abate. These days men would rather be famous than live to grow old. And as I have tried to show, the drive behind the behaviour is a part of a larger social ethos which enwraps our age. Climbers are driven by more than they realize. Who could ever rationally consider the umpteenth ascent of a mountain worth lives expended? Who could ever say that increased efficiency in climbing a rock wall was an object worth dying for? I have no comprehensive answer to propose, beyond a tentative suggestion that climbing literature needs to represent a greater scale of values than it presently does.

Whether modern alpinism is ultimately an expression of “the good” is also a question I must reserve at present. If it is good that human society be ordered along principles of technique then the ascendancy of such principles in even so trivial a field as mountaineering can be seen as a step in the right direction. The difficulties of judgment in this area cannot be minimized. Many wise and compassionate men have believed that the world’s most pressing problems - starvation, poverty, illiteracy - can be overcome by the application of the methods of efficiency and organization. It may seem obvious that my sympathies lie with an older tradition. But there are ultimate questions involved in this debate which it would be pretentious to try and answer.

“I have learned that the mountains and death are irreconcilable” Don Serl wrote to me from India, shortly after leaving the Canadian Everest Expedition. At the time I was unsure of what he meant, beyond the commonplace. But as I have tried to show, the extreme spirit of modern alpinism seems to obviate those values which traditional mountaineering affirmed: spontaneity, idiosyncrasy, exaltation, a sense of belonging to an order which was greater and more meaningful than individual achievement.

Beyond the quest for wonder and simplicity of course, there is also the example of the true iconoclasts: MacInnes and Patey, Eric Newby, Tilman and Shipton, Doug Scott, Beckey, Muir, Norman Clyde. Canadian mountaineering is particularly rich in such figures: the Mundays, Tom Fyles, Culbert, Baldwin, Clarke.¹⁷ These determined individuals remind us that it yet remains possible to operate outside the basic assumptions of one’s time and still achieve a rare and meaningful significance.

Bruce Fairley

FOOTNOTES

1. Not all of these individuals died in the pursuit of extreme alpinism; they are included because their names are recognizable. Anyone who doubts that mountaineers are dying in unprecedented numbers is referred to the last few issues of the AAJ or any of the journals which treat climbing in the European Alps.

2. Modern climbers tend to belittle much of Ullman's writing partly, one suspects, because he was not a hard man. Also his style tends toward the eulogistic; modern readers prefer the grimmer school of "warts and all". My purpose here is simply to use Ullman as an example of ethical thinking evident in North American mountaineering at the time of his writing. The fact that he was chosen as the official historian of the American Everest Expedition shows that his values were those of the mountaineering establishment of his day, at least in the US. Quotations from *The Age of Mountaineering*, JB Lippincott, 1954, pp 76,73.

3. See, for example, most recently the debate in AAJ 1982 and 1983 or the re-emergence of the question in *Mountain* issues 91 and 92. Since this manuscript was written the article by Martin Boysen, "The Reason Why" (*High Magazine*, no 10, July 1983), has come to my attention. The article catches Boysen in a mood of reappraisal; without being judgmental he canvasses many of the issues raised in this article, concluding: "It is natural that a new generation of climbers will attempt ever more ambitious routes, but only if these can be accomplished safely will climbing truly advance."

4. J Ellul. *The Technological Society*. Knopf, 1964.

5. J Lauchlan. *Aggressive Treatment*. CAJ 1982:37.

6. R Robbins. *Advanced Rockcraft*. La Siesta Press, 1973. p 82.

7. D Sale. *Mountaineering's Real Values*. *Mountain* 58,1977. p 42.

8. A recent discussion is found in C Lasch, *The Culture of Narcissism*. WW Norton & Co Inc, 1979.

9. M Herzog. *Annapurna*. EP Dutton and Co Inc, 1952. p 12.

10. G Grant. *Technology and Empire*. House of Anansi, 1969, p 116.

11. Everest, *The Expedition Chronicle*. *Equinox*, V 2:7, January, 1983. p 84.

12. Y Chouinard. *Climbing Ice*. Sierra Club Books, 1978. p 188.

13. C Bonington. *Everest, Southwest Face*. Penguin, 1975. pp 30-44.

14. MJ 1982:141.

15. P Boardman. *Changabang Commentary*. *Mountain*. 55,1977. p 27.

16. Wrongly, in my opinion. Ourom may not have climbed in the Himalaya but he had been a regular contributor to *Mountain* and as such was well appraised of the "ethical" questions involved in large scale mountaineering undertakings. The Serl/Ourom debate may be found in the letters section of *The Vancouver Sun*, February 1982. I have been too lazy to go and look up the precise dates.

17. Some note on the inclusion of these various figures is in order. They have been chosen for widely different reasons: Patey, MacInnes, and Newby for their completely individual and self-reliant style; Tilman and Shipton for their self sufficiency and commitment to each other; Muir, Clyde, and Beckey for their exploratory spirit. I include Doug Scott because he has always been interested in climbing with his friends, even when they

have not been supermen. The Canadian group are all linked by the exploratory urge and a rejection of the easy way into the mountains — noted bushwhackers all! Also, in an age when technical achievement is most prized, the moderns among them have concentrated their efforts elsewhere. Those who were notable as soloists have soloed for reasons that had nothing to do with "technical" concerns.

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My research has been neither systematic nor comprehensive; I have tended to use sources I already knew about or was reading at the time. The big omission is *The Breach* by Rob Taylor, an account which perhaps more than any other would tend to confirm my thesis that in modern extreme alpinism "technique has become autonomous". Unfortunately I have thus far been unable to obtain a copy.

Listed below are the main sources (not included in Footnotes above) which I had in mind when I wrote the article; the list does not include the many accounts of Himalayan climbing — from Smythe and Shipton to Messner — which are alluded to throughout.

My thanks to Don Serl who read an earlier version of the manuscript and made a number of perspicuous comments on it.

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Group Communication Research on Mt Orizaba

The value of effective group communication need not be emphasized to those who have had expedition experience. I am sure many can vividly recall trips that have had communication breakdowns. This has been obvious with the recent Canadian Everest Expedition as well as many other less publicized adventures. No known studies have attempted to measure the effectiveness of leadership style or group management techniques related to communication in an expedition setting. This research project addressed these issues during a high altitude climb to Mt Orizaba, Mexico.

The literature in outdoor pursuits indicates a lack of empirical evidence pertaining to leadership and communication, therefore it was logical to apply the theory of other more established disciplines. The evidence in the human service industry and business management fields invariably describe the positive results of effective communication. In this study I have attempted to mold the theory of group communication to an outdoor pursuit setting.

Table 1 -FIRO 9, pre-test/post-test mean group comparison scores. Eberhard Grav

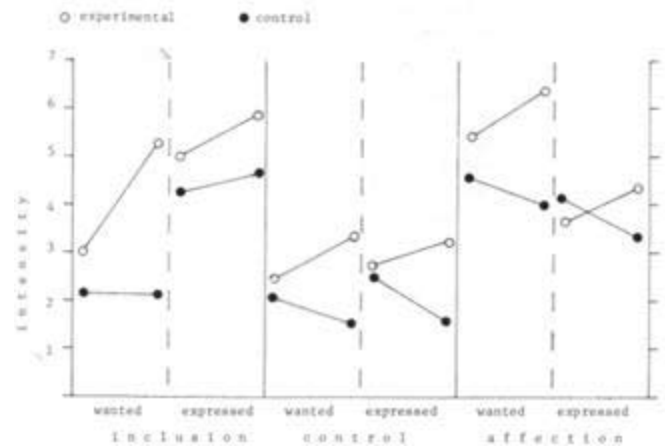


Table 2-perception variables, pre-test/post-test mean group comparison scores. Eberhard Grav

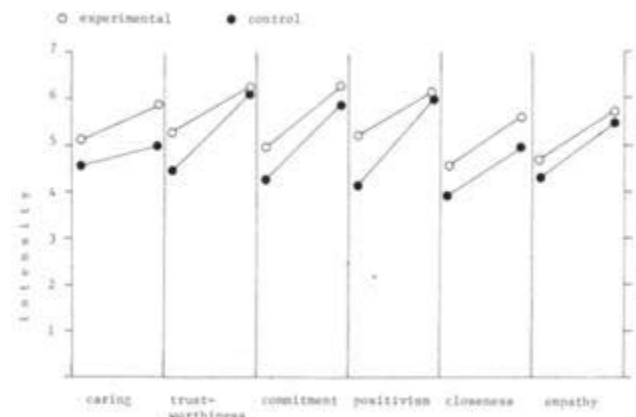
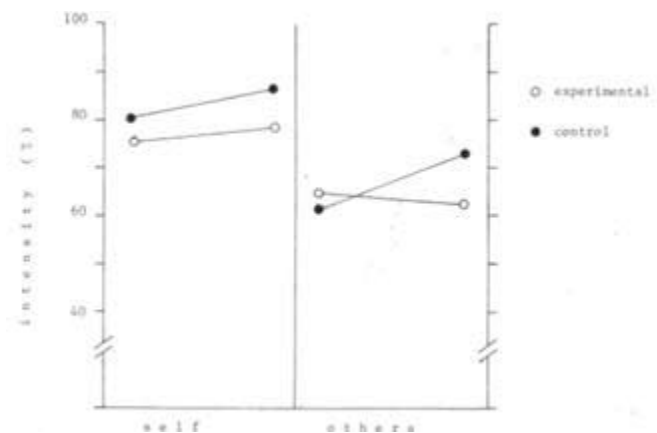


Table 3-acceptance variables, pre-test/post-test mean group comparison scores. Eberhard Grav



balanced due to the more intimate disclosing interaction between members.

Acceptance of Self and Others. The acceptance of self increased for both the control and the experimental groups. This is consistent with other researchers' results due to positive outdoor pursuit experiences. As Figure 3 indicates there was a lower positive increase in the experimental group than in the control group. This may mean that the treatment of the interpersonal group spanned personal doors in individuals which resulted in an attitude of higher

TREATMENT MODEL

The treatment applied to this study was in the form of an interpersonal communication group. This process follows a model developed by the University of Calgary, Educational Psychology Department. In brief, the group's communication is facilitated by an experienced group leader (in this case the author) through a series of free flowing discussions. Group members are encouraged to disclose personal goals, conflicts, or concerns with themselves or others in the group. The leader helps the group members explore and work through these issues. An atmosphere of group trust and safety is developed through honesty and confidentiality. Specific communications skills and an awareness of group development is required to orchestrate this process. Some of these specific skills are: attending actively to the group, communicating clearly, personal role modeling, regulating the group process, and facilitating closure of specific issues.

RESEARCH DESIGN

This study was designed to measure the changes of interpersonal behaviour and attitude within two separate randomly selected groups. The experimental group was subjected to the treatment in the form of 12 interpersonal group meetings. The control group was expected to function as it normally would under similar expedition conditions.

The interpersonal communication meetings were conducted at predetermined days and times and ranged in length from one to two hours each over the two week life of the group. These meetings were private and segregated from the rest of the expedition's meetings. The variables measured consisted of: 1 - FIRO-B Scale (Fundamental Interpersonal Orientation Behaviour), 2 - Perception of Others Rating, 3 - Acceptance of Self and Others. A pre-test/post-test questionnaire design was administered to both groups.

RESEARCH RESULTS

FIRO-B Scale. Figure 1 indicates the trends of the changes in the variables of inclusion, control, and affection between the two groups. The experimental group shows an increase in all of these factors which can be attributed to the effect of the treatment they received. The consistent trend is towards an increased need in the areas of interpersonal contact. Conversely, the control group showed the opposite trend after the expedition experience. This is indicative of a decreasing need for interpersonal contact. Interpretively these results may be attributed to the closer personal experiences the experimental group had due to the interpersonal group. The control group may have been pushed further apart due to unresolved issues between members, often the case. The increase in the expressed inclusion factor may be attributed to the group's desire to be involved in the interpersonal group.

Perception of Others Rating. Figure 2 indicates the changes in the variables of caring, trust, commitment, positiveness, closeness, and empathy. The experimental group had a greater and therefore more positive rating change in all of these variables compared to the control group. In one factor (positiveness) the control group actually outrated the experimental group although its pre-test rating began at a much lower baseline. For each of these variables the results can be interpreted as showing that the interpersonal group did have a more positive impact on the perceptions of each other due to their treatment model. Again these factors were probably

personal expectations. The results of the acceptance of others had a complete opposite effect on the two groups due to the expedition experience. The control group indicated that they were much more accepting of others while the treatment group were less accepting than before the trip. There may be many rationales for this attitude change in the treatment group which is only speculative at the least. My thoughts are that the treatment group had seen hope for change in others and were frustrated or non-accepting when expectations did not materialize.

CONCLUSION

The impact of the treatment in the form of interpersonal communication in a group setting was significant enough to show positive changes in individuals. This study reinforces the value of applying communication skills in a structured setting while working with groups in an outdoor extended adventure.

On a more subjective note, the observed growth and development of this particular group (as individuals) was extremely rewarding to view under these unusual conditions. Undoubtedly the intensity of the group interaction was facilitated by the sharing of a very tangible group goal (ie to climb the mountain), the exact reason most of us are drawn together. But regardless, to deny the personal contact and social rewards of group experiences would be foolish. For example, the change in some members' attitudes were quite touching. One member who later admitted to having

weak interpersonal skills stated at the first meeting that his only goal and measure of expedition success was to reach the summit of the mountain. At the last session he replied to a similar question that his goal was reached by just being a part of the interpersonal group. Many similar changes in attitudes were also shared by other group members.

It is hoped that this study has shed some light on and insight into the usefulness and applicability of an effective method for managing and leading the communication network of extended outdoor group adventures. The trail has been broken for other researchers and humanists to continue the pursuit into this field of study.

As a final note to satisfy those who value more pragmatic experiences, the entire party of 16 successfully attained Mt Orizaba's summit (18,820 ft) without a hitch.

Eberhard Grav, BPE, MED

I would like to thank Dr George Kinnear and all of the participants on the trip for their contribution and co-operation to help make this research project possible. Financial and academic support was provided by The University of Calgary Research Grants Office and Physical Education Department. For more detailed information regarding this study write to Eberhard Grav, The Banff Centre, Banff, Alberta TOL OCO.

Group Communication Research: group summit photo on Mt Orizaba. Jim Elzinga



Obituaries

Virginia Ball

Associate member since 1966.

Tom Dalton

Junior member since 1980.

Margot Grzywacz

Senior member since 1953. Died March 1983.

Michael Manning

Associate member since 1981. Died May 1983.

Harold G Peckham

Senior member 1936, Life member 1976. Died May 1983.

Edward Porter

Life member 1948, Service Badge 1980. Died 19 August 1983. His substantial donations to the ACC Library are to be designated The Edward Porter Collection.

John Brett 1895 to 1982

John Brett, a member of both the AAC and the ACC, died October (not September as in CAJ 1983:53) 1982 in Montreux, Switzerland. His death was preceded by that of his wife Elizabeth in September of the same year. John spent his youth in Geneva and began his climbing in the Alps before coming to Canada in 1913. He trained as an engineer, worked in Montreal for the Canadian Pacific Railway, then joined the army and served in France with the Engineering Corps. He returned to Montreal, worked with the Montreal Water Board, and became an engineering consultant. He served as an army mountaineering instructor in the Canadian Rockies during the Second World War.

John's love of the mountains kept him active in climbing for many years of his life. He was particularly active with the ACC as Eastern Vice-President from 1941 to 1947 and again from 1950 to 1954, and as President from 1958 to 1960. He received the Silver Rope award for climbing leadership in 1948 and the Service Badge award in 1982. He was an honorary member of the Geneva Section of the Swiss Alpine Club.

Left to right: John Brett, Eleanor Hamilton Birkes (standing), Elizabeth Brett, Fritz Wiessner.

After a climb of Gran Paradiso in the Italian Alps. Fritz Wiessner



John was well known to climbers in the Montreal area as he helped to found the ACC Montreal Section in 1942. He organized a successful ACC camp to the Bugaboos in the fifties and during a recent camp there I met many of his old friends who had known him in his most active years. They always mentioned his outstanding qualities of leadership and instruction.

I was fortunate to meet John while climbing at Val David almost 20 years ago. He missed leading the harder climbs but was still prepared to follow many routes, even into his late seventies. He was a tremendous example to all who knew him, no matter their age. His great love was rock climbing in the Laurentians which he helped to discover and tirelessly promoted. While on a ski outing in the Val David area in 1928 John recognized the potential for rock climbing in the Laurentians. It was not until 1932 however that John and the Findlay sisters climbed the Arabesque - to open climbing at Val David.

I last saw John and Elizabeth at their home in Val David before they returned to Switzerland. They were greatly missed by their friends in the Montreal area, many of whom kept in touch on a regular basis.

In recognition of his founding of the Montreal Section of the ACC and his contribution to rock climbing in Quebec, the Club presented John with the Service Badge. He was quite touched by this and indicated he was deeply grateful for having been remembered in this way. Before he died his account of the founding of the Montreal Section and various climbing anecdotes which had originally appeared in the CAJ in the fifties were republished in the Montreal Section Newsletter.

John will be missed by all who knew him as a climber and a friend. He enriched our lives in many ways whether or not we knew him personally. Perhaps the finest tribute we can pay him is that the mountain spirit he nurtured lives on through the Club he supported and the Section he helped to found.

Kevin O'Connell

Lawrence G Coveney 1898 to 1981

Lawrence Coveney, a member of the ACC since 1956 died after a short illness on 27 July 1981. Lawrence started rock climbing in the 1930s with the Appalachian Mountain Club after his doctor advised him that he should get some exercise for his bad back. Besides helping to pioneer various routes on cliffs in the eastern United States including the Shawangunks, he was a member of the party led by Fritz Wiessner and including Bill House which made the first free ascent of the Devil's Tower. He also made several early ascents in Canada including a few second ascents in the Bugaboos. He climbed throughout his long life and at the age of 70 he participated in the Alpine Club of Canada 1967 camp in the Mt Steele area of the Yukon Territory. Lawrence married Marguerite Schnellbacher, also a member of the ACC, in 1941. Marguerite died in 1962. They are survived by their daughter Lelia Coveney. He was president of the American Alpine Club from 1967 to 1970. Lawrence was especially helpful in the encouragement of younger climbers. He made possible a number of expeditions that probably

would not have occurred without his support. In the true sense he was a mountaineer and a gentleman. Others may be skyscrapers. Lawrence Coveney was a bridge.

N Clinch

Julian Harrison 1954 to 1983

Julian Harrison, ACC member since 1972, was a wonderful companion in the mountains - a cheerful, spontaneous person who loved the outdoors and relished every moment he spent there. Following literally in his father's footsteps, he began climbing in high school, making an ascent of Mt Welch in the Cheam Range. Later trips took him to the big peaks of the interior ranges - Robson, Hungabee, Victoria, Wheeler, Dawson, and many, many others. It seemed so unlikely that he would ever be caught out, for inevitably when one climbed with him one relied on his careful judgment; he read the mountain hazards and weather better than any of us. Ironically on 2 April 1983 a massive avalanche on Mt Shasta claimed his life. More than any other person I ever knew, Julian seemed to realize that life was to be lived with enthusiasm. He crammed his 29 years with achievements and activity, becoming president of the Varsity Outdoor Club at UBC, trekking with his wife Mary through Asia and the Himalaya, earning a medical degree, and achieving distinction in the field of cancer research. Through all of it he remained a warm and buoyant spirit — a friend whose wisdom and good humour will be deeply missed.

Bruce Fairley

Donald W Ruddick 1951 to 1983

Ice was his favourite route. Although Don's climbing centred around the Valley of the Ten Peaks, Aberdeen, Lefroy, and Victoria, there were other fields in which he expressed his creative talents. From his photography, to his music, to his religion, Don always had a new perspective to offer on virtually everything. He was an incredibly unique individual who brought a wild blend of eastern religion and philosophy to climbing. Through the lens of his camera he could transform an everyday scene into something almost mystical or magical. On the day that Prince Charles and Lady Diana were married he soloed Mt Aberdeen with the Toronto Globe and Mail and the Calgary Sun in his pack. At the summit he took a photo of their wedding picture in the foreground, the surrounding peaks in the background, and sent it to them as a wedding gift.

It seems that there can never be a real explanation when a friend dies suddenly. Everyone tries to rationalize the loss in one way or another but no one ever manages to succeed. When it comes to mountaineering there is always hindsight. "He should have been doing this. He shouldn't have done that." Yet who knows what forces were at work. Don was an ACC member for the years 1977 to 1981. He died while soloing the 3 / 3 1/2 couloir on the July 1st weekend. To his family and friends mere words cannot measure the loss. We will miss you Iceman.

Bill Ruddick, with help from friends

Reviews

Exploring The Coast Mountains On Skis

John Baldwin. John Baldwin, Vancouver, 1983. Also distributed by Gordon Soules, Vancouver. Black & white photographs, 10 maps. 144 pp. Paper. \$9.95

John Clarke recently commented that only John Baldwin knew as much or more about the south-western Coast Mtns as he did. As well as having ski toured extensively in the local mountains around Vancouver he has, remarkably, crossed the full length of three major icecaps that lie between Vancouver and Bella Coola. This most recent exploit was the complete ski traverse of the Pantheon, Waddington, and Whitemantle Ranges in May 1983. He is therefore, well qualified to write a touring guide. Even though this is the third guide to ski touring routes in the Vancouver area published within the last year, it is definitely the most comprehensive and the most useful to the ski mountaineer, including information on weather, avalanches, huts, access, and references.

The format is similar to Culbert's guide with the coast ranges divided into sections. For the peaks that are usually weekend trips from Vancouver the route descriptions are individualized, whereas for the larger icecaps the access, traverse, and escape routes are stressed. To describe the precise route for each peak covered by the guide would have been ponderous indeed, and was deferred to other available sources. As this guide is meant to be used with other sources of information, so each route description is meant to be read with a map in hand. However the guide includes several very good and useful hand drawn maps that aid the reader. John includes a useful difficulty scale for each trip but the descriptions of good ski runs encountered was somewhat limited. There are

many good photographs but they are, sadly, poorly reproduced.

Most of the information in this guide is available elsewhere but it is certainly easier to refer to one inexpensive source. Recognizing that access to many areas is rapidly changing, John has included an important list of phone numbers for information on local air services and road access. Where a particular area has not been visited on skis the author speculates on its potential. The guide does not include all possible trips but the ski mountaineer with a map and knowledge of the area can explore further.

This is not just another guidebook but a well written, well researched guide to ski touring the Coast Mtns and an important addition to the current guides to mountaineering in south-western BC.

Grant McCormack

Cold Climbs: The Great Snow And Ice Climbs Of The British Isles

Compiled by Ken Wilson, Dave Alcock, and John Barry. Diadem Books, London, 1983. Colour and black & white photographs, route diagrams, index. 280 pp. Cloth. \$39.95

A review of Cold Climbs is rather like a debate about motherhood: it is a thankless task to be critical. This collection of great winter classics comes in a large and glossy book, where no expense seems to have been spared. There are route diagrams, over 70 essays, and more than 240 photographs, one quarter of which are in superb colour. They combine to give a memorable collection of the best of British winter climbs.

The book is naturally centred on Scotland, with 47 chapters covering a wide variety of climbs from the Southern Uplands to the Northern Highlands. Thirteen of these are devoted to Ben Nevis, the spiritual home of Scottish winters. The Lakes and North Wales together make up 17 chapters. Two accounts summarize the fleeting nature of ice in Ireland.

The price varies from \$34 to \$40, enough to whack the breath out of anyone who is not well fed and fully employed. However it is probably worth it. This is no guidebook but a literary milestone in British climbing.

My enthusiasm for this magnum opus does not mean that it is without peccadilloes. There are a few very minor oddities in print and photographs. More interestingly, a question arises as to the criteria the author used to make his selection of climbs. Geographic representation of different areas is fair enough, but maybe it is stretching a point to include the Dreepie and Grey Mares Tail. The latter climb will likely remain soggy until another blinding winter like 1979. They seem to be poor fare when we could have had the Aonach Eagach instead. A bigger objection is to the inclusion of so many hard climbs from Wales. Three of these routes were first climbed in that year of 1979, at a time when the rest of the country was also undergoing a frenzy of ice climbing (even I was there!). What about Green Death? What about Eagle Front? It is difficult to avoid the impression that the authors tailored the climbs to fit the available photographs.

Ken Wilson has previously produced four similar books dealing in a selected manner with the magnificence of the British crags and hills. The first book *Hard Rock* (1975), is the only one that really caught the imagination of North Americans. I recall meeting an awestruck American climber reading the book while sitting at the top of Gogarth! *Cold Climbs* is the natural twin of *Hard Rock*, the long heralded winter edition. It was worth the wait.

It must have been a monumental task to gather such outstanding photographs and squeeze such literary gems out of the 54 contributors. The photographs are a source of wonder. Fort William is further north than Dawson Creek; to be enclosed in a gloomy gully thereabouts on a winter afternoon is no inspiration for fine photography.

It is in the quality of the essays however, where the book is elevated beyond its four predecessors. There is something about struggle, hardship, and the esoteric circumstances of winter that propels climbers into excelling themselves with the pen. Every ascent of a winter climb is different; every day brings new conditions and a fresh look at an old friend (or enemy!). Particularly eloquent are accounts by Harold Raeburn on Green Gully, Jimmy Marshall on Crowberry Gully, and Len Lovat in Stob Coire nan Lochan.

The Canadian who has never climbed in Scotland may well wonder what all the fuss is about. These short and crowded climbs may seem to fall short of the grandiose cascades of Canada. The uniqueness of Britain lies in the remarkable availability of the routes and summits. These little hills can be vicious, people die regularly, the wind is unrelenting in its power, and the stormy weather, the fickle conditions, demand respect from the mountaineer. Yet, the winter climber can rise late, spend the day climbing

thick plastic ice, trot along crusty ridges, traverse wind blasted summits, become lost on the descent, and still be down to the valley by evening. This wide variety of winter pleasures in the mountains contained within one short day, is generally denied to us here by the sheer scale of the mountains. Winter climbing in Britain, despite its stern nature, exudes a lingering charm.

The moods of winter are beautifully captured. The austerity, the melancholy glens, the gloomy corries, and the awesome howling of the arctic storms are all here. So too are memories of cloudless skies, thick green ice, and the magic of the late afternoon sun on the summits and ridges. The great legends leap out at the reader, demanding to be climbed. North East Buttress, Zero Gully, Crowberry Gully, Eagle Ridge Direct. It is a book that will always be an inspiration.

Kevin McLane

The Trekker's Guide To The Himalaya And Karakorum

Hugh Swift. Sierra Club books, San Francisco, 1982. Distributed in Canada by Douglas & McIntyre. Black & white photographs, maps. 342 pp. Paper. \$15.95

This guide covers all of Nepal, parts of Bhutan, Chitral, the Gilgit River valleys, Baltistan, Kashmir, Ladakh, Himachal Pradesh, Garhwal, and Sikkim. Swift begins with a brief outline of early exploration and travel in the Himalaya and then explains ways to trek to-day. Next is preparation - from books to read, documents required, equipment lists, costs, how to reach the various areas, food, porters, and much more. Chapters 4 to 13 document travel in each region in good detail and with much interesting 'extra' information. Chapter 14, entitled Himalayan Natural History, outlines the life zones and fauna. Two appendices treat maps available and how to stay well. A bibliography is followed by glossaries for Khowar, Burushashi, Balti, Ladakhi, Hindu/Urdu, and Tibetan, as well as an introduction to Nepali which includes pronunciation, basic grammar, useful words and phrases for along the trail, and a quite extensive vocabulary. A good buy is this, both for the wealth of information and for the quality of the 'read'.

A Field Guide To The West Coast Mountains

Stephen R Whitney. Douglas & McIntyre, Vancouver, 1983. 36 colour and 54 black & white illustrations by the author. 288 pp. Paper. \$16.95

Here is a field guide directed primarily to the amateur naturalist. It is intended for the person who has a broad but perhaps shallow interest in all the physical and biological aspects of nature. The avid birder or the well qualified botanist can each carry a book specializing in their particular interest but the mountain walker needs an easily carried guide to the wide range of natural history found in a specific area. This guide will generally satisfy those needs. The introduction claims it is ten guides rolled into one. Most of these ten are very small but there is not a wide variety of animals to be found in the mountains. Almost half the book is taken up by plants. The title West Coast Mountains includes all of the Cascade Range from southern BC to northern California, the Coast Mtns north to Bella Coola, the Vancouver Island Range, and the Olympic Mtns. On the eastern flank the area extends to the lower limit of continuous forest and on the west the lowland forests are included.

The book is divided into three parts, the physical aspects, the plants, and the animals. Part I includes a good description of the mountain ranges, the geology and the climate. Part II is a field guide of the ferns and flowering plants. Part III is a field guide of the animals and is subdivided into butterflies, fish, amphibians, reptiles, birds, and mammals. The fish section covers only trout and salmon. The amphibians covers salamanders, frogs and toads. The reptiles covers lizards and snakes. The book will be most used for the easily seen life forms; the plants and the birds. These two were reviewed in some detail to determine the adequacy of the lists and descriptions.

The large plant section has 118 pages of pictures and descriptions on a matte finish, non-reflecting paper. The illustrations are made by the author, some line drawings, others coloured. Colours are not always true to life. Scale is sometimes given but generally is missing and would be very helpful if used more often. Both scientific and common names are used. The flowering plants are divided into sections by flower colour to make it easy for the non-scientific reader to find the plant description. There appears to be a reasonably complete listing of plants found in the area.

The bird section has 33 pages and 124 illustrations. Neither paintings or descriptions are as good or complete as the two bird guides commonly used in this area. Only male birds in breeding plumage are illustrated and this is not adequate for identification of warblers, shorebirds, and ducks where female plumage is markedly different. Not listed, but found in the alpine regions of the coast range, is the cowbird.

Generally it will be possible to identify most birds seen in the mountains using this book but positive identification cannot be assured in some sightings. Other sections maintain the same high standards and will be useful on occasion. An important addition to the mammals section is two pages of animal tracks. This is a book that fills a specific need and along with small binoculars it will be a useful and not too large addition to the map, compass, and altimeter, which should be in the rucksack of hikers in the west coast mountains.

Norman Purssell

Avalanche Safety For Skiers And Climbers

Tony Daffern. Rocky Mountain Books, Calgary, 1983. Photographs and diagrams. About \$10

In the back country the cry "Avalanche!" strikes fear into the hearts of skiers and climbers more than any other. And so it should. Chances of being recovered alive after burial in an avalanche drop to 50% after only half an hour. Your best chance of survival in avalanche terrain is to avoid being caught in one in the first place. Now there is a clear and concise book available to back country travellers which can serve as either the first step in avalanche education or as a refresher text for the seasoned skier or climber.

Avalanche Safety is a very readable as well as a comprehensive treatment of the many factors involved in the creation of avalanche hazards, how to evaluate and recognize these hazards, and first aid and rescue. As with many mountaineering subjects there are a number of books available for both beginner and experienced back country user on avalanches. However a book left unread because of technical language, complicated charts and graphs, or dry prose,

is of little use. Daffern's book not only informs in a clear, readable style, it also offers many examples to which the reader can often personally relate his or her own experiences.

Avalanche Safety opens with several classic examples drawn from the disastrous spring of 1981 in the Canadian Rockies which clearly illustrate the factors which contribute to creation of avalanche hazards. Expanding on these factors the author impresses on readers the need for continuous assessment of these factors for themselves during the course of a day trip or a major expedition. It is this treatment of the reader, addressing him or her as an individual, that adds to the seriousness of the subject on a very personal level.

The topic of snow crystals, often a very dry subject in most publications dealing with travel in snow terrain, is treated in such a manner that the reader can clearly understand how changing snow conditions contribute to avalanche hazards. The reader also can understand the conditions under which snow will stabilize to reduce these hazards. Being aware of the changing nature of snow as the day progresses and as the terrain changes is an important step in evaluating the dangers that a particular route may pose.

Hazard evaluation and route finding are both dealt with in the context that places responsibility on each individual who undertakes to travel in the back country. Daffern impresses on the reader that the ultimate decision belongs to each one of us and we must constantly weigh the many variables against the very personal and, often difficult, decision whether to continue on or turn back in the face of increasing risks. Throughout the book the reader cannot help but be impressed with the seriousness of the subject; it's your decision and it could be a life or death one. This is an excellent text for all levels of back country user and as an experienced teacher of avalanche courses Daffern warns the reader that books are only the beginning of education. Knowledge must be applied in real situations on a regular basis to be of value. The photographs and diagrams that accompany the text have excellent captions relating to the topic under discussion. Many of the photographs illustrate several points and help the reader understand the relationship between a number of factors relating to avalanche terrain. Even skiers and climbers who feel they have experience and an understanding of avalanche hazards will find something of value in *Avalanche Safety*. Every skier or climber who ventures into snow terrain should have a personal copy, if only to refresh his memory on an annual basis before venturing into areas of potential avalanche hazard.

Bev Bendell

Legacy In Ice: The Vaux Family And The Canadian Alps

Edward Cavell. The Whyte Foundation, Banff, 1983. 69 black & white photographs, 2 maps. 98 pp. Paper. \$19.95

This is a tribute to the Vaux family and their scientific and photographic work, particularly around Glacier House in the Selkirk Range at the turn of the century. Well educated Quakers from Philadelphia, with a typically Victorian curiosity about natural history, George Vaux Sr and his children Mary, George Jr, and William Jr first saw the Selkirks in 1897. They were travelling across country on the newly opened CPR, stayed at Glacier House a few days, hiked to the nearby Illecillewaet Glacier and took a

few photographs, thereby initiating a prolonged connection with the mountain area.

George Vaux Sr (1832 to 1915) and his brother William (1811 to 1882) were businessmen, the former also being an expert on Quaker history and the latter also an avid mineralogist and supporter of the Academy of Natural Sciences. William Jr (1872 to 1908) died young of tuberculosis but, as the author notes, "it was his fascination with glaciers, his drive and technical ability that caused the family to start on the glacial studies." He maintained the records, undertook the calculations, and authored the publications with some assistance from his brother and sister. George Jr (1863 to 1927) became a lawyer, a member of the Board of Indian Commissioners, amassed a collection of over 10,000 mineral specimens, and was a keen outdoors-man and photographer. He was a founding member of the American and Canadian Alpine Clubs and in 1899 became the first American to climb Mt Sir Donald. Mary Vaux (1860 to 1940) was less educated, uninvolved in business, and traditionally occupied with housekeeping. However she had the longest involvement with the mountains, returning regularly until 1939, and was the first woman in the Yoho Valley, the first to climb over 10,000 ft, and the first through the Nakimu Caves. She helped out with the glacier studies, undertook them herself between 1911 and 1922, and produced lantern slide shows and publications. In 1914 she married Dr Charles Walcott of the Smithsonian who was studying the Burgess Shales, near Field. Referred to at ACC camps as 'the Artist' she became a skilled botanical painter and in 1925 published five volumes on "North American Wildflowers".

Having provided background on the family the author summarizes their glacier studies, the first continuous ones in Canada which involved 20 years of observation, ten years of annual measurement, and resulted in eight monographs — notably William Vaux's *Modern Glaciers* published in 1907. They began in 1887 by photographing and making a rough map of the tongue of the Illecillewaet Glacier, then at its point of maximum recent advance. In 1897 they initiated more systematic and detailed work using compass and barometer, and taking full plate photographs from fixed viewpoints. Concentrating on the Illecillewaet and Asulkan Glaciers, they also undertook some surveys of the Yoho, Victoria, and Wenkchemna Glaciers. The ongoing debate about how glaciers moved or flowed led them to install steel plates across the tongue of the Illecillewaet in 1899. These were surveyed regularly and replaced in 1906 and 1909 as they disappeared through glacier movement or melting. Mary Vaux undertook the last measurements, made by the family in 1922, though Arthur Wheeler and the scientific section of the ACC maintained observations of the Yoho Glacier, and the Illecillewaet Glacier has been surveyed again in recent years by Parks Canada staff.

Although their photography was integral to the glacier studies, as the author recognizes correctly, it deserves further discussion because of its broader coverage, significance, and value today. George, William, and Mary, while regarding themselves as amateurs, had become accomplished photographers by the time they visited the mountains and were interested in the artistic as well as the documentary potential of this rapidly evolving medium. George and Mary exhibited photos of the Yellowstone area at an 1886 exhibition of the Photographic Society of Philadelphia and, with William, gave presentations, especially on mountain

photography, at Society meetings. George and Mary became associate members of the breakaway, now famous, Stieglitz group, but remained essentially 'straight' documentary photographers, hence their work was not always highly acclaimed.

The taking of the photographs was initially largely the responsibility of the two brothers but after William's death Mary became more active and she was always responsible for the printing. She made platinum prints using a hot development technique on German paper. We are fortunate that many negatives and prints have survived to today and are now preserved in the Archives of the Canadian Rockies.

In summary the author notes, "the Vaux family was exceptional in the technical and aesthetic mastery of photographing the impossibly hard edged northern mountain light that cuts and shatters a scene rather than modeling it. The Vauxes, through dedication and persistence, produced a significant body of work that places them among the select few who have captured a portion of the mountain essence."

The book, though limited to a folio section of 32 large photographs, includes numerous smaller reproductions and gives a good impression of the range of subjects photographed by the Vaux family, from glaciers to mountains, Swiss guides to railway engines, and the quality of their work.

In addition a substantial part of the book is devoted to reproducing an edited version of the famous but elusive Glacier House Scrapbook. Dr JH Stallard of California initiated the Scrapbook at the Glacier Hotel in 1897 so that visitors could record their impressions of the area. The Vaux family contributed regularly to the Scrapbook and augmented it with their publications. It was maintained until 1910 and provides "an intriguing reflection of the Victorian experience in the Canadian Alps". Here can be found accounts of mountain ascents such as the first of Mt Dawson by Charles Fay in 1899, and the first ascent of Sir Donald by a woman, Evelyn Berens, in 1901. Here lie insights into the work and character of Swiss guides such as Ed Feuz and Frederick Michel. Poems follow scientific observations, humorous anecdotes, complaints about mosquitoes, tips on clothing and photography, weather information, and rapturous descriptions of scenery. While only one third of the Scrapbook has been reproduced it has been annotated and illustrated with Vaux photographs. Even such a partial version is to be welcomed for the original copy, having survived for decades, was lost mysteriously in the 1970s and legible xerox reproductions are few and far between.

Thus *Legacy in Ice* provides a visual record of the Selkirk landscape at the turn of the century, an insight into the experiences this landscape afforded, and an introduction to and commemoration of the activities of one family, the Vauxes, who were more involved with this landscape than any other visitors during this period. The book is elegantly and spaciouly produced using high quality paper and a clear printing style. While book collectors may have preferred a hardback version, at least this paperback version could be priced reasonably and accordingly made available to a wider and well-deserved audience.

John Marsh

Snow War: An Illustrated History Of Rogers Pass, Glacier National Park, Bc

John Woods and John Marsh. Parks Canada & The National and Provincial Parks Association of Canada (Suite 308, 47 Colborne Street, Toronto, Ontario M5E 1E3). Black & white photographs, 11 x 8 1/2. 52 pp. Paper. \$6 by mail from NPPAC.

To commemorate the discovery of Rogers Pass in 1881, this book presents an impressive selection of photographs. The majority of them document the period between 1884 to 1916 when the CPR maintained rail service through the pass at tremendous cost. The years when 150 to 200 ft high wooden trestles were built to span steep gorges, only to be replaced by stone and metal bridges as the hazards of sparks from steam locomotives were soon realized. The years when scores of men hand dug through compacted snow to clear the track and to recover the bodies of their fellow workers buried by avalanche. When one realizes the extent of lives lost over the years of rail operation in the pass, one appreciates more how the development of heavy equipment has reduced that same loss of life. The cover photo of a snow and ice encrusted locomotive is a dramatic reminder that winter is a powerful force to be reckoned with and that the Glacier Park Snow Research team does just that in its constant monitoring of the avalanche danger in Rogers Pass. The quality of the black and white photographs is good and the text accompanying them a valuable addition to EC's mountain history.

JE Gilchrist

A Beast The Color Of Winter: The Mountain Goat Observed

Douglas H Chadwick. Sierra Club Books, San Francisco, 1983. Distributed in Canada by Douglas & McIntyre. Black & white photographs, line drawings, maps. 208 pp. Cloth. \$19.95

Douglas Chadwick studied mountain goats in the Rocky Mtns of western Montana year round for seven years. His study centred on the social behaviour and dynamics of goat populations. The book presents a composite of his knowledge of goats and his experiences at his field camps in the remote mountain areas written in a light but informative style.

The narrative starts with the birth of a goat kid, then examines different aspects of mountain goat life through the year. Mountain goats, built for strength and sure-footedness rather than speed, are well adapted to their precipitous terrain (70% of their time is spent on slopes steeper than 40 degrees). A result of the mountain goat's extreme environmental niche is they are less subject to predation, competition, and serious disease than any other North American ungulate. Environmental hazards such as harsh winters, rock fall, and avalanches play the significant role in controlling populations of goats.

Those, such as mountain climbers, who are familiar with high rocky terrain may find it hard to imagine that any large animal could find enough to eat, particularly in winter. Chadwick explains how partitioning of summer and winter range and a complex social system enables goats to live in this marginal habitat. He also describes in detail the social interactions and behavioural traits and postures that are the basis of communication to goats.

Besides discussing mountain goats Chadwick touches on the biology of grizzly bears, wolverines, elk, and deer to give the reader

an appreciation of the diversity of adaptations to the environment.

In the final chapter he criticizes previous hunting management practices. These were based on inadequate knowledge of the dynamics of goat populations. This, along with increased access to goat ranges, has taken a serious toll of many goat populations.

Douglas Chadwick's writing shows he is both sensitive and inquisitive. He provides personal insights of a variety of wildlife from grizzly bears to small trout feeding on insects in a stream. I recommend the book to anyone who wants to expand their appreciation of the outdoors.

Moiria Lemon

Mountains Of The Middle Kingdom: Exploring The High Peaks Of China And Tibet

Galen Rowell. Douglas & McIntyre/Sierra Club Books, Vancouver 1983.

83 colour and 48 black & white photographs. 191 pp. Cloth. \$45

Mountains of the Middle Kingdom is an exploration of the mountainous regions of Tibet and western China. This almost unknown area has, for political reasons, escaped the post-war boom of Himalayan climbing and trekking. Knowledge of the region is contained only in obscure books, most out of print and all hard to find. Maps of the area tend to be either inaccurate or non-existent.

By 1950, when the area was closed, few Westerners had visited this vast region. The stories they had brought back (God Kings and mountains higher than Everest) were scarcely less wonderful than Marco Polo's of six and a half centuries before. The 1950 closure served to preserve the mystery and romance almost to the present day.

Since 1980, when limited access became available, Galen Rowell has made several climbing and trekking trips to China and Tibet. In this book he tells of his experiences on the mountains and among the people who live there. He also contrasts his experiences with those of earlier travellers and climbers such as Shipton, Tilman, Harrer, and many others. There is a rich variety of climbing stories, among them that of a Chinese mountaineer, Chu, climbing a difficult rock pitch at 28,000 ft in his inner socks, a modern ski descent from nearly 25,000 ft Muztagata, and the account of the 1932 American ascent of Minya Konka where "our total climbing personnel consisted of only four men, two of whom had little previous mountain experience, a woefully small number to tackle an unknown 25,000 ft giant...."

Many voices speak in this book and only some of them are climbers. A Chinese bureaucrat in Tibet wishes to go home to Peking where his family has waited for five years. A Golok Tribesman speaks wistfully of an area once rich in wildlife. "I saw my last nyan (mountain sheep) when I was eighteen; now I am forty-three. None of my comrades have seen any sign of them in many, many years."

Powell's photographs and their reproduction are magnificent. The cover photo of the Potala Palace at the end of the rainbow will not easily be forgotten. Forty-eight old photographs, Mallory and Irvine setting out from the north col on Everest to cite but one, add

a great deal as well.

My only problem is with the lack of maps of the areas visited by the author. The one large map is nice but not too helpful for following the action.

At \$45 this is not an inexpensive book but it is very well put together and should give lasting enjoyment.

John Manuel

Kilimanjaro

John Reader. Universe Books, New York, 1982. 82 colour and 11 black illustrations. 85 pp. Cloth. \$25 US

Kilimanjaro, for being the highest mountain in Africa (5860 m), for its isolation and its place in African history and legend, lends itself perhaps better than any other mountain in the world for a good portrayal in both text and plate. Author Reader seeks a wide audience, his work well exceeding what would pertain solely to mountaineering. There are eight chapters, of which two are historical, covering early approaches and explorations until 1886, and three are scientific, surveying in a light and readable manner glaciation, vulcanology, and natural life. Chapter 3, Exploitation, though most interesting, seems out of place in this book since it describes the scramble of colonial powers for pieces of East Africa and concentrates on the benefic work of missionaries and evil doings of slave traders but does not delve into the real exploitation, that perpetrated by the modern white man. The remaining two chapters pertain to mountaineering proper, both historical and modern, including the author's own ascents to the roof of Africa. There is a good bibliography (English sources only), with more than 100 entries on Kilimanjaro and related topics (eg vulcanology). Photography, mostly by Reader, is most satisfying. Very fine colour plates, complemented with the reproduction of 19th century drawings, adorn the book and they represent its main merit. Reader's photographs of the weird vegetation of the higher moors that surround the mountain are to be commended.

There remains the question of audience. Do not expect itineraries and descriptions of routes, not even a complete history of Kilimanjaro climbing. The author's indifference for the modern climbs up the Great Barranco or the Kerstein Glacier is reflected in the lack of bibliographic sources that include modern accounts. And Mawenzi (5140 m), Kilimanjaro's smaller brother, distant but from which it cannot be separated, barely receives a few mentions. But this is indeed the portrait of a unique and immense mountain, of interest to mountaineers certainly, but also to travellers, trekkers, hikers, tourists, naturalists, and readers of *Africana* in general.

Evelio Echevarría

Everest Canada: The Ultimate Challenge

Al Burgess and Jim Palmer. Stoddart, General Publishing, Toronto, 1983. 115 colour photographs. 214 pp. Cloth. \$34.95

When I settled down to read *Everest Canada*, the story of the 1982 Canadian ascent, I was looking forward to a good read. But the cover itself was unsettling. *Everest Canada* had an uncomfortable resemblance to the logo of Air Canada, the expedition's major backer. The jacket drum-beating was worse. It spoke of the "Canadian team's world-record-breaking ascent," (I knew of no records maintained, let alone broken), and went on to say that Everest "is universally recognised as the highest mountain

in the world," (but perhaps is not!).

At least the Forward, which all expedition books seem to have, should be plain sailing. But no, for here we read that after the accidents in the icefall "the reduced team of climbers, in haste to achieve and justify the whole program, spent no time in bringing up further supplies." Bringing up supplies, of course, is mostly what Himalayan expeditions are about and this group was no exception. The Prelude too, with its avalanche and death was too dramatised for the reviewer's taste, so that expectations were not high for the actual story itself. Yet once Al Burgess/Jim Palmer finds his stride he is a fine storyteller and an observant traveller. Indeed, faced with what must be an entire wall full of Everest books, it must take quite a lot of courage, not to say some financial risk by the publisher, to embark upon yet one more; and this moreover about the South Col route, not some solo/winter/new route/no-supplementary-oxygen epic.

The Canadian Everest story quickens in the aftermath of two tragedies: the loss of three Sherpas in an avalanche, and the death of cameraman Blair Griffiths in the icefall a few days later. These back-to-back sorrows cause the team to re-examine their reasons for being on Everest. Here Burgess skilfully presents the situation and allows the various actors to play their roles. We feel the disparate forces pulling at these men and can empathize both with those who leave the expedition and those who stay. It is one thing to tell yourself that Everest is dangerous; it is another to carry down a lifeless companion.

Though he makes liberal use of his teammates' diaries, the story unfolds through Burgess' eyes. We have no way of knowing the balance of his viewpoint and at times it appears tough and hard hitting. Yet here again we can understand those who performed at less than maximum, possibly even see ourselves reflected in these struggles with self and Everest. We must remember that we are not spectators at a theatre where "the show must go on", but witnesses to a dream of high places turned to a numbing loss of confidence and resolve.

Ten or more of the team make their living through an association with mountains, whether as instructors, mountain park wardens, or equipment suppliers. In distinction to these persons Burgess refers to himself as a professional mountaineer, one who needs to climb at the forefront of the sport. With such a programme in mind it is reasonable that Burgess appears to be driving the team from the front during the dark days that follow the accidents. As they advance the climbers who remain coalesce into a strong unit. These few have a well-defined objective in mind. The team moves up to the South Col and from there two Canadians and four Sherpas reach the summit. It is ironic that Burgess himself is thwarted in his summit attempt by a faulty oxygen set. This episode provides him with a chance to re-consider the use of bottled oxygen, and he concludes that for him "if I couldn't climb a mountain without oxygen, I didn't deserve to climb it." One cannot help wondering whether he would have been so reflective if he had completed his ascent. The oxygen controversy has been around a long time. As of this writing I believe we can say the following: Without oxygen the climber at extreme altitude will move more slowly, will react more slowly, and will have impaired judgement as compared to the same climber with oxygen. These factors increase the risk in

an already high risk situation. The number of climbers who perish on Everest summit days is already high; the recent deaths of oxygenless summit climbers on Everest and K2 make the statistics even worse.

Everest Canada is a well told and handsomely illustrated account of an expedition in turmoil. The actual events are by turns tragic and even controversial. Finally leader Bill March and his team reach the summit. Can we call it a success after four deaths? Surely we can; men were tested and persevered. They are an inspiration to millions who will never approach a mountain yet followed the events and were moved by them.

Chris Jones

"I had chosen the Canadian expedition over the Lhotse climb because it was cheaper" writes author Al Burgess, renowned Himalayan mountaineer. He espouses the current light weight style of trying to climb the world's highest mountains. Yet the Canadian Everest Expedition's style grew to classical siege proportions. He had been invited to join a concurrent New Zealand expedition to Lhotse that planned to climb in his style. He declined for, at the last minute, the Canadian expedition invited Al Burgess, the most experienced high altitude mountaineer who has made a base camp in Canada. The expedition needed someone with his knowledge, skill, and experience. Though his heart was with the other expedition he chose Everest with the Canadians because, he admits, getting to the top of the world can't hurt his career as a professional climber.

Tragedy struck the expedition when three Sherpas and one climber were killed in two separate accidents in the Khumbu icefall, three days apart. In spite of this and the defection of seven participants, the expedition succeeded in putting two Canadians on top. Al wasn't one of them, his oxygen delivery system failing near the summit. Close, but no cigar. His international reputation tarnished, what should he do? Work through a commercial writer to produce the official expedition book to denigrate its efforts.

The book is a personal statement of the expedition's events from Burgess' point of view. It has been rushed into production in time for the Christmas season. There has been little input from others on the expedition, and that mostly from a few climbers' diary entries. Al's feelings while on the mountain are not recorded for he did not keep a journal.

He repeatedly down grades most other members of the team. They are characterized as basically inexperienced, sometimes incompetent, and often unable to work hard, qualities which contrast with those he attributes to himself. He feels the leadership of the expedition was irresponsible, lacking in judgement, and not consistent or hard working. He blames three of the deaths on the climb to these factors. And finally, the thread continuing through the book is that the only style of expedition in the Himalaya justifiable today is the light weight, small scale effort. Yet he joined it. Will climbers whose opinions Burgess cares about read the book and absolve him from the guilt he feels in being part of another large expedition on Everest?

In the rush to print, sloppy layout, amateur design, poor quality, copious errors and omissions abound. Only one photograph, the

book's cover, is credited. The quality of printing of the remainder of the images is so poor it reminds you of the early attempts at producing colour plates in climbing books of the 1950s. The reproductions have been far better in magazines that preceded this. Colours are awash, a lack of sharpness and contrast prevails. That we reached the summit was due in large part to the effort of the Sherpas, those hardy highlanders who supported us, even through the tragic loss of three of their own. Almost no successful expedition to the world's summit has been possible without their work. Yet there is no listing of their names, or even photographs of these gallant smiling folk. Even Sung-dare who, with this team, made his third visit to the summit, doesn't rate a picture.

Errors abound in captions, translations, spellings, and in verifiable factual material. One of many examples is Burgess' ghoulish description of the cremation of Sherpa Pasang Sona, which he didn't attend. "To see the flames and smoke writhing around the corpse's limbs and face, the grisly ghostly effect of them on the mouth and eyes and hair." In fact the body burned with dignity, hidden deep inside the pyre, as I personally witnessed. Could it be that Al's interpretations suffer as much as his delineation of facts?

There have been so many books on Everest that this one doesn't have any maps nor does it mention the altitude of the summit. Yet for some reason there is a diagram of the route, borrowed from a previous publication. Surely everyone must know the 'yak route' on Everest by heart now. In a break with another tradition, the relatively brief text is not divided into chapters but is a continuous narrative with only one character developed to any extent. Yet there are a few appendices on photography, equipment and food in this inappropriately titled schizophrenic account.

In the end most mountaineering expeditions compromise. The New Zealanders, given the opportunity, demanded use of the Canadians' food and equipment to spare journeys carrying their own through the icefall. Ours shunned responsibilities wherever possible. The climbers wanted to climb and not to organize, so this work was done by anyone who offered or could be persuaded to. The Canadian media machine publicized our preparations, the cost of having a corporate sponsor. With its affairs spread far and wide there was little opportunity for the close control that would bind the expedition into a tight knit unit. Then the Khumbu icefall split us apart. This expedition chronicle once again follows this pattern, the lone work of one of its least suited participants.

The Canadians tackled Everest with modest high altitude experience, using the grand style of every nation's first successful expedition to Everest. We had hoped to do a new route but with only half the team available after the accidents, we accomplished another ascent of the 'yak route'. That we succeeded in the face of such tragedy is an accomplishment. Burgess made a mistake in deciding to join us. His statement towards leader Bill March speaks for Al. "Human dignity can be lost in the scramble to achieve success by sacrificing ideals."

Stephen Bezruchka

Member, Canadian Everest Expedition, and its high altitude doctor

A Walk In The Sky: Climbing Hidden Peak

Nicholas Clinch. The Mountaineers, Seattle; The American

Alpine Club, New York; Douglas and McIntyre, Vancouver; 1982. Black & white and colour photographs, maps. 214 pp. Cloth. \$24.95

Americans were first up only one of the fourteen 8000 m peaks of the Himalaya which so dominated the psyche of the mountaineering community in the 1950s and early 60s. The American triumph came on Hidden Peak in the Karakorum in 1958, when a party led by Nick Clinch placed two men on the summit of what was then the second highest unclimbed peak in the world. The ascent is perhaps the least well known of any comparable expedition from the period. Yet there are many reasons why, in the 1980s, it is refreshing to pick up again this tale from the past and to consider how international expedition climbing has changed over the past 25 years.

I must admit that as I thumbed through the photographs of this volume before beginning my reading some doubts about the kind of values that would be represented here crossed my mind. Cowboys hats and lumberjack shirts on the Baltoro Glacier? One is tempted to wonder if the sheriff's contingent from some Louisiana bayou country has not become suddenly displaced to the Himalaya.

But I was pleasantly surprised. For this was a modest and restrained endeavour in every way - so much so that we have had to wait 23 years for the publication of the full story! It seems astonishing that Clinch was unable to locate a publisher for the book in the United States back in 1959, but then he seems even to have had a little trouble rounding up enough competent mountaineers to form the party in the first place. Fortunately Clinch has not doctored the original manuscript in any way, so that not the least interest of the book is that it provides a kind of "state of the art" look at American mountaineering in the late 1950s.

It also provides a good story. There is a great sense of living this expedition alongside the participants partly, one suspects, because they seem so much like one's own climbing friends. And if the book lacks the intensity of a volume such as *Storm and Sorrow*, it makes up for it with more humour (often of a self-deprecating nature) than most such accounts allow themselves:

Schoening believed in the efficacy of slogans to stimulate party morale. At six-thirty in the morning when we started to make the first relay to Camp I, Pete shouldered a sixty-pound load and cried, "Bearcat!" All the other sahibs looked at him as if he had lost his mind. It was a try....

This expedition was a happy affair, with singing and dancing and a lot of laughs colouring the approach march. And while this prelude to the climb itself takes up almost half the book, I found the account less tedious than other preambles in similar books.

A number of incidents add a kind of charm to the story and tell us something about the kind of climbers involved. For example the party carried suits and neckties into Skardu so as to have them for the anticipated farewell dinner hosted by the governing political resident. How many expeditions today would observe such scrupulous politeness? On the whole in fact, cowboy hats excepted, the Americans seem to have accommodated themselves as graciously as possible to the character of Baltistan, and the Baltis seem to have reciprocated in kind. Some school children sat

up all night to sew a Pakistani flag for the party to replace a lost one. The expedition managed to avoid the traditional porter strike at Urdukas.

The climb of the mountain itself sounds a familiar story: the usual build ups, storms, route finding problems, deep snow. This account will likely further enhance the reputation of Pete Schoening, the party's strong man who, with Tom Nevison one particular day put in 2000 ft of fixed line at high altitude all before 8.30 in the morning, only stopping because he had run out of rope.

In short, *A Walk in the Sky* fills a gap in the mountaineering history of the Karakorum and takes us back to a time when mountaineers could be more naive about their pursuits and the expedition business wasn't such a grim affair. All the climbers on this trip came back as friends. I appreciated the chance to finally hear their story.

Bruce Fairley

The Seven Mountain Travel Books

H W Tilman. Diadem Books, London, and The Mountaineers, Seattle, 1983. Distributed in Canada by Douglas & McIntyre. Black & white photographs. 896 pp. Cloth. \$42

This large volume contains the full texts of *Snow on the Equator*, *The Ascent of Nanda Devi*, *When Men and Mountains Meet*, *Everest 1938*, *Two Mountains and a River*, *China to Chitral*, and *Nepal Himalaya*. The Mountaineers continue, fortunately, to make available classic mountaineering books to a new audience and a new generation. The books, out of print and hard to find even in libraries, chronicle Bill Tilman's mountaineering adventures from 1929 to 1950 in Africa and Asia. Also included are side trips, such as pedaling about 3000 miles across the breadth of equatorial Africa.

Tilman's is a welcome contrast to many current books. His titles have no impossible or ultimates; the books have none either. His writing is both descriptive and also very calm and quietly factual. Humour is present everywhere — always dry and ironic. What comes through very strongly is Tilman's style as a mountaineer and explorer. He enjoyed a very simple, light-weight, almost spartan style of travel that companions often found rather difficult to cope with. The food he found most admirable as fuel others found ghastly.

Tilman, although physically spartan, was well educated and well and widely read. He enriches his books with historical background to many of the areas he climbs, eg *The Mountains of the Moon*. Such background, usually very complete, is often from obscure sources.

Two items notable for their absence are any expression of emotion and any explicit description of companions. Fear, anger, joy, love, etc are either absent or so hidden between the lines as to be almost unrecognizable, as is anything about the companions in his adventures. There is more information about early mountaineers in Africa in *Snow on the Equator* than there is about Eric Shipton, Tilman's climbing partner on Kilimanjaro, Mt Kenya, and The Ruwenzori. We are given no introduction to Shipton; he is known simply as S. In contrast Shipton, in his account (*Upon That Mountain*), introduces Tilman as follows.

He was very strong and tough, he had a natural aptitude for moving about difficult country, I have never known him rattled, and he had a remarkable ability to put up with — even a liking for — unpleasant conditions. He said very little — too little, I thought — but, like many quiet people he was worth listening to. As a companion the qualities I liked best were his tremendous sense of humour and his constant readiness to embark on any project. When I first knew him he was a recluse, and to, my way of thinking, too antipathetic towards the softer forms of human pleasure, such as novel reading, cinemas or any form of social intercourse.

Tilman either could not or would not write such descriptions of the people with whom he climbed and travelled. What he could do he did remarkably well and these well written and enjoyable books chronicle an extraordinary man and his travels.

John Manuel

Everest The Cruel Way

Joe Tasker. Methuen, London, 1981. 26 black & white photographs. 166pp. Cloth. £6.95

Savage Arena

Joe Tasker. Methuen, London 1982. 51 black & white photographs. 270 pp. Cloth. £9.95

The richness of the mountain experience has been described again and again. So much so that one wonders whether or not any freshness can pervade mountaineering literature. It is a rare combination when someone has the ability to climb at the forefront of today's standards and also has the talent to communicate these intense feelings and experiences to a much wider audience. In his two books *Everest The Cruel Way* and *Savage Arena*, the late Joe Tasker proves himself more than adequate for the task. Both books are extremely fine examples and deserve your attention.

Everest The Cruel Way deals with an attempt to climb Everest in the winter of 1980/81 by the west ridge without oxygen. Tasker writes with brutal honesty of an expedition that fails at 24,000 ft on Everest. The conditions of extreme cold and high winds are the biggest enemies of his story. By the time Tasker and Aid Burgess are in a snow cave at their highest point the rest of the team members are stretched out below, exhausted from the cold and wind and/or incapacitated by physical illness.

Everest The Cruel Way displays Joe Tasker's developing style, his ability to probe with honesty and compassion that inner drive that allows people to make such challenges. He is savagely frank when discussing living conditions on Everest in winter. This is no pleasure trip and he lets the reader know it. Yet at the same time Tasker explores his reasons for being on Everest in winter, a choice he freely made.

In *Savage Arena* Tasker concerns himself with not one expedition but several spanning the years 1975 to 1980; some end in success, others in tragedy or failure. He writes of his climb of the north wall of the Eiger, the first British winter ascent, and the ascent of Dunagiri's south-east ridge, both done with Dick Renshaw. From Dunagiri Tasker moves to the ascent of the west face of Changabang with Peter Boardman, allowing an interesting comparison with Boardman's *The Shining Mountain*. At some points it is as if they were on separate mountains, their recollections

of the experience differ so greatly. From Changabang to K2 and Nick Estcourt's death, from there to success on Kangchenjunga and finally failure again on K2.

Savage Arena is by no means a standard biography. Rather it is a reflection on specific incidents in Tasker's life. He crafts his story carefully - the reasons behind his choices, his growth as a mountaineer, the rationale as to why he climbs. It is all here, blended with skill into the recounting of his expeditions, as if the climbs themselves are parables to his inner self.

If expecting the usual discussion of technique or guidebook route descriptions be forewarned; Tasker does not write that way. The summit may be his goal but it is never the *raison d'être*; for Tasker the whole experience is what drives him on. At times more is devoted to the descent than to the climb, as in the case with Dunagiri and the second attempt of K2.

Reading *Everest The Cruel Way* and especially *Savage Arena* I felt a vague sense of melancholy. Joe Tasker will not see all his dreams and hopes come true, for in May of 1982 Joe and his good friend Peter Boardman disappeared while climbing the ENE ridge of Everest. In answer to that feeling let Joe Tasker have the last words:

If I had died, I would have wanted no sorrow, I would have been achieving my ambitions, would have been exercising the drive and vitality which made me friends or enemies in ordinary life. If I did not do something to the limit, if I had not channelled my energies into climbing, I would not be a person liked or disliked, but someone mediocre. When a friend was killed in the mountains I could only regret that he had not fulfilled his dreams; when a friend was killed drunk and driving as usual too fast, my sorrow was selfish. I wished I had seen more of him. He lived fast, he lived at the limit, and his absence made the world a little less fun for those who knew him, but he died in the way he lived and in a way which he had escaped from only by a hair's breadth many times. (*Savage Arena* 1982:126)

Geordie Howe

High Ambition: A Biography Of Reinhold Messner

Ronald Faux. Victor Gollancz Ltd, London, 1982. 45 black & white photographs. 180 pp. Cloth. \$30.95

To the readers of this journal Reinhold Messner should need no introduction. Messner is certainly at the forefront of extreme high altitude climbing today, perhaps the superlative mountaineer of this century. Yet for most of us Messner is an enigma. His mountaineering accomplishments have been presented in carefully orchestrated expedition articles, books, and lectures. The real Messner remains hidden.

I read Ronald Faux's *High Ambition* in the hopes of learning more about Reinhold Messner. I was hoping that the biographer would provide valuable insights as to the motivation and the rationalization of key events in Messner's life. Such in depth examination is hard enough to accomplish when the individual under study is dead. When the subject of the biography is still alive the author has a special problem; he must walk a thin line during examination of his subject's life, for slander and libel are never far away. Faux's approach unfortunately is very conservative. As a result *High Ambition* comes across as a mediocre biography of an

extraordinary individual.

Faux's biography reads at times as if he is writing sensational newspaper accounts of Messner's life. The majority of the biography is trite and superficial. For the most part *High Ambition* is nothing more than a rehashing of Messner's previous articles and books. Faux's writing lacks the originality and immediateness of Messner's own prose.

The book's only informative chapter deals with Messner's early years but when Faux starts covering climbs Messner himself has written about the book degenerates into the blandness of unstimulating second hand accounts. Obscure expeditions which have only been mentioned in a line here or there, such as Messner's trip to New Guinea, remain obscure.

I had hoped *High Ambition* would provide me with a better understanding of Messner and not just a tally of his accomplishments. *High Ambition* presents us with a sterilized account of Messner's exploits and we come away still knowing little of Messner. If one looks hard enough Messner the man is revealed somewhat in his own writings - stay with them.

Geordie Howe

Solo Faces

James Salter. Penguin Books, 1980. 220 pp. Paper.

I was working on the north end of Vancouver Island when the weather turned from bad to worse. We had been conducting an archaeological survey in the rain for a few days when the storm hit. The wind precluded doing any work on the lake so we took a day off. Scattered among the site reports, ethnographies, geological history, etc, were a few works of fiction which I had been dragging around. One book caught my attention, James Salter's *Solo Faces* "a novel of men who climb mountains". I was apprehensive since fiction and mountaineering don't mix well. Even with the memory of a good review from an old *Climbing* lingering in the back of my mind I still had my doubts. The weather did not look like it would improve so I stayed snuggled in my sleeping bag, drank cups of tea offered by Nadia, and with skepticism started reading.

Within minutes I was involved in James Salter's stylistic prose and caught up in the plot of *Solo Faces*. The rain didn't let up and neither did the story. Centred around the life of Vernon Rand the book opens with Rand's return to hard climbing after a period away from the sport. He progresses from California to the Alps, from climbing standard routes to soloing hard climbs. We become entangled in Vernon Rand's life, the routes, events and people who enter and exit his story. Salter writes of Rand's successes and failures and the pivotal role of his friendship with Jack Cabot. Rand pursues his quest, that elusive inner peace with himself that so many look for but few seldom find. Salter's ending is ambiguous, whether Rand has found his peace is left to the decision of the reader.

Solo Faces is a very good novel; I cannot praise it highly enough. James Salter has skilfully blended fact and fiction to create a gripping story. He has taken characters and events from real life, particularly those of Gary Hemming and John Harlin. Central to the story line is a fictional account of Hemming's rescue of two trapped climbers on the Dru west face. Salter manages to write

of climbing and its techniques without being pedantic or trite; the story line never gets bogged down in unnecessary technical detail.

The weather never did clear up but the day was not wasted. *Solo Faces* is very fine fiction, well crafted and intelligent. Far from the regular works of mountaineering fiction this book deserves to be read — you won't be sorry.

Geordie Howe

Books Received

HIKING GARIBALDI PARK AT WHISTLER'S BACK DOOR

Claude Roberge. Douglas & McIntyre, Vancouver and Toronto, 1982. Black & white photographs, maps. 80 pp. Paper. \$6.95

Trail descriptions and maps for 27 hikes. Brief details re flora and fauna, skiing, weather, avalanche safety, and bears.

94 HIKES IN THE NORTHERN CANADIAN ROCKIES: YOHO, JASPER, MT ROBSON AND WILLMORE WILDERNESS PARKS

Dee Urbick and Vicky Spring. Douglas & McIntyre, Vancouver and Toronto, 1983. Black & white photographs, schematic view maps. 223 pp. Paper. \$10.95

Trail descriptions, with schematic view maps for each hike. Short introduction deals with the areas, maps, clothing, equipment, ethics, horses, bears, and huts.

703 HIKES IN SOUTHWESTERN BRITISH COLUMBIA

Mary and David Macaree. Douglas & McIntyre, Vancouver, 2nd edition 1983.

Black & white photographs, maps. 224 pp. Paper. \$10.95

709 WALKS IN BRITISH COLUMBIA'S LOWER MAINLAND Mary and David Macaree. Douglas & McIntyre, Vancouver and Toronto, 2nd edition 1983. Black & white photographs, maps. 240 pp. Paper. \$10.95

Revised editions that detail changes on trails and update information on markings and vehicle approaches.

ANNAPURNA: A WOMAN'S PLACE

Arlene Blum. Sierra Club Books, San Francisco, 1983. Distributed in Canada by Douglas & McIntyre. Black & white photographs. 258 pp. Paper. \$12.95 Paperback version of the 1980 cloth edition. Includes new afterword.

Wedgemount Lake and Glacier Studies, Northern Garibaldi Park: 1983 Progress Report

The weekend of 23 to 25 September 1983 was the only dry and relatively clear one for the late summer re-survey of the glacier. Two previous weekends brought some snow, whereas this one had only a last minute developed cloud cap on Wedge Mtn which conveniently thwarted our plans to re-occupy AJ Campbell's three camera stations, set in 1928, on the summit ridge. From them phototheodolite stereo coverage would have allowed us to calculate the volume of shrinkage of Wedgemount Glacier over the intervening 45 years, but it will have to await a 46th year. Nonetheless the party of five students, two survey instructors, and two geologists covered much ground with tightening up the peripheral triangulation net which included setting a major monument on Parkhurst Mtn. The four camera stations (1, 6, 7, and 8) were re-occupied, thereby providing a photo record of the snout position and height of ice surface, as well as a fix on the upper and lower velocity profiles. As for the weather during the year between our September visits, the winter would have to be rated as mild, yielding a reduced spring snowpack at nearby Whistler/Blackcomb ski areas. Summer however, was cloudy and wet with a vengeance, being even snowy in late July and again in early September. This yielded a firm or equilibrium line at about elevation 2100 to 2120 m, somewhat lower than the past few years. Thus the abnormal summer compensating factor once again held glacier recession to a minimum.

The hike into the lake began from the highway despite our printed protests of last year regarding a newly installed locked gate, a washed out road and footbridge, and a deteriorating trail. As for the cabin at the lake it is holding up remarkably well except for the floor, which apparently offers a tasty fare to some rodent or small carnivore.

From the cabin the phototheodolite re-survey of the glacier snout revealed again (see CAJ 1983:58-61) a slight overall advance (1 to 2 m) on the south side of the snout where it still sits on submerged bedrock, but up to about 12 m retreat on the gravel based, above water, north side. The ice-cliffed face however, continues to diminish in height, and the far (true) left side is also now an inclined (but steep) ramp. On mid axis the cliff is severely overhanging, and slightly to the true left of it a recent collapse has left much brash ice to conceal the glacier to lake water interface. So while the overall ice front position would be registered as 5 to 6 m of retreat, relative to last year, it is tenuous because imminent collapse in the next few days to complete the glacier year could about double the figure. The reducing height and breadth of the cliff, coupled with a decreasing velocity, suggests that in 3 or 4 years the glacier will have a tapered profile across the entire snout.

The lower velocity profile (the 1930s series of ice monuments shown in previous CAJs) has shown a reduced average rate of 9.77 m/yr movement for the year. It had peaked at 11.67 m/yr for the 1980/81 period and was down to 10.4 m/yr on last year's

survey. The well-preserved targets no longer revealed converging flow, though the marginal drag factor persists. Ablation (assumed) across the profile averaged 1.5 m for the year, below the 2 m norm. So by all counts it appears that glacier recession could have been much more severe during a normal summer.

The condition of the glacier at its junction with the east arm (below Trig Stn 7) is not so good. The mid-velocity profile was not re-measured because the east arm of the glacier at monuments 41 and 42 is all but completely detached. Over the summer extreme ablation in this sun exposed spot, helped by the dark radiation of the morainal wall behind it, has opened up several large holes through the ice, exposing bedrock islands separated by stagnating segments of dirty ice. The detachment would be nearly complete were it not for the surface debris flow shown on the orthophoto map in CAJ 1983:59. The feature is now well elevated above surrounding ice, insulating that beneath it, but upon close examination it appears that the ice is of local rather than east or main glacier arm origin. Thus the second stage in ice source loss has developed in the glacier basin. Before the 1920s the source from the Mt Weart cirque was lost as shown by the photo on page 71 in CAJ 1978, and now the east arm source is lost altogether, being a receding but active glacier on its own. The downstream ramifications of this will likely yield the continuation of the recently observed accelerated retreat of the true right margin of the glacier which unfortunately is already preferentially exposed to solar radiation.

The surface of the main glacier on the upper velocity profile near the equilibrium line is much better this year. Glacier travel from one ice monument to the next on this profile was very easy as the crevasses were tightly "closed" and the remains of the winter snowpack made for a much smoother glacier surface. This year the phototheodolite plates were again exposed from stations 7 and 8 (near 4) imaging the upper profile as shown in the photo in CAJ 1983:60. Survey measurements were taken to provide exact co-ordinates of the two stations. Because this upper glacier stereo-photo model lacks surveyed-in control points near the velocity profile, and also because of the convergence of camera axes, it was considered necessary to compile co-ordinates of these ice surface monuments (the 1960s series) treating the camera station co-ordinates as fixed. (In the lower glacier model they were treated as unknowns because there are fixed co-ordinate points —Stns 3,4,5— near the snout of the glacier.) So, a computer program had to be written for this purpose. Initial results indicate that the average horizontal velocity component of the six ice monuments is 20.8 m/yr for the six stations or 22.8 m/yr if we ignore Station 61. However the above velocity, compared to that of the snout, nicely refutes Bernoulli's principle. It seems that this upper line is situated on the glacier which is in the extended flow of motion, as opposed to the snout which is in the compressive flow. As to be expected the monuments are diverging from one another. A tabular presentation of the results will be given next year when the reliability can be checked against a second year of observations. We had some difficulty initially in calculating these monument positions because of the lack of survey control near them but by picking off visible joint surfaces on rock exposed near them the error of measurement has been reduced to an acceptable standard.

This has led to another interesting facet of measurement which was noted while transferring control across sets of vertical air photos. Over the flatter regions of the glacier the surface correlates extremely well, indicating that the crevasse patterns change only slightly from one year to the next. This discovery will be used to attempt to create a velocity vector diagram, using the crevasses as indicators, covering the regions between the upper and lower velocity profiles. This will be shown in CAJ1985 as well.

The through-put of ice at the upper profile theoretically should balance the loss of ice below it on an annual basis if the glacier is in steady state. With a few more ice sounding points on this profile, we can make such an estimate of the annual discharge. And by measuring the volumes of ice loss shown over two successive years of map contouring below this profile we can determine whether it is in excess or matches this discharge. We suspect there is slight excess melt from the lines of evidence used in the foregoing discussion on conditions at the glacier snout.

Other work during the year included the contouring of another glacier map for the 1982 year, due to the timely receipt of aerial photos which appears as part of the annual coverage now flown for the ever-expanding Whistler area. We now have a 1983 set which will be given the same treatment. While in the field tree sampling 'downstream' or west of the climax glacier position in the lake was carried out on the bushy cliffs above the water surface. An old spruce (*Picea*) gave a ring count to AD 1821 but as the sample was taken above ground surface it would appear that we missed the earliest 10 or so rings. The growth was decidedly eccentric, showing compression due to snow creep. However consistently tight rings for AD 1899 to 1902 and 1969 to 1973 are evident. Another sample (*Pinus*) at a slightly higher elevation (20 to 25 m above the lake) gave compression growth dating to AD 1915 but five rings could be of the false variety. A zonation of vegetation shown on aerial photos in this region is due to a species change. Western red cedar (*Thuja*) of an unusual attitude of occurrence with a low brushy character dominates the steep lower slopes out of which the isolated higher species of old spruce are found. The cedar however does not extend eastward to the area just above the former extent of glacier ice. The upper zone of the slopes as well as the ridge crest paralleling the lake is dominated by veteran amabilis firs (*Abies*) with other species including *Pinus* of near equal heights. The significance of the cedar 'invasion' is not yet fully understood. The work wound up this year with a submission on historical changes in ice front positions to the Permanent Service on the Fluctuation of Glaciers, an organization based in Zurich which carries out world wide glacier inventory for UNESCO. So tiny Wedgemount will now have an international notoriety. Could this spur our government agencies into action on the access dilemma?

Bill Tupper, Karl Ricker, Ray Bremner, Kris Frankich, John Fairley

Caltha Peak and moraines as seen from Caltha Lake. Dashed line denotes down slope limit of 1983 residual ice. Double arrow marks 1951 down slope limit of residual ice which is to top of indicated cliff band. Single arrows show a post AD 1914 protalus moraine. Dots mark boundary between oxidized rock on right side of the single crested 1898 and 1914 moraine and non-oxidized granitic rock of the double crested portion of moraine to the left. Karl Ricker



Caltha Lake Moraines and Other Natural History Matters, Stein River Divide in the Lillooet Ranges of the Coast Mtns

INTRODUCTION

The Stein River basin is the last major untouched primaeval forest area in south-west British Columbia. It has drawn a strong coalition of people together to do what they can on limited funds to keep the area intact. Only the mining industry have been able to bypass the coalition's arm of resistance, due in part to the historical first appearances of prospectors in the area who have worked in a manner compatible to the landscape and who have built trails that are useful to the hiking community. There have been recent exceptions to this ethic however. In an effort to increase the public awareness of the majestic Stein basin, two very ardent promoters of its uniqueness have produced the Exploring the Stein River Valley hiker's guide. By encouraging foot traveller use of the area they and others argue that its long-term recreation potential will far outweigh the questionably very thin and apparently short-term forest resource economics of this vast area. To drive this point home the authors, R Freeman and D Thompson, inventoried virtually all natural heritage aspects of the area, including all existing trails and practical overland routes where there are no trails, as well as man's historical presence in the basin. Only the activity of glaciers was left untouched in their information gathering quest. So since 1979 the increase of hiker traffic into the basin has greatly increased due to their efforts, so succinctly shown by the detailed route maps which abound in their guide book. Access to the Stein, as the book shows, is not all that easy. The valley entrance near Lytton is a fair drive from Vancouver and it also involves a cable ferry crossing of the Fraser River. And for the mountaineer this access provides little incentive because the peaks are far from the valley floor tracks. The book shows other access via Kwoiek Creek valley to the Mt Skihist area on the south but this is also a long drive from Vancouver. To the north-east another entrance by way of Texas Creek is practical to only the residents of Lillooet. However two other direct approaches via ridge tops to the north by way of the Duffey Lake road hold more appeal. Of the two, Slowdown Creek road is unquestionably the most popular because it actually

climbs over the divide at 2140 m to enter what should have been a sacrosanct Stein Basin. However the miners were here first and the upper Cottonwood tributary of the Stein is again producing spectacular blocks of silver-rich galena at a new pilot mine being driven from a hillside portal and hidden from view to all but the most curious. There is no direct west approach to the Stein but as the guide shows the Lizzie Creek trail provides good access to open alpine ridges which can be traversed quite easily in good weather around intervening Rogers Creek basin to reach the basin. The log books in the Lizzie Cabin (CAJ 1982:52-55) do in fact show this to be the most popular route to the alpine domains of the Stein and it spurred the writers to follow suit last summer when we found ourselves with a few spare days in late August near the close of a two week dry spell.

GEOMORPHIC ATTRIBUTES

Ascent of the Lizzie system is via the Lillooet Lake basin and is of geomorphic interest in itself. A series of glacially gouged hanging valleys have to be ascended to reach the Lizzie/Rogers divide. The basal step is the bottom of Lillooet Lake for which an elevation is not immediately available but it is obviously well below its surface elevation of 200 m. A messily logged-out Lizzie valley floor hangs into it at 300 m elevation and the road in it gradually climbs up valley to 850 m where the next steep slopes are met at a three tributary valley intersection. Kame terraces are passed along the way. The road all too steeply by-passes the third step at 1190 m and then feathers out into several spurs around Lizzie Lake which is the fourth step at 1310 m elevation. In short order the trail climbs from there to the cabin at the fifth step of 1590 m elevation and one more significant rise broken up by a minor step leads to the sixth step at Arrowhead Lake (1830 m). Easy gradual rises lead to the half stepped Heart Lake basin (1920 m) but the seventh step in the pater noster series is actually above it at tiny "Mosey Lake" (2020 m) which can be reached on the same contour running through the divide of the Stein/Rogers system nearby.

From the divide the goal of most alpine trekkers to the Stein is the plainly visible and very attractive Caltha Lake basin (1830 m) which is backed by a very prominent colour tone-divided terminal moraine (Photo 1). The latter is shown on both guidebook and ordinary topo maps despite the lack of a glacier behind it. From a camp between lake and moraine trekkers cannot resist a walk around the latter and up to a nearby col to peer into a perched basin containing cobalt-blue Tundra Lake. Its colour is a stark contrast to the turbid turquoise green Stein Lake in the valley floor beyond.

While glacial silt of Stein Lake accounts for the selective absorption of the green band wave length due to the shallow depth of light reflection from this suspension and hence its increased dispersion in the light wave spectrum, the physics of this system is at the opposite end of the scale as far as Tundra Lake is concerned. The latter is obviously deep, devoid of glacial suspended particles, and the light spectrum is transmitted deeper into the water column where irregular molecular motion is the chief agent to bring on its dispersion. In this set-up the short wave lengths of light are favourably dispersed and, with the aid of minor amounts of particulates in the water column to enforce reflection, we have a blue in the depths of water before it reaches our eyes. Thus there is greater light filtering effect which increases colour saturation and the resulting darker blue hues appear.

The question is how did this perched lake basin become so deep and so pure in water clarity? It appears that cirque glaciers have actively eroded out a selective weak zone in the granitic rock during one or more Pleistocene ice age events. A rusty gossan zone veers west north-westerly into the basin from the Elton Lake area to the east (Chevron Canada has more than their share of troubles looking for mineralization on the trend). The glaciers are no longer present leaving a very efficiently quarried-out lake basin; perhaps the oxidized rock around it is providing the exact limited concentration of fine particulates into the water to generate the optimal colours observed as explained above. On the other hand there is one small glacier (not marked on the topo map) to its south which might supply some runoff in a somewhat filtered mechanism of flour.

In our visit a fog delayed trip to the Tundra Lake viewpoint was substituted with an investigation of the adjacent two tone coloured moraine. A splay on the oxidized granitic rock trend was found to be the cause of the colour zonation. Looking up valley, as in Photo 1, the right side of the moraine is by and large single crested and composed of more erodible oxidized rock which could be pinpointed to a narrow zone of similar rock on the headwall above it. The left or north side of the moraine is of sound and largely unaltered granitic rocks and it bares a double ridge line with the crests about 10 m apart. On the valley floor just beyond and outside this part of the moraine there is also another cobalt blue tarn with a diffuse pile of shattered rhyolitic rock rubble to one side. We finally concluded the latter to represent a small in situ volcanic dome or flow which reached ground surface on an accessory pathway to its main mass exposed around Elton Lake to the east. Between moraine and headwall the absence of an active glacier was glaringly anomalous. High on the cirque headwall a residual patch of two metre thick ice is all that is left. A coalesced series of dirty avalanche cones lie against the base of the wall though two other lines of rubble suggest either a yet innermost moraine developed during final ice recession or a protalus loop of debris that developed around one of the more resistant patches of melting basin ice. The double crested moraine upon which we stood to gaze at this scene of denudation was also a wasteland and the lack of any significant vegetation upon it does indicate a feature of youthful age dimensions. Peering down valley to Caltha Lake the remnants of older moraines are apparent (Photo 2). Between lake and where we stood there are several hummocks of oxidized sandy gravels and at the outlet of the basin the south side of the valley shows gullied exposures of oxidized moraine. Trees were sampled and lichen thalli diameters were measured en route to camp to see if the age of these features could be determined. Awakening next morning the array of glacial features was noted again as we climbed Caltha Peak to view the scene. Evidence of Cordilleran ice cover in the form of erratic rocks and striations were found to elevation 2350 m which is probably indicative of complete inundation of all peaks in the area one or more times during the Pleistocene Epoch. Below meadows around the north side of Caltha Lake show smoothly ridged crag and tail topography and the upper limit of streamlining could be traced out of the mega cirque into Rogers valley below (Photo 2). The upper limit of the oxidized moraine located at the lake outlet could be traced on aerial photos to meet this trimline as well. Moving down to the lake outlet itself there are at least two higher and abandoned outlets on its north, as well as a lower incised outwash plain between the present lake and the

brim of the cirque. The gullied moraine rising above it was found to be only slightly oxidized to a depth of one metre, the deeper appearance being confused in part by the oxidized headwall rock material which is a significant component in its makeup. So the age could not be all that great despite the initial impression as discussed in the following.

CHRONOLOGY OF MORAINES

The conspicuous bi-crested terminal moraine marked on the maps was searched for trees. Only one specimen (*Picea* sp) could be found on the inner crest and it yielded an age of AD 1942. However at least 10 rings were lost by not being able to sample it at ground level and at least a 15 year time lag for colonization must be added onto the revised age of AD 1932. So the moraine is likely pre AD 1917. On the outer crest there were a few *Picea* but again the count of the rings went only to AD 1942 and the other above stated corrections have to be added in. On the oxidized hummocks between moraine and lake there are no trees and the large specimens standing off on adjacent rock outcrop were beyond our means of sampling. The moraine and other surfaces at the lake outlet also harbour very sparse but large tree cover.

The alternative method of dating fell to the use of lichen thalli measurements. The method is heavily criticized by several specialists but several have used it successfully on areas where other dating techniques have provided corroborative evidence. An example of such is published in CAJ 1978 for a Baffin Island site. Almost all lichen growth rate curves are established using *Rhizocarpon geographicum* as the reference species though there are two or three other species of the same genus to add to the nomenclature and identification difficulties. We believe the Caltha Lake specimens are by and large this species. Measuring several maximum sized thalli at several dry sites the following pattern emerged:

Up valley moraine, inner crest - 20 ± 2 mm; outer crest - 30 ± 2 mm. Oxidized gravel hummocks between up valley moraine and lake— 60 ± 5 mm. Lake outlet area on bedrock - 60 ± 5 mm. Lake outlet moraine, inconclusive sampling.

The age significance of the thalli has to be interpolated, at risk of great wrath by the experts, from other areas where there are established growth rate curves. South-west BC as of yet lacks a published lichen growth curve. The dryness of Stein River basin area is explained by the meteorological report in the Stein River guidebook; only 150 to 160 mm of moisture falls in a year at nearby Raven Flats. The nearest lichen growth curve is for an area on the wet side of the Cascades under Mt Shuksan at Price Lake (Leonard 1974) where annual precipitation exceeds 3000 mm. Theoretically, if the growth substrate is the same lichens will grow faster in wetter environmental conditions. However snow cover at the latter is probably one or two months more prolonged which has some growth inhibiting effect. The Caltha Lake specimens are growing on predominately quartz and feldspar-rich granitic rocks (simple silicate) whereas the Price Lake specimens are on mica-rich phyllites (complex layered silicates). A dry site curve could only be found at a far removed Mt Edith Cavell area (Luckman 1977) though there may be one for an overlooked east Cascade site. Edith Cavell specimens grow on quartz-rich quartzites thus approaching the chemistry of the Caltha Lake site. Using both

curves, after adjusting the time base, it appears that the ages of our specimens show little divergence between the two areas. The following dates are revealed:

20 mm (inner loop) = 60 to 75 years or av 69 ± 9 years (AD 1914);

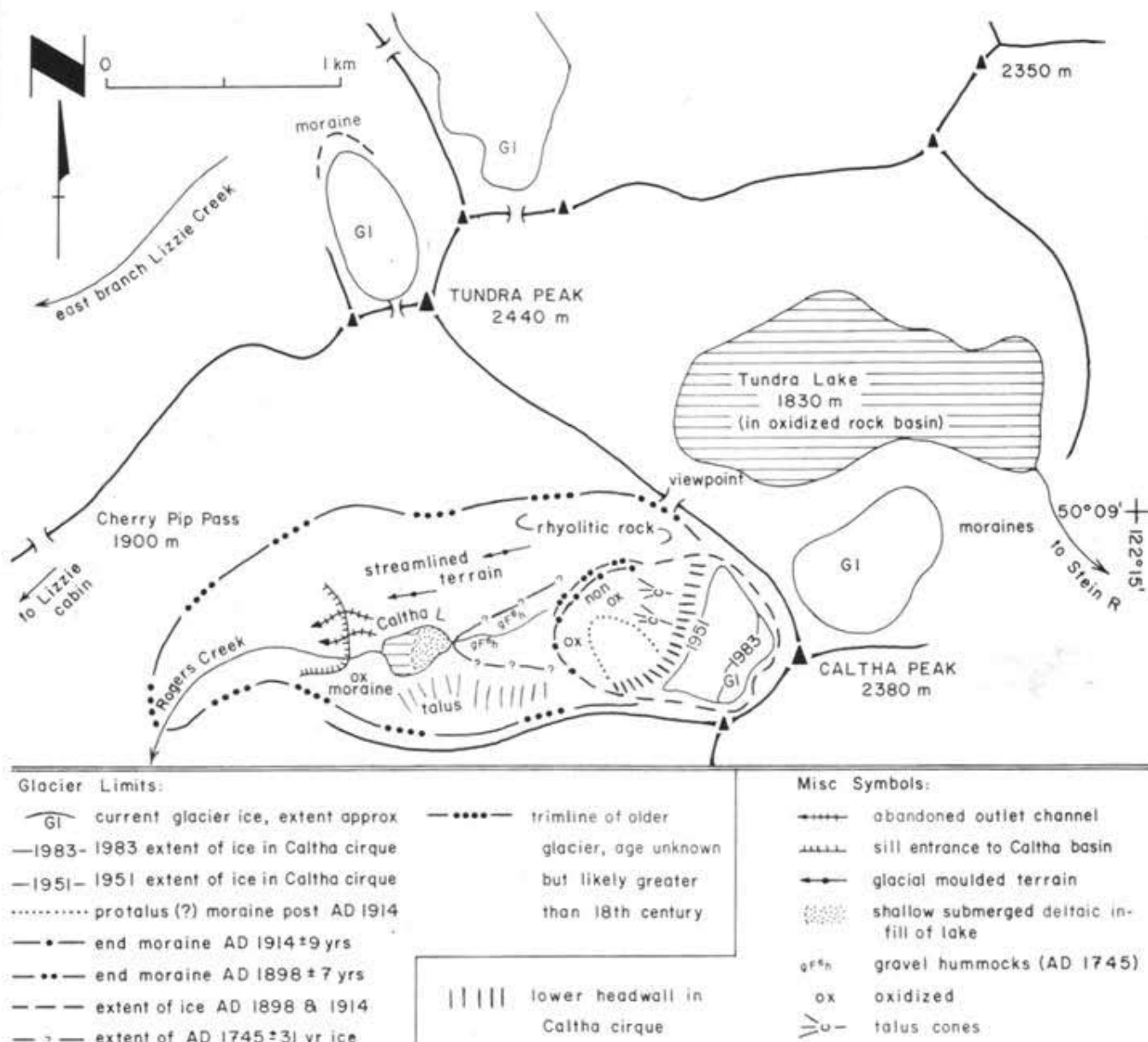
30mm (outer loop) = 78 to 93 years or av 85 ± 7 years (AD 1898);

60mm (ox gravel) = 211 to 269 years or av 238 ± 31 years (AD 1745).

The above analyses used two methods of Leonard (mean of 10 measurements at four sites on each moraine as opposed to the largest at four sites averaged to one value) and considered straight line growth rates to set time intervals as opposed to ever decreasing growth rates as discussed by Luckman. So each of the above values is based on the average of six determinations and hence the suggested maximum limit of error spread. Invariably the Caltha Lake diameters would fall intermediate to a time-diameter value on Luckman's and Leonard's curves. On a regional basis the results do fit other known periods of glacier advance. For example the 1914 date ties into the 'subclimax' at Wedgemount Lake which has a moraine dated to about 1920 by dendrochronologic and photographic methods. The Caltha Peak cirque however is so short that response to climatic change between névé (source) and glacier snout is very quick as opposed to nine or more years of time lag response for even small valley glaciers. The 1898 date for the outer crest of the moraine ties into the more tenuous AD 1900 established for the climax event at Wedgemount while the AD 1745 date is shown by Leonard to be atypical 18th century event in the Pacific north-west which is usually found beyond, but occasionally overridden by the 19th, or turn of the century glacial advance.

Problems begin at the 18th century event however. The oxidized gravel hummocks are clearly of ice recessional debris and the problem is to define the outline of the glacier responsible for their presence. The 1969 aerial photos strongly suggest an outline confined between the cirque headwall and inlet of the lake, as shown in the sketch map. One could argue that the deltaic infill of the lake is a product of this event (ie outwash proximal to the glacier snout). But field inspection of this area was not re-assuring of such a confined glacier because limiting moraines were not evident. Furthermore is the delta a product of the recent loss of stored water (in the form of ice) behind the inner moraine? Between 1914 and 1951 (as will be shown) the cirque was 98 percent emptied of ice and the runoff (percolation under the moraine?) could have carried a vast deposit of sand and silt to fill about one half the lake basin? It's a tenuous proposition as well. However at the outlet of the lake the largest lichen diameter to be found was only 60mm suggesting an ice advance of the 18th century to that position or farther. With the exception of a two level or tiered gullied moraine on the south side of the lake outlet there is no apparent and correlative limiting moraine on its north side to indicate a glacier margin unless the upper limit of streamlined terrain (Photo 2) is considered, and thus this puts the snout of the 18th century glacier well into Rogers Creek valley below. But this yields an oversized 18th century glacier which is equally unpalatable. The 18th and 19th century moraines normally lie very close to one another. It is the writer's hunch that the extended glacier is of at least a 16th century age as

Table 2 - Ice volume losses. Ricker and Parke



Caltha Lake Moraines: sketch map of glacial features. K Ricker/M Irvine

time span (AD)	retreat of "snout" (m)	rate (m/yr)
1898 - 1914	0 to 10 metres (±5 m)	0 to 0.63
1914 - 1951	500 metres (±25 m)	13.5
1951 - 1969	0 metres (±25 m)	0
1969 - 1983	225 metres (±25 m)	9.4

Caltha Lake Moraines: Table 1 -- ice snout retreat. Ricker and Parke

year	ice volume remaining m ³	interval ice volume lost m ³	interval rate of loss m ³ /yr	% original volume loss
1898	38.2 million			
		37.5 million	707.5 thousand	98.1%
1951	719 thousand			
		635 thousand	28.9 thousand	99.8%
1983	84 thousand			

found at several Cascade locales, or of an older Early Neoglacial (ie 2600 to 2800 years BP) event, and possibly even of the 4500 to 5500 year BP event which is found in the Garibaldi Lake area. Cutting a few large trees may shed some more clues on this matter, and perhaps several hours of lichen search near the lake outlet and on the moraine by it (on unaltered material) may give much bigger thalli diameters to work with. That is our limited data at the lake outlet may not be representative of the site condition.

RATE OF ICE RECESSION

The absence of glacial ice in Caltha Lake valley and its virtual absence in the cirque behind the moraines would seem to be anomalous. The elevation of 2000 m plus, the north-west facing slope of the basin, and its shaded aspect under Caltha Peak would lead one to think that a glacier should be present because to the north, west, and south of this locale in similar settings glaciers are still present. However it has not been a case of disappearance in the last few decades. The 1951 aerial photos show a virtual absence of a bonafide glacier; yet the age and form of the inner moraine (AD 1914) suggest that the bowl like basin was filled with active ice not too long ago. Plotting the positions of the ice fronts onto a topo map the pattern of recession shows roughly the following in Table 1. The shown error margin reflects a half millimetre of plotting variation on the 1:50,000 topo map which could be optimistic. As for the 1969 year the aerial photos show a similar ice position to 1951 but on them there is much late season snow still in evidence which may or may not be underlain by ice. However there are one or more points along the 1969 ice front which are at the same position as a more uniform ice front of 1951. Undoubtedly the 1969 ice thickness (once the seasonal snow is removed) was thinner than the 1951 ice cover. The situation is repeated in 1983 where we could not detect any visible ice retreat from our more distant observations in 1981.

The ice frontal retreat position is not in this case a good measure of the overall retreat status of the glacier. For one the glacier is in a depressional bowl. So for the first few years of recession the glacier is more apt to be down wasting in its own milieu rather than retreating back from its confining end moraine. Secondly sometime before 1951 the bowl was empty of active glacier ice and retreat thereafter was concerned with inactive residual ice left veneered onto a rather steep headwall. Thus the rate of retreat is really no longer an ice frontal proposition but rather a thinning of what is left. To surmount these incongruencies a model of the glacier was drawn up using the very conspicuous moraine and the trimlines of rock freshness above the moraines to serve as its outline. The height of the moraine provided evidence of the thickness of the ice which was projected up slope using a typical cirque glacier slope and geometry. However it is an eyeball estimate of how the surface ice contours could have appeared and mathematic modeling was not employed in the design. The volume of the glacier was calculated by adding polar planimeted areas of the surface and equivalent subsurface contours in 15 and 30 m increments. This yielded an estimated ice volume of 38.2 million cubic meters in 1898. The 1951 volume was treated as a uniform 4 m thick slab which could be one metre too thick or several metres too thin. However the 1983 thickness was observed to be an average of 2 m thick as shown by gullies cut through the ice in a thinned out area shown on Photo 1. The volumetric disappearance of ice is given in Table 2. The tabled losses of ice indicate that the glacier was in

essence non-existent by 1951. That is it took less than 37 years to 'kill' a glacier. Whereas using the ice frontal retreat technique the data would indicate that in the same time frame about one third of the original glacier is still left in the cirque. Thus in this case the rates of retreat as expressed by linear measurement of a retreating snout are anomalously low in the early years and ridiculously high for the last 32 or more years. The volumetric table does suggest however that about three warm summers is all that is needed to completely remove the last vestiges of ice on the headwall.

Assuming a melt period of 90 days each year and neglecting atmospheric evaporation the residual ice translated to water equivalents (910 kg/m³) would yield a discharge of only 0.0035 cubic metres/sec (3.5 litres/sec) into Caltha Lake whereas before 1951 it was likely higher than one cubic metre/sec in the warmer summers. These figures exclude the seasonal snow lying on the ice surface and thus the ice melt down is an extraordinary component to the yearly runoff. The data shows that it is no longer a significant component. If all glaciers in the Cordillera were to suffer a similar demise there would likely be some dramatic reduction in river flows with the intendent impact on the whole ecosystem. Let's hope that the Caltha Lake model is not followed by a wholesale disappearance of our larger ice fields but during the Hypsithermal Interval some 5500 to 6500 years ago such a cycle did prevail.

Karl Ricker and Bert Parke

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Who Built the Cairn - Tchaikazan Valley?

In CAJ 1983 (p 67) John Lixvar gave a very rigorous analysis of the recent retreat of the Tchaikazan Glacier. He comments on the placement of an unknown cairn between our 1975 and 1982 cairns used to monitor its snout. Would the party or person who built a circa 1977 to 1980 cairn here please notify the Alpine Club Manager or phone K Ricker (604) 926-5933 collect so that we have an exact date (or at least to the nearest week) of its establishment. This date is urgently needed for inclusion in the quadriennial report

of the Permanent Service of Fluctuation Glaciers, an UNESCO organization based in Zurich.

K Ricker

Retreat of the New Moon Glacier, Bulkley Ranges, Hazelton Mtns, Western British Columbia

INTRODUCTION

Inventories of glaciological work in Canada, kept by the Snow and Ice Division of Environment Canada, show a hiatus of studies in the mid portion of the Western Cordillera's Coast Mtns. Between the Stewart (Boundary Ranges) and Mt Waddington (Pacific Ranges) areas the intervening Kitimat Ranges (also part of this maritime front) are lower and less spectacularly ice covered than their brethren to the north and south. However to the east there is a near equally high (2000 to 2800 m) series of ranges in the leeward lying Hazelton Mtns. The latter however do harbour sizeable glaciers as well but all appear to be in a drastic state of recession.

One would expect however both the central Coast and Hazelton Mtns to have some documentation on their glacier regime because the vast Kemano hydroelectric complex for the Kitimat aluminium smelter is located in this area. Its dams to the east are used to reverse much of the flow of the Nechako River through both sets of mountains to a tidewater power house via a set of long penstock tunnels. Glacier derived runoff is a not too insignificant portion of this discharge. And with a dependence on such a source of water one would guess that engineers of a major 896 megawatt power development would have studied the amount of runoff derived from the extraordinary component of glacier melt. If glaciers stop receding or even advance for any period of time this excess is lost by storage within them in the form of ice and thus a reduced meltdown will occur. However hydrologic studies have either been neglected or are not yet concerned with this possibility. Observations on the recent regime of New Moon Glacier (Photo 1) in this report have, by accident, an interest in a planned expansion of the Kemano project. Part of the Morice Lake drainage basin (Nanika River) will be diverted by tunnels into the Nechako system which, in turn, will help add 'fuel' to a controversial 600 megawatt

North-west lobe (right), snow shelved outcrop "nunatak" (right centre), ridged medial moraine (below outcrop), and south-east lobe (left centre) of New Moon Glacier

Left skyline is Pyramid Peak (in cloud), right foreground shows true left lateral moraine. Dashed lines show rolling structural geological trend under glacier. Taken late July 1983. Karl Ricker

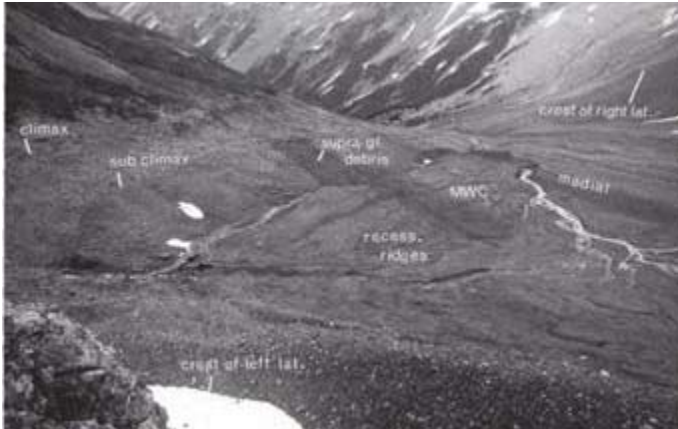


General view of a glacier monitor baseline

From left lateral moraine (LM), to central medial moraine monument (CM), to right monument (RM) tucked under large boulders. The south-east lobe lies adjacent to this monument but is 6 m away from the line whereas the debris covered north-west lobe extends 15 m beyond the line in the foreground. Taken late July 1983. Karl Ricker



Detail of morainal forefield, looking down valley, of New Moon Glacier as seen from crest of left lateral moraine near glacier recession monument. Basin in foreground is that of north-west lobe which shows recessional drainage channels (MWC) and recessional ridges developed around a retreating ice tongue. Arrows point to pre-1946 (still used) drainage and to recent channel leading to the right, the two uniting again at the medial moraine. On left of photo the upper "climax" moraine and trimline refers to both the 18th and 19th century advances whereas the "sub-climax" appears to represent oscillations of a ca 1910 event. It is overlain by rockfall derived maroon volcanic debris which was carried from the headwall (to the right) to this location. The scallop outline shows a post 1946 to pre 1954 slump in old morainal deposits. Fresher 19th century end moraines from Full Moon Glacier lie on the upper righthand corner of photo. Karl Ricker



General view of glacier monitor line from central medial moraine cairn to crest of left lateral moraine. North-east lobe is receding except where covered by debris. Note large gully breaching moraine, developed by run off from one arm of the receded Lunar Glacier located above picture to the left. Taken late July 1983. Karl Ricker



expansion. The Atna Bay region of the lake to which New Moon drains is not part of the scheme but it does have a bearing on the planned reduced flows of the salmon producing Morice River. This article will demonstrate that historical pronounced glacier ablation is coming to a close thus depriving the Morice of the much needed extraordinary component of ice meltdown to keep the impacts of the planned Kemano expansion to a downstream minimum.

The Morice Lake watershed lies between the Tahtsa Ranges to the south and the much larger Bulkley Ranges to the north. New Moon Glacier (a new approved geographic name) lies just north-west of the lake. The granitic and high grade metamorphic assemblages of the glacier endowed Coast Mtns are just to the west. On the other hand ranges of the Hazelton Mtns are underlain by a Jurassic aged and very colourful volcanic sequence (with

related interbedded sedimentary rocks) which have provided more than ample 'teaser-type' ore showings, including some coal, to the mining industry. For the mountaineer the crumbly rocks have yielded little interest in any of its Tahtsa, Bulkley, or Nass Ranges though there are exceptions. Within the Bulkley the domineering appearance of the spectacularly glacierized and much higher Howson Group has drawn a few climbers from afar; the easy access to the alpine meadows of the large Hudson Bay Mtn massif will always attract the local ridge Rambler; and the Seven Sisters standing as a ragged fortress above the Skeena Highway has caught the attention of many but few ever reach any of its eight or nine tops.

Curiously enough the only remotely related glaciological endeavour in these ranges has been at Lake Kathryn Glacier which is visibly located to the residents of Smithers on Hudson Bay Mtn. Decades of mineral and coal exploration on the lower slopes, with some ore pick and shovelled out of the area, have lead to the inevitable - recent drilling through the glacier to test for bigger awards. The results are indeterminate. A parallel set of circumstances has developed at Morice Lake. Only the north end of the lake can be reached by road but lack of wheel access has not stopped prospectors making a thorough search of its more inaccessible tributary valleys. For about two decades now they have turned up signs of sulphide minerals in the basin and valley (Coppercliff Creek) leading from New Moon Glacier to Atna Bay on the lake. This work eventually brought in a series of mining companies and an appraisal by one author for such last summer. It gave us the access mechanism as well as the spare time to work on the glacier and its spectacularly developed moraines and thus the data to supply to the world inventory of glacier fluctuations for a region that once stood as a hiatus in their coverage. It will also give a hint on the water budget outlook with respect to the Kemano project.

The study is designed so that others visiting the area can perpetuate the data flow for the long term without involving much effort on their part. St Joe Canada Inc is to be thanked for their enthusiastic role in setting up the mechanism to launch the project and Dr K Mackenzie of Alpen Exploration Ltd cheerfully provided nearly all the valuable field assistance in very trying weather conditions.

HISTORICAL ADVANCES OF NEW MOON GLACIER

The ridges west of Morice Lake are littered with erratic granitic boulders which originated from the Coast Mtns to the west. Behind New Moon Glacier its headwall ridge at 2000 to 2100 m harbours not only a prolific abundance of them but also glacial striae bearing N80E. The latter is oblique to the trend of Morice Lake (N45E) and local valleys (N25 to 55E). This evidence points to a Pleistocene aged ice cap covering all surfaces; the Late Wisconsin's Fraser Glaciation (15,000 to 25,000 yrs BP) is the suspected actual time of this event. Valley walls below the ridge crest however show a lower level of bevelled or faceted spurs overtopped by ragged edges leading to ridge crest. Clearly a lesser "valley stage" of glaciation can be inferred and it is surmised that it may parallel other better known late Pleistocene ice advances (10,000 to 11,500 years ago) in British Columbia. This presence of a valley stage of ice is also evident in adjacent Morice Lake basin but it is not known how far down the Morice system it extended. Between this

partial success. Tree sample No 2 (hemlock), taken on the oxidized crest of the down valley positioned terminal moraine, proved to be an embarrassingly young and sturdy specimen of only 47 rings! Tree sample No 1 (hemlock), taken on the correlative outwash terrace downstream of it however is much more reassuring. Rings count back to AD 1818 and the sampling height at 10 to 15 cms above ground surface suggests that lost rings could yield a germination date of AD 1808. The tree grew in very harsh conditions as shown by compression wood and thus the time lag to colonize the bouldery outwash was at least another 15 years and possibly as much as 48 years. The latter is pessimistic because the regional valley forest is not all that distant. However for the time being it suggests that the outwash surface is dated to the interval of AD 1760 to 1793. Possibly this surface is slightly younger than the moraine but the overall evidence suggests an 18 century glacier advance rather than an older event. Another facet shown by this specimen is a uniform tight series of rings for the period AD 1895 to 1906. They too are of compression origin but regardless of the local stresses it may be significant as will be discussed. Sample No 6, taken up valley just below the trimline, turned up only 65 rings and thus is of no help in the analysis.

The 19th century moraine is subtly disguised within the limits of the 18th century. In fact before visiting the field it went undetected on aerial photo pre-examination and we had mis-assigned a 19th century age to the 18th century moraine. The true 19th century advance was found in the field examination of the entire end morainal loop. The glacier during this advance was about 130 to 135 m less extended down valley than the previous advance but up valley from its terminus it nearly filled the floor of Coppercliff valley to the same extent (Photo 2). On the west end several ridge crests occur at the highest level of the moraines. The inner of the high level series was walked out down valley with some interruptions in continuity until obliteration by a recently active fan was reached. However the trend was again picked upon the other side of this chaotic intrusion and it led to a low transverse cross valley ridge which in turn could be traced across the creek to a very high right lateral moraine of two crests. An outwash fan spreads out down valley to and through the older moraine cited above, as well as into the present incised creek channel beside it. Three tree samples on this outwash yielded 39 to 82 rings. The oldest (No 4a) taken at the transverse up valley moraine to outwash interface was again cut 10 to 15 cms above ground surface. By counting opposing sides of the cross-section sample block (a 2 ring differential) we estimate that the 10 earliest rings of the hemlock's lifespan were missed. So the site was colonized in about AD 1891 and the bouldery condition of the area would suggest that 15 to 20 years of time had lapsed before germination began. Thus the moraine is assigned a date of AD 1871 to 1876. This date is also suggested by an up valley moraine crest site (No 8) which dated to 1922 but knee height sampling on this amabilis fir suggests at least 30 lost rings.

Near the upper crossing of Coppercliff Creek by the moraines a lower inner morainal bench with four or five minor metre high crests is found (Photo 2). Tracing it down valley becomes increasingly difficult until it disappears altogether, though another probable correlative minor morainal loop encloses a pond near the giant right lateral moraine. The date of this advance (or fluctuating standstill) could not be ascertained for the absence of

trees. However it might be related to the AD 1895 to 1906 ring unconformity shown in Sample No 1 if the rings do indicate a cooler and/or glacier-induced windier climatic shift. Possibly there is a time lag response by a glacier to such a change which would have to be considered but if so it would likely be only nine or so years and thus the innermost moraine may be of the AD 1904 to 1915 time span in age.

GLACIER RETREAT OF THE 19TH AND 20TH CENTURIES

The retreat of New Moon Glacier has opened up a morainal forefield (Photo 2) much larger in area than the remaining ice and névé left in its basin today (ca 1 km²). The forefield includes a curious medial morainal ridge that has developed down valley of the outcrop ('palaeo'-nunatak) now exposed at the break in slope (ca 35 degrees) between the upper névé and the gentle valley floor which once harboured the expanded glacier (Photo 1). The ridge is 50 to 70 m broad and rises up to 30 m in a series of furrows above the valley floor. Rock material on it is segregated in linear colour banded fashion suggesting specific outflow sources during advance. So once glacier retreat began it soon was divided into two retreating lobes by this emerging medial ridge. The 1946 aerial photographs show that separation had already begun (see sketch map). The photographs also show that up valley Coppercliff Creek drainage was forced around the north-west lobe of the glacier and, as ice withdrew, new channels of drainage developed apace around it. However the oldest channel still today retains some of the upper creek's flow (Photo 2). Other features on the forefield include lesser medial ridges to the east of the south-east lobe and maroon volcanic rock veneer lying as a distinct patch on the moraine near the lower innermost moraine in front of the north-west lobe (Photo 2). It represents a rockfall onto the glacier from the headwall and was probably carried englacially before final melt out at this locale in the 1910 to 1946 time span. At the climax of glacier advance one narrow arm of ice extended from adjacent Lunar Glacier to nearly join the north-west lobe of New Moon Glacier (Photo 4). With ice recession a huge canyon developed between the two as shown by over 30 m of downcutting through New Moon's true left lateral moraine. As a result much of the morainal forefield in the basin of the north-west lobe is of hummocky glacial fluvial deposits (Photo 2) and the snout today is covered by a carapace of this erosional debris which tends to retard recession (Photo 4).

Year interval		north-west lobe		south-east lobe	
		distance (m)	rate (m/yr)	distance (m)	rate (m/yr)
1875 -	1946 (-)	1150	16.2	(-) 955	13.5
1946 -	1954 (-)	98	12.3	(-) 98	12.3
1954 -	1967 (-)	212	16.3	(-) 261	20.1
1967 -	1971 (-)	11	2.8	(+) 37	9.2
1971 -	1975 (-)	8	2.0	(-) 8	2.0
1975 -	1978 (-)	17	3.4	(-) 17	3.4
1978 -	1983 (-)	NM	little	(-) NM	little

Table 1: Measurements made on aerial photographs Calibrated against a 1500 m long baseline between the 1875 moraine and the intermediate shelf on the nunatak shown on Photo 1. Ricker and Jozsa

Excluding the ca 1910 standstill (or slight readvance of the glacier) the retreat of New Moon Glacier's two lobes is shown on

Table 1, using AD 1875 as the benchmark date for the maximum extent of ice in the 19th century. Whether or not a component of the north-west ice lobe ever reached the down valley terminus is a moot point. We have assumed that it had but ice flow orientation trends shown by the colour banded medial moraine may suggest that it had not (see sketch map). If so the 1875 to 1946 retreat of 1150 m may be an overstatement and the value assigned to the south-east lobe (955 m) may be more realistic for the two. All measurements shown are taken from aerial photos which had a habit of being flown in a too early month of July for the 1971, 1975, and 1978 series. So seasonal snow at the snout of the glaciers precluded (or made more difficult) the exact delineation of the ice edge. Therefore the 1963 to 1971 advance (37 m) for the south-east lobe might be spurious. To avoid this aerial photo recognition problem in future we have erected a set of three cairns across the snouts of both lobes as shown on the sketch and on Photo 3 which, as can be seen, do not exactly mark the ice edge. Thus when monitoring future positions of the glacier the reporter should bear in mind that the south-east lobe in 1983 was 9 m back of the line while the debris covered north-west lobe extended to at least 15 m in front of the line. In an effort to keep the line straight we had no choice but to build the south-eastmost cairn in the protective shelter of some large boulders (painted for recognition) so that up slope derived avalanches would not carry away the station. The middle station (on the medial moraine) and the west station (crest of left lateral moraine) are also marked by painted cairns containing messages and in 1984 we hope to have them also marked by ground signal cloth so that they will show in future aerial photos. The approximate co-ordinates of the central monitor cairn as established by crude compass resection techniques are 581010E by 5975650N. Undoubtedly the figure will have to be revised a few tens of metres for both co-ordinates. As it now stands we cannot tie this line onto the 1978 aerial photos without the combined efforts of a large first order field triangulation survey and machine set-up photogrammetric plotting exercise. So the 1978 to 1983 retreat, which is slight, is not shown in Table 1. In fact the north-west lobe shows some oscillation morainial ridges for this time interval.

In summary the former rather large recession of New Moon Glacier has slowed since 1967. Today the snout of each lobe is at the base (el 1500 m) of a rather steep gradient with the névé connected to them by ice in the extended mode of flow. This névé lies about 200 m above these snouts and it would take a significant warming trend to induce melting in the elevated catchment zone. So the glacier appears to have reached a steady state, that is precipitation in the form of snow now nearly equals runoff in the form of melting ice (and evaporation). Thus extraordinary losses of ice will no longer be significant and hence the discharge into Morice Lake will likely be less than it has been in the past. Other glaciers in the area appear to be at or near the same crossroads and thus the entire Morice watershed could well be headed for a reduction in meltwater runoff unless it is counterbalanced by some other climatic mechanism. To see if this site observation proves to have even a limited regional significance we have painted a line on the stones littered around UTEM Glacier's snout (located 2 kms south of New Moon Glacier). It has a north-east facing accumulation zone but a south-east facing snout which terminates at 1550 m above mean sea level. We would be grateful if others visiting the area would also monitor its position. The numerals

7983 are painted on a large 3 m high boulder on the true left side of the snout and thus it should not be hard to locate.

Karl Ricker and Les Jozsa

The Other Marker

"At the time of the 1911 measurements it was found that the Alpine Club's expedition had no paint or brush and a difficulty arose as to how the rocks should be marked. It was solved by mixing boot grease (dubbin) and charcoal, which was laid on with a bit of stick. In 1913, to our surprise, these superficial markings were intact and almost as clear as when made. They were not removed, but Lambart found them in 1922. Again, in 1931, they were found, though faint. It seemed that the mixture had eroded the rock surface to a slight degree and the markings appeared faintly etched in white."¹

So reads Arthur O Wheeler's description in CAJ1931 as to how two rocks in the vicinity of the toe of the Robson Glacier were ingeniously marked during the 1911 ACC Mt Robson expedition; and as to how the markings were still visible two decades thereafter. The rocks were to serve as reference points against which the advance or retreat of the Robson Glacier could be measured in subsequent years. They were located one east and one west of the nunatak, an unglaciated outcrop of rock immediately north of the toe of the glacier (see Photo 2). The rock on the west side of the nunatak was marked

A.C.C. AUG. 10, 1911 TO ICE 175 R ALONG WALL

and an arrowhead was placed at the point from which the measurement was made.² The American Geographical Society party of 1953 located and photographed this marker and its appearance then is the same as today (see Photo 2).³ However only part of the marking, "A.C.C. AUG. 10, 1911" is visible, and this lettering appears on three horizontal lines as opposed to on one single line as described by Wheeler.⁴ These facts and the well preserved condition of this lettering lead to the conclusion that this is probably not the original marker but an incomplete and inaccurate renewal made by persons unknown, sometime between 1932 and 1953. From all evidence the location of this marker is certainly correct and its inspection has become a favourite side trip for hikers on their way to Snowbird Pass. Although the 1953 party took several photographs from near what my investigations have shown to be the location of the east marker, they make no mention of either looking for it or locating it.⁵ So the east marker, apparently unrenewed, has been "lost" since 1931.

In August of 1983, armed with a copy of Wheeler's report on the Mt Robson expedition⁶ I set out to find the marker east of the nunatak. The description of the rocks and their locations as it appears in that report is very detailed. The rock east of the nunatak was marked:

A.C.C. TO ICE 7
AUG. 10 338.6 FT
1911

and was described by Wheeler as being "14 1/2 ft by 7 ft by 7 ft high of dark blue crystalline limestone"⁸ and "in line with a square block of rock on the east moraine of a white crystalline formation

(size 16 1/2 feet face by 13.7 feet high by 13.4 feet thick) and the first high point of the old moraine to the west, where a pile of stones has been put together".⁹

In the area east of the nunatak, between it and Tatei Ridge, there is only one rock which fits the above description; being of the right colour and dimensions, roughly in line with the references given; and with the old water course from the then eastern lobe of the glacier clearly visible in the moraine "just east of and immediately below it".¹⁰ I spent several hours on a cloudy afternoon scouring this rock for evidence of the marking, even crawling beneath it to see if perhaps the rock had shifted, concealing the lettering beneath. I could find none and although certain I was examining the correct rock came to the conclusion that this marking had long since been eroded. Then the sun came out briefly and with the improved lighting some very faint numbers became visible on the southern exposure of the rock. Barely discernible, about one metre from the eastern end of the rock, and slightly more than one metre down from the top, are the numbers "338.6" (see Photo 3). Remarkably these would seem to be the remains of the boot grease and charcoal marking, having survived the elements for 72 years. No other part of the original marking could be positively identified. A small four stone cairn was erected on the south-east corner of the rock to facilitate its identification by others (see Photo 4).

Although locating this marker has no great implications it does

add another aspect of detail to this fascinating area. At the times of its earliest observation the toe of the Robson Glacier was still in contact with the southern edge of the nunatak and this outcrop created two lobes in the extremity of the glacier. The eastern lobe drained into Lake Adolphus, Alberta, and the western lobe into Berg Lake, British Columbia; probably the only instance of a single alpine glacier feeding two oceans. However from year to year, as reported by Wheeler, AP Coleman, and JN Collie the volumes flowing east and west from the toe were seen to vary greatly.¹¹ In 1922 Wheeler crossed Robson Pass and noted all the flow was west to Berg Lake, although he speculated that some flow to Lake Adolphus had occurred earlier in the year.¹² So the line of the watershed, lying somewhere up the Robson Glacier, was constantly moving and hence the exact location of the provincial boundary which follows the watershed, was in doubt.

As Wheeler describes in his 1914-15 CAJ article¹³ this would be of little consequence were it not for the size of the cirque which feeds Robson Glacier. If Lake Adolphus received all of the flow from the glacier then Mts Robson, Resplendent, Waffl, Helmet, and Rearguard would all become peaks of the Divide, and the entire Robson Glacier system would be in Alberta - a considerable shift in the boundary!

As it is today and has been since the boundary was set in 1924¹⁴ the continuing recession of the Robson Glacier has allowed the

Terminus of Robson Glacier in August 1983 showing principal drainage west to Berg Lake.

The nunatak is the rocky knoll in foreground (N). Locations of Wheeler's markers are E (east) and W (west). The old drainage patterns are evident, as is the distance the glacier has receded from the nunatak since first observation in 1908.





lie of the land to channel the meltwater into Berg Lake, British Columbia; with a consequent setting of the boundary east of the glacier and the nunatak, on a line descending northwards from Lynx Mtn to Snowbird Pass, ascending to Titkana Peak, descending Tatei Ridge to Robson Pass, and ascending to Mumm Peak. One has only to compare the colours of the two lakes to see that Lake Adolphus receives little water of glacial origin; but on a hot summer afternoon it is possible to hear beneath the moraine a trickle of water descending eastwards from the nunatak towards Lake Adolphus, making a mockery of the static line drawn by the surveyors and the many boundary cairns that dot Robson Pass.

It is also interesting to note (Photo 1) that despite its recession most of the meltwater from Robson Glacier issues from its eastern side and that the remains of the two lobes are still visible. Perhaps someday an advancing Robson Glacier will reapproach Wheeler's markers, sending waters east and west, and the question of the precise location of the provincial boundary will be raised again.

Graeme Pole

Detail of the east marker, the numbers "338 6" being visible. Graeme Pole



FOOTNOTES

1. Lambart during the Topographical Survey. Arthur O Wheeler. Glacial Change in the Canadian Cordillera. The 1931 Expedition. CAJ1931:137.

2. Arthur O Wheeler. The Alpine Club of Canada's Expedition to Jasper Park, Yellowhead Pass and Mt Robson Region, 1911.

CAJ 1911:45.

3. Calvin Heusser, Howell Archard, Stephen Den Hartog, WO Field. Report on the Robson Glacier, 1955. Prepared for the ACC by the American Geographical Society, July 1955. Figs 9,10,11,12. Archives of the Canadian Rockies, Banff.

4. Whenever Wheeler describes these markers in his CAJ articles the lettering for the west marker is always shown as being on a single line in the text; whereas for the east marker the Alpine Club insignia, the day, and the year each appear on separate horizontal lines, with the distance to ice on a separate line to the right. One can only assume this uniformity in the text duplicates how the lettering appeared on the rocks.

5. Report on Robson Glacier, 1955. American Geographical Society. Archives of the Canadian Rockies, Banff, Alberta.

6. Arthur O Wheeler. The Alpine Club of Canada's Expedition to Jasper Park, Yellowhead Pass and Mt Robson Region, 1911. CAJ 1912:1 -83.

7. Ibid, p 44

8. Loc sit.

9. Loc sit.

10. Loc sit.

11. Arthur O Wheeler. Robson Glacier. CAJ 1914-15:141. Also AP Coleman. Geology and Glacial Features of Mt Robson. CAJ 1910:110-113.

12. Arthur O Wheeler. Motion of the Robson Glacier. CAJ 1923:158-159.

13. Arthur O Wheeler. Robson Glacier. CAJ 1914-15:141 -142.

14. Arthur O Wheeler. Glacial Change in the Canadian Cordillera, The 1931 Expedition. CAJ 1932:136.

Meteorological Data from Thangboche Monastery, Nepal Himalaya

The accompanying data was provided by Sagarmatha Park Service and was obtained while on a trek in the Solo Khumbu in 1981. I have not seen the data published before and it would certainly be helpful in planning trips to the region. For those who prefer to see measurements in graph form the data in Table 1 are plotted in Figure 1a and 1b. The observations were made between 1966 and 1975.

Kevin O'Connell

month	average precipitation in mm	mean maximum temperature in °C	mean minimum temperature in °C
January	12	3.5	-9.5
February	25	4.5	-9.0
March	24	8.5	-5.8
April	27	12.2	-3.5
May	30	13.8	-0.8
June	155	14.5	3.5
July	280	14.2	4.6
August	267	14.2	3.8
September	140	13.0	2.5
October	75	11.8	-1.8
November	10	8.2	-6.8
December	2	6.0	-7.4

Thangboche Monastery - Table 1 - precipitation and temperature
Annual mean precipitation = 1075 mm. Monsoon average precipitation, June to September = 845 mm. Kevin O'Connell

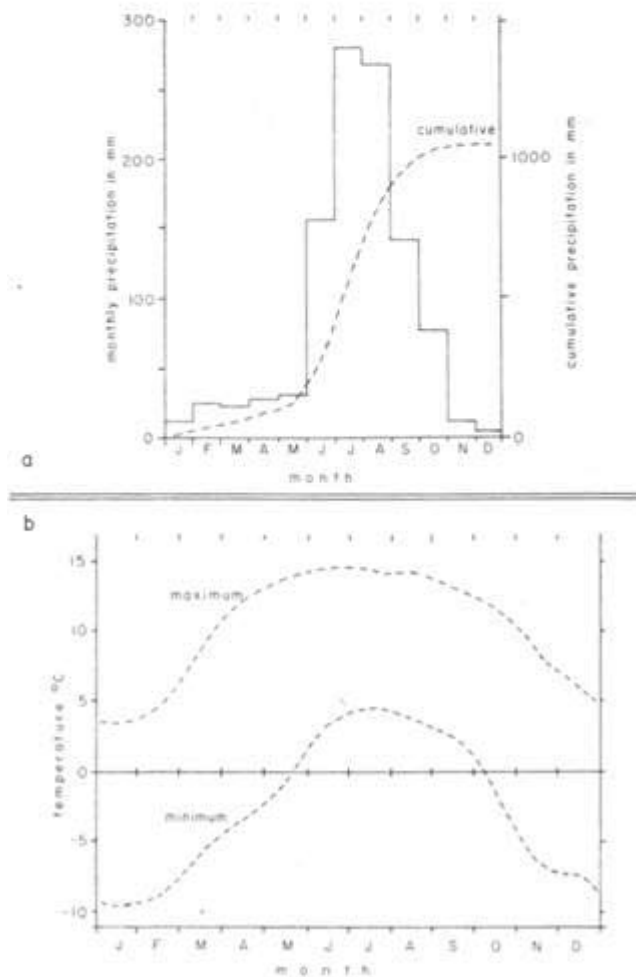


Table 2 - a - annual precipitation, b - annual mean temperatures.
Kevin O'Connell

Coast Mountains

Coast Climbing Notes 1983

1983 saw, despite very poor weather early to mid season, considerable activity in the nether reaches of the Coast. The activity level in the more accessible areas of the lower Coast and Cascades on the other hand was way down from last year.

Locally the major new routes were the north rib of Viennese Peak and the south face of Mt Ashlu, both good quality alpine rock routes. Further afield Baldwin & Co completed another monster ski traverse (through the Pantheon, Waddington, and Whitemantle). As well summer saw John and friends completing a long traverse from the Orford River to the Raleigh/Gilbert complex and out to the Toba. John Clarke was active west of the Klinaklini with the weather causing him long delays and foiling some plans.

The Monarch/Ape Lake area was awash with people but little of significance was accomplished because of atrocious weather. The south face of Waddington had attempts winter and summer. Beckey and friends visited Falls River and bagged two new routes on the north face of Winstone; of more importance the party then spent a couple of weeks in the Waddington Range and knocked off both the big buttresses on the south face of Tiedemann. The righthand (south-east) is the biggest route ever done in the Coast Mtns, rising just under 1600 m from the Tiedemann!

The only other news worthy event of the summer was that Peter Croft seemed to forget his rope somewhere early in the summer and, undaunted, proceeded to clean up in the Bugaboos, Rockies, Cascades, etc. What can we say?

New routes include:

PT 6500+ "DISILLUSION PEAK" Rexford Group, Ignoramus Ridge (east ridge). 1200 ft vertical via Disillusion Notch consisting mainly of 80 degree powder on dry granite and upside down tree climbing. Had a great day.

First ascent, Bob K and Maxim de Jong in their usual depraved state. 7 December 1982.

MT RIDEOUT NORTH COULOIR Four easy hours approach from Silvertip ski area road to bivy in last forest before huge runout bowl north-east of peak. Thence up left (and over a 2 m fracture line at top of bowl) into couloir. Rock step at about 200 m forced exit right then touchy traverse back into main couloir, followed by half pitch 75 degree ice hose in a leaning corner. Above far too many miles of 50 degree snow leads to the east ridge and shortly to the summit. A big (800 m) route that looks appalling from up the valley but proves disappointingly straightforward. Only 6 hours up, 11/2 down via east ridge to Silvertip notch and northwestward. But hard, hard routes abound nearby.

First ascent. Joe Bajan, Joe Buszowski, Don Serl. January 1983.

MT MATIER WEST BUTTRESS From Matier/Cone col climb loose gully to right about 100 m then ascend right wall onto open face. Two rope lengths onto shoulder then up and right (and right even more!) on superb, solid, nubby rock for 4 more lengths to ridge crest above, whence easily to summit. 5.6. 2 1/2 hours.

First ascent. Don Serl and Manrico Scremin. 4 June 1983.

MT PIEBITER, 8400 FT

An old mining road runs up from the Cadwallader Creek system to about 5200 ft. It is, strangely, neither mentioned by Culbert nor shown on maps, although it has existed for years. There is an old cabin which sleeps four located at the end of the driveable portion.

The upper valley was marshy, reminiscent of similar terrain in the Upper Depot or Kwoiek basins. We found an excellent camp site on the south flats of the valley beneath Mt Royal, after chasing off the resident bear. The following day we climbed Piebiter's west ridge, a specimen class 3 outing with some fine exposure on a narrow, spine like ridge. We were not surprised to find a cairn on the summit and set to wondering if skiers from McGillivray Pass had ever ventured this far.

Although the geologic map indicates that the batholith protrudes in the upper reaches of the Piebiter valley the rock features here are not outstanding, and our ridge may likely prove the best climb of its kind in the area. This is good country for alpine traversing however, as is the entire Lillooet district to the south-east, with some pleasant meadow and tarn topography.

Bruce Fairley and Martin Condor. Late July 1983.

PK8200 NORTH FACE WASHINGTON STATE Reference: Alpine Guide to Southwestern BC, Dick Culbert, p 136, photo 125; Cascade Alpine Guide (Red), Fred Beckey, p 112, photo p 110.

Approach to the McNaught Creek valley can be made by driving the Mazelpalik Creek Road, taking creek's east fork 14.5 kms from Silver Skagit road. By cross-country route follow creek to cirque north-west of International Peak, cross over lower part of north ridge of International Peak and descend via options of several gullies to McNaught Creek valley. 4 1/2 hours from car. Another approach would be from the Galene Lakes. This looked very attractive.

Route begins just right of the lowest point of rock touching McNaught valley glacier. Follow an obvious dyke for three pitches (first two being low class 5) then traverse left one pitch to a wide gully. The line chosen was the adjacent lefthand ridge to this gully. The ground in the area is very loose, being class 4 in difficulty. Solid belays and placements for protection were hard to find. Near the summit minor portions of class five are encountered.

Descent was made by scrambling the intervening ridge to the summit of International Peak then descending the north snow slopes and glacier to cirque of Mazelpalik Creek east fork and on through bush to road.

10 hours, 18 pitches. John Manuel and Harold Redekop. 13 and 14 August 1983.

Don Serl

Squamish - The Horizons Broaden

While the town of Squamish has suffered through the most depressed years in its history, by contrast activity on the local



crag has reached an unprecedented level. This is not a coincidence. Almost all of the active climbers have been unemployed at one time or another, leading to an astonishing number of new climbs being unearthed and a fresh look being cast at crags that previous generations thought better avoided. Squamish, once famous only for its big walls and slab routes has now reached maturity, with the addition of a vast number of superb outcrop climbs.

A new grading system has been developed at Squamish that will be used in conjunction with the existing Yosemite Decimal System in the forthcoming topographic guide to the area. In order to familiarize climbers with the new system I have used the new grades to describe the climbs included in this article.

The new system, known as the Squamish Rating System, will illustrate the overall difficulty of leading, while the YDS grade will still be used to describe the technical nature of the climb. This new grade, denoted as S, is loosely based on the British E grade. It will take into account how sustained and strenuous a pitch is, the quality of protection, and general boldness of a climb. Generally the S grade will come into effect at the 5.10 level but will be used to describe climbs of lesser technical difficulty should they merit it. Multi pitch routes will usually receive a higher overall grade due to the increased difficulty of leading every pitch in good style. Finally it should be noted that the S grade assigned to a climb only applies in the case of an on sight, free lead.

The following are considered 'bench mark' climbs at Squamish that demonstrate the wide variety of leading difficulty within a relatively narrow range of technical difficulty.

Sparrow - 5.9. Neat and Cool - strenuous, S1, 5.9. Mobius - poor protection, S1, 5.9. Flying Circus — straightforward easy, 5.10, S1, 5.10a. Apron Strings — continuous and strenuous, S2, 5.10a. Exhibition Flake Direct -no protection, S3, 5.10a. Jabberwocky -bouldering start, S1, 5.10b. Caboose -sustained, S2, 5.10b. Centre Street - short crux, S1, 5.10c. Exasperator - S2, 5.10c. Crescent Crack - strenuous, S3, 5.10c. Penguins in Bondage-very strenuous, S4, 5.10c.

NEW CRAGS

Just before the long descending curve on the highway heading north into Britannia Beach a red gate on the right marks the parking spot for a couple of small, recently developed crags called Comic Rocks. Some activity has taken place here but it is unclear exactly what was done. In the summer of 1983 Jim Campbell and Bob Milward cleaned and climbed almost every conceivable line on the two main cliffs, producing over a dozen routes ranging from 5.7 to hard 5.10. The best of the lot on the first cliff are Garfield (5.7), a hand traverse and flake crack, Peanuts (S2, 5.10c), and Popeye (S2, 5.10b), the latter two good steep fingery climbs. Bob freed his own Little Abner (S4, 5.11 a) on the next small cliff along the road, describing it as being "extremely awkward". The two big plums are located further along the access road on a small cliff to the left. Following the finger traverse out left from the ramp to reach an overhanging flake crack is the spectacular Tank McNamara (S4, 5.10d; Mil-ward). The flake can be either liebacked or jammed directly; both techniques are equally difficult. The big roof on the right is called Rufus and was climbed by Jim who aided to the lip then freed the crack to the top at 5.9. The route will undoubtedly go free and give one of the best single pitches at Squamish.

The overlooked overhanging wall right of the Xodus area in Murrin Park was the scene of a climber's tribute to Reid Flemming, a local literary hero. Starting up the steep wall immediately right of Tourist Delight is Mr O'clock (S4, 5.10d; P Croft and H Fraser). This great route gives 20 m of strenuous and technical climbing with a wild hand traverse finish. Following the series of jugs and cracks up the steepest and highest part of the cliff is the superb line Horrors of Ivan (S4, 5.10c; P Croft and T Knight). Although technically relatively easy this climb remains one of the most strenuous for its grade at Squamish; very few have led this one free on sight. Mr Crabbe (S5, 5.11a; P Croft and M Beaubine) is an eliminate line linking Mr O'clock to Horrors of Ivan. On the far right side of the wall is a short but very enjoyable overhanging flake climb, The Worlds Toughest Milkman (5.8; P Ourum and C Thompson). This route is one of the most exciting 5.8 leads at Squamish and is easily protected with large friends.

The often looked at black slab on the right of the highway just past Stoney Creek saw a limited amount of activity in the past two years. Carl Austrom, partnered by various people, climbed up the main part of the slab via a series of dykes and cracks. The result of his work is a three pitch face and slab climb called Snakes & Ladders (S3, 5.10d). The corner crack on the lower left of the crag called Too Much Effort was climbed by Buszowski, Ourum, and Thompson.

Jalap Bluff, once considered a training ground for the "big wall zealots" of the '60s, has been rediscovered by the '80s free climbers. Kevin McLane linked up a highly unlikely series of flakes and hand traverses up the centre of the cliff to produce Hell Fire Wall. He later placed a very inventive bolt for aid at the thin section midway. It was subsequently freed by Dave Lane (S4, 5.11 b). A long reach is advantageous in solving this very strenuous crux but even with the bolt for aid the climb remains a demanding lead and a good quality route. The obvious system of scary looking flakes right of HFW was climbed by Peter Croft who chose the appropriate name Frail Scales (S3, 5.10d). Subsequent ascent parties have found the flakes reasonably safe and have confirmed the route's quality. Ugly Dwarf (S3, 5.1 Od; P Croft, T Knight, C Austrom) is the finger crack right of Frail Scales. The arête on the right of the main wall was cleaned and climbed by Scott Flavelle and Amy Boyer. Although technically Rush Hour is only 5.9 it rates an overall grade of S1 because of the poor protection at the crux.

Tucked away behind the main peak of The Chief, high above the noise and ever present industrial hum of Squamish, is a group of cliffs considered by some to be the Squamish answer to Yosemite crack climbing. The three main cliffs, collectively known as the Backside Crags, are located approximately 30 minutes along the trail to the main peak.

The first of these hidden gems to be encountered is White Cliff. On the far left side Perry Beckham and Randy Atkinson climbed Future Shlock. It gains the overhanging ramp by some hard face climbing. The final crack required a point of aid. A shallow corner 40 m right of Future Shlock is Backwoods Beebop (S3, 5.10 c/d; P Beckham and J Daley). This climb can best be described as an easier

version of Horrors of Ivan stacked on top of an easier version of Mr O'clock, but still retaining the quality of both routes. The obvious hand traverse beginning right of Backwoods Beebop and finishing up that climb is an unnamed 5.9. Perry's best effort on this cliff was Bush Doctor (S5, 5.11a) a desperate eliminate that has repealed several strong attempts.

About five minutes further along the trail is the Cirque Lower Tier. The first climb is the short and enjoyable overhang, Ivan Meets GI Joe (S1, 5.10a; H Fraser and C Thompson). Next is an off width called A March of the Kitchen Utensils (5.8), a good climb for aspiring wide crack enthusiasts. In the huge square recess further along is one of the "last great problems", a 35 m 7 inch off width corner crack topped by an overhanging section. Croft and Knight had a good look into the monster by climbing the 5.9 cracks on the right then departed

Randy Atkinson on The World's Toughest Milkman (5.8) Georgie Howe



Randy Atkinson on The World's Toughest Milkman (5.8) Georgie Howe



awe struck. The next feature along the cliff that has been climbed is Bop Till You Drop (S3, 5.10b; Lane and Flavelle) a beautiful fist crack in a corner. Right again is the aptly named Boogie Till You Puke (S4, 5.10c; Flavelle and Lane), giving 20 m of gut wrenching off-width climbing. Croft put in a good effort at trying to free the arching face crack called Magical Dog which had previously been aided. A 15 m traverse of a down sloping, flared 1 1/4 inch crack on a vertical wall stopped him short of a free ascent. However he did return with Mike Beaubine to climb Big Mouth (S4, 5.11), the thin crack leading to an off width right of Magical Dog.

On the Cirque Upper Tier several short cracks of varying sizes on the left have been climbed as well as the "clean" finger crack, Short and Curly (S3, 5.22b) on the right.

Still further along the trail is a small cliff with a good hand crack called Too Much Pressure (S2, 5.1 Ob; P Ourom, J Howe, B Robinson). On the summit slabs just south of the First Peak Jim Brennan soloed the clean Joe's Dyke (5.7) and then seconded Peter Ourom on a nice slab route Welfare Daze (5.9).

Ray Parker and Dave Jones took the 1982 cleaner of the year award at the annual Squamish climbers' slide show for their monumental pioneering efforts on Octopus's Garden, a small group of crags on the top of the Smoke Bluffs. The main cliff, found by following the well travelled path past Joe's Crack, became instantly popular owing to the abundance of easier, good quality cracks. Particularly good are Edible Panties (5.8, D Jones and R Parker), Unearthly Delights (5.9, R Parker and Chris Guest). The hardest route to date is Electric Balls (S3, 5.11 b; S Young and D Martin). About 50 m east of the main cliff is Respiration Rock with two fun roof problems: Thorax Complaint (S2, 5.10c; Campbell and Millward; Ffa Croft), and Coronary Bypass (S1, 5.10a; C Austrom and D Jones). On the third cliff a little further north is First Class, an excellent 5.8 finger crack climbed by D Jones and D Harris; and Funarama, a 5.9 face climb done by the Rybak brothers.

The Black Zawn, a nondescript cliff above and south of Crag X in the Smoke Bluffs, has seen a blitz of activity and has yielded several outstanding routes. Robin

Barley and Peter Rowert climbed the steep groove on the far left of the cliff naming it Token Brits (S2, 5.10c). Kevin McLane and Dave Lane added a direct finish moving up and right past the peg, upping the grade to S3, 5.11 a, and improving the quality substantially. Following the next feature right is Perfidious Albion (S3, 5.10d; R Barley, P Shackleton; Ffa McLane), a continuous technical bridging problem. K McLane also climbed through the chronically wet black streaks right of Perfidious Albion to reach a steep lieback crack. This route, Black Flag, features three cruxes of hard 5.10 protected by one Kevin McLane on the upper section of Horrors of Ivan (S4, 5.10c) in Murrin Park. Georgie Howe



Climbers on Horrors of Ivan (left) and The World's Toughest Milkman (right) at Murrin Park. Georgie Howe



fixed pin and many small nuts. Right again is a sensational route, The Crucifix (S4, 5.10d; K McLane, C Murrell, J Howe). It involves some dynamic moves up an overhanging wall followed by a wild swing and a gripping move from a good jug up to a severely overhanging crack - definitely at the top end of S4! General Strike (S2, 5.10c; K McLane and P Schackle-ton) follows a line on the wall just right of The Crucifix.

MORE NEW ROUTES

With more emphasis in the last few years on free climbing very little has been done in the way of new aid routes since the last guide. Daryl Hatton finally climbed his much talked about Negro Lesbian (A3) with Craig Thompson and Rick Baudins. The route climbs through the big roofs to

Kevin McLane tackles the initial section of Frail Scales (S3, 5.10d) on Jalap Bluff. Geordie Howe



the right of the Black Dyke then follows intermittent cracks and shallow corners to Dance. Croft and Foweraker completed Ten Years After, finding some A3+ nailing above the bailing out point on the original route. On the Pan Granitic wall are two new additions: Son of Pan (A4, D Hatten and G Foweraker) and Edge of Pan (A3, Jim Brennan and C Thompson).

Besides his astonishing free ascent of University Wall, Croft also freed Tantalus Wall of its aid, climbing over the roof via the tree then along a thin dike, the crux (5.11d), to regain the crack system. In the same area he also freed the lower dihedrals on Milkrun (5.1 Od), apparently still quite scruffy. Near Arrowroute three climbs have been unearthed: Slow Dyke (S2, 5.1 Oa; Croft and B MacDonald) a one pitch dike climb, Deadend Dihedral (S4, 5.11b; Tooley and Beckman; Ffa Croft) a good two pitch thin corner crack, actually the start to Slow Duck; and the excellent two pitch Rutabega (S3, 5.11 a; P Hiltner, J Lewis, V Kramer) beginning immediately right of Arrow-route. It is a superb climb, destined to become a classic.

A few other notable new routes in Murrin Park include Washington Bullets (S2, 5.10c; Ourom and Hatten), a sustained technical crack left of Brunser Overhang, and Tricky Dicky (S2, 5.10c; Buszowski, Milward, Campbell) an interesting steep bridging problem to the left of Block and

Tackle. Croft also free climbed Claim Jumper in the Nightmare Rocks area grading it a 'boulder' 5.12b.

In the Bulletheads Campbell and Milward climbed The Slot Machine, a two pitch moderate crack climb (5.8) on the most southerly buttress. Above and right of Golden Labs is the yet unfreed off width Nuclear Arms. Below and left of the same area is another two pitch low angle crack, Manana (S2, 5.10c); good but suffers from slightly decomposing rock.

The Sheriff's Badge has also seen some reassessing from the free climbers' point of view. Taking the awesome soaring corner at the left edge of the white rock scar is The Daily Planet. The first pitch is the blockbuster, with the crux at 100 ft. The third pitch leaves the corner and underclings a 40 ft roof out into the centre of the face, followed by a very exposed layback for 35 ft up a flake. Many people were involved in the first attempts, including Beckham, Croft, Fraser, and Beaubine. The route is claimed by those who have done it as being one of the very best at Squamish. The introductory pitch, Philistine Groove, (S3, 5.11 a) had been aided some years previously but was recently cleaned and freed by Beckham, Beauvine, and Simpson. Beckham also climbed the naturally clean

overhanging hand crack up and left of the large terrace, calling it Blazing Saddles and grading it a modest 5.9. He also aided Astral Logger (S4,5.11 a) a perfect 1 1/4 inch clean steep crack near the start of the Zodiac Wall route.

The Smoke Bluffs continue to yield good lines despite five years of intense activity. Not to be eclipsed by his achievements on the longer free climbs, Croft made an historic free ascent of Zombie Roof, the often attempted 5 m roof crack. Although he wasn't able to put an accurate grade on it (he'd attempted it so many times) he admitted it was definitely 5.12. It should be noted that this was the only climb at Squamish that visiting Australian hot shot Warwick Baird was unable to do.

The main activity, aside from Octopus's Garden, was centred around Crag X, in the Boulder Gully area near Auntie Gravity. To the left of Cool Comfort is the serious but superb Triage Arête (S3, 5.9; McLane, Howe, Murrell). On the large rounded buttress to the left is the very popular Super Value (S2,5.10c; Barley and Turly) giving 40 m of steep varied climbing. The obvious overhang to the left was climbed by McLane who employed one aid point above the lip to reach the final 5.10 crack. He felt a clean on sight flash of this route

Another Rock Weekend. Tami Knight



would be exceedingly hard indeed.

Barley climbed Sensitol (5.9), the somewhat dirty crack system heading left from below the overhangs. Around the corner and up the gully proper is Talking Holds (S2, 5.10b; Rob Rohn and Howe), the prominent overhanging left leaning hand crack past a perched block. After several attempts McLane managed to free climb Turbocharger

(S4, 5.11b) a steep fingery climb up the clean wall left of Talking Holds. The slanting groove left again is Stroll On (S3, 5.10b; McLane, Flavelle, D Hart) which is harder than it looks. Immediately right of Auntie Gravity is Crag Rat (5.9) which involves similar climbing.

Over on the Easy Does It wall Barley and Shackleton climbed Finger Licken' Good, the steep finger crack right of Easy Does It, subsequently freed by McLane and Campbell to up the grade to S3, 5.10d. On the small buttress left of Sunny November Barley and Shackleton also climbed the sustained Up From Despair (S2, 5.10c), tainted by the often wet but easy finish. To the right of Pixie Corner Beckham climbed Little Feat (S3, 5.10c), a short strenuous face/crack climb. After their return from Everest Don Serl and Dave Jones cleaned and climbed The Locker (5.6; aka The Man Who Peed Down Everest) just right of Joe's Crack. On the Alexsis cliff Pat Post and Ian Kay did Groundward Bound (S2, 5.10c). Near Hot Cherry Bendover Tooley and Beckman found Take It To The Ligaments, a S2, 5.10c face climb. And finally left of Mosquito is the poorly protected Alice (S1, 5.8; Campbell and Milward).

The Squaw has been jerked out of a long quiet slumber. Bob Milward and Jim Campbell spent many days toiling in the shadows to produce Birds of Prey (5.10a). A fine climb that winds around below Right Wing to take a large groove left of Pipeline. A little more cleaning will probably make it very popular. Robin Barley was not to be outdone and produced Supernatural (5.10a) at the right end of the main crag. The first pitch is particularly good.

Scott Flavelle made an outstanding free ascent of Pipeline in September 1983, gallantly assisted by Kevin McLane. This is the first clean ascent by a local climber. It was not as hard as feared at 5.10b but the

protection in the 8 inch crack is only for the bold.

John Howe

Tomyhoi Peak North-West Ridge

From where the Tamihi Creek Road turns east to parallel the border at circa 2500 ft, cross the creek to the Damfino/Tamihi Divide. Ascend the open, timbered ridge south-east to a relatively level stretch at ca 5800 ft (camp). Here the ridge turns east. Maintain the crest unless forced on to the south slope to avoid cornices. At ca 6800 ft the ridge is joined by the north-east shoulder. Above this a narrow notch leads to the summit pyramid. Follow the crest to the summit. 12 hours return to camp under winter conditions.

Dan McAuliffe

Dan McAuliffe and Jack Bryceland. 5 March 1983. First ascent.

Nooksack Tower

As reported in the American Alpine Journal (1983:153) Jim Nelson and Chuck Gerson climbed Nooksack Tower via the complete north couloir and east ridge on 30 May 1982. Their ascent preceded our October ascent, reported as a new route in CAJ 1983:69. I can still recommend the route and must agree with Jim Nelson's description of the 1946 route under iced conditions. "The descent found us rappeling down fantastic ice gullies...here was the ice we had hoped to find on our own route" (AAJ 1983:153).

Bruce Kay

Sloan North Face

I remember walking along the Gun Creek Road with Rob Boyce on a day in March back in 1978 or 79 on the way to Spruce Lake and for the first time getting a really good look at Mt Sloan. I was struck by its singularity and its symmetry and it became one of the mountains I just had to climb.

I learned that Phil Kubik and Ed Zenger had made the first ascent of the north-east ridge in 1976, so I decided to try the north face which fronts boldly onto Little Gun Lake - one of the grandest sights in the south Chilcotin.

But it rained a lot in south-western BC summer '83 and other mountaineers did not seem too interested in my project. With summer slipping by and a sense of frustrated hope beginning to set in I decided to climb it solo.

On 23 July I woke at 4.30 am in the old lookout cabin on Green Mtn to rain and fog but by 7.30 the clouds had split a little. Descending snow into Ault Creek basin I climbed a gully to gain the north-east arête where a nonchalant mountain goat sauntered ahead of me up the ridge. I dropped off on the other side and traversed out onto the face. A recent slide allowed me to cross the bergschrund easily and I was on the summit about an hour and a half later. There was no ice, a minor disappointment as I'd come equipped; in some spots a snow shovel would have been the most practical tool. The exposure at the top of the face reminded me a little bit of a similar situation at the top of the Kain face on Robson.

There is certainly a different feeling about in the air when one is alone in the mountains but it is hard to characterize. Maybe it is simply a heightened intensity that comes from an especially alert sense of concentration. While I do not think that I would like the steady diet that a John Clarke allows himself one can understand the occasional attraction.

Bruce Fairley

Castle Towers and Sphinx in a Day

September came too quickly and alpine starts began to get colder and the hours of predawn soul searching lengthened as the days shrunk. One afternoon, during a pre-meal snack, a map was brought out. Under the shelter of a large Low, imagination was given full rein as I licked peanut butter off my fingers and began tracing future (like next summer) trips. With winter seemingly well on the way, ambitions naturally rose pretty high. And then it happened — the Low lifted and a High fell into place. A short Indian Summer arrived and so us hill bandits saddled up and headed for the hills.

That night Tami and I camped at the black top Black Tusk parking lot, both

with specific plans for the next day. Her for the Tusk itself and me for Castle Towers, Sphinx, and a ring around the lake. I set the alarm for 11.30 (which is like asking to be woken up before going to bed) and at 8.30 pushed my face into a pillow. My thoughts drifted back home where the Love Boat would now be over and Real People would be starting with a fresh batch of freaks. My dreams were unusual that night. I was ready when the time came; the alarm went and I pounced on it, slapping and fumbling madly for the Off button. Breakfast was a dazed search for something to put on my corn-flakes. In the end I dripped peanut butter all over them and at quarter past twelve lurched off into the night. In the wee wee hours I wandered out over the Cinder Flats; the Northern Lights playing, a freezing wind blowing, and my fly broken. I looked up into the cold black sky and a part of me grew cold.

"The way up to Helm Glacier is obvious. Even an idiot couldn't get lost," so Tami had said. Well it looked like I didn't even rate idiot because I didn't have a clue. The moon had been eaten up by the dark hills long ago and the Roaring Borealis was just flickering now. Finally I just aimed for the largest patch of white. The toe of the glacier was fairly cracked and dusted with fresh snow like foot powder. Another few months and the powder would heal the cracks but for now I snaked my way around them. At the top of Gentian Peak I waited for stars to dim then carried on down to Gentian Pass and up the shoulder of Castle Towers. Then Castle Towers appeared in the distance and I realized how confused I was. I hadn't even reached Gentian Pass yet.

"Oh Shoot." I said. I really did.

The summit was finally reached and was wonderfully rimed up, just like Patagonia. Well, maybe not quite. At any rate a particularly fine place for a second breakfast. Half an hour on top for the view and digestion and then I was skidding down a snowy rubble chute which shot me out onto the white flat blinking in the brightness. I slapped my goggles on, and crampons crunching happily bumped my way past wind cirques and granite spikes towards Sphinx. Traversing one slope the sun had softened, snow kept on balling up on my crampons. So every three or four steps I'd hit the side of my boot with my ice axe, feeling like Frankenstein doing a

clumsy tap dance routine at a cheap talent show. At the first chance I slipped into the shady side of the crest and stomped up firm snow to the base of Sphinx's north ridge.

Blocky granite, laybacks, crampons, and ice axe on the pack screeching and scratching in a chimney, short hand and fist cracks and then a second chimney, this time with a gift — two nuts and two shiny crabs. I shed my pack and wiggled into the depths to nab them. Five minutes later I was sitting on the flat, cracked summit frightening a raven with my ridiculous caw caw caw. It circled the summit, checked me out, then shot up over the void on an updraft, obviously wondering how a jerk like me got there. Winds wouldn't take me anywhere but gravity would so I ran down the other side where massive boulders grated under foot like huge rough cut ball bearings. I took great running leaps down a broad snow gully to Sentinel Glacier where I passed goat tracks heading for a nice looking climb. The route down to Sentinel Bay and around to Table Meadows was obvious but from there to Battleship Islands it was Darkest Africa. I felt like a rat in an overgrown maze with my bowl of hamster food a long way off. My last piece of apple and crumpled hunk of bread was sucked back hours ago.

When I caught sight of the Islands I poured on the energy and an hour later I was on a real trail again where Tami met me with a surprise. She had connections with

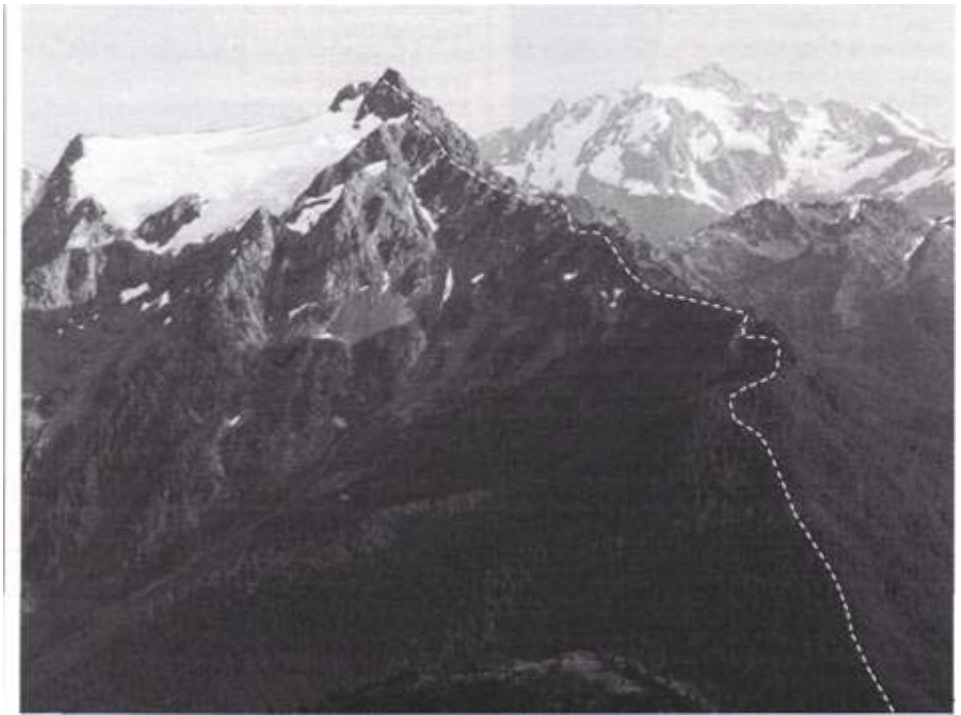
one of the rangers there and we had formal invitations for din din. What followed was the stuff dreams are made of: salad, oyster bacon hors d'oeuvres, pizza, apple raisin pie, and Neapolitan ice cream. It sure beat hamster food. After many portions of pizza and a big piece of pie and with most of my blood charging to my stomach to deal with it, my limbs were sufficiently numb to deal with the last leg of the path to our mobile. Five miles of smiles and tasty burps later we slid into the parking lot and melted like butter into the sun warmed car seats.

Peter Croft

A Summer Ski Traverse of the Spearhead Range

Our trip began with a brisk evening hike in to the Russet Lake hut via the Singing Pass trail. A low ceiling of cloud threatened us with rain but failed to dampen our spirit. Upon reaching the hut we found it infested with aggressive mice. They had no fear of the great two legged monsters that brought them crumbs to steal and packs to raid. Eventually it was every man for himself with two party members abandoning the shelter for less infested ground outside.

Dawn broke with clear skies. It was not long before we were skiing just west of the cabin on hard sun capped snow. In an hour we were in a col between Fissile and Whirlwind Peaks overlooking the Overlord Glacier, the largest glacier to be crossed on



the traverse. From this point on the skiing was straightforward until we reached the pass which overlooks the Fitzsimmons cirque. Then the skiing became more exciting as we descended 1200 vertical feet to the beginning of a short 200 ft scree gully that steeply led to the Fitzsimmons Glacier. The gully was the only safe path to the Fitzsimmons Glacier. Steep cliffs predominate the valley wall from the gully, almost at the toe of the glacier, to the Fitzsimmons cirque head wall.

After some scree scrambling we crossed the Fitzsimmons Glacier to a large V shaped notch filled with snow on the opposite valley wall. We ascended this notch to the 7400 ft contour and the toe of the MacBeth Glacier. The only entertainment on the slog up the MacBeth Glacier to the col between Mt MacBeth and the couloir ridge was a mountain goat who showed his displeasure with us by leaving as soon as we saw him. After a short rest at the MacBeth col we traversed to the Naden/Ripsaw pass. Chris lost some of his equipment here when a sudden gust of wind carried his climbing hat into the jaws of a bergschrund. The other members of the party agreed it was for the better as the hat made Chris look too much like a gear freak. A short traverse across the Ripsaw and Platform Glaciers brought us to a very windy Tremor/Shudder col. This was to be our camp site but it was so windy that we decided to continue on towards the Tremor Glacier. It was a good decision because we had a superb ski descent on late afternoon corn snow to a warm and flat camp site in the middle of the Tremor Glacier.

The next day began with an exciting snow climb up to Pattison col under a cloudless sky. Route finding beyond the col was difficult as a large bergschrund traversed the slope that we were about to descend. A few snow bridges provided access over this obstacle and some exciting skiing. The descent beyond the bergschrund was wonderful and the corn snow superb. We descended and traversed the Trory Glacier until we reached the base of a steep scree slope that led to the Decker col. The scree slope is the most obvious one on the right below Mt Decker. After gaining the col we had some steep ski traversing before we reached the base of a large stable boulder field which fanned out below the pass between Blackcomb and Spearhead Peaks. Between Spearhead Pass and the peak of

Blackcomb we had some difficulty in route finding. We eventually descended to a point just below a notch in a ridge that runs west-north-west from Blackcomb. After gaining the ridge our mostly on foot descent down Blackcomb Mtn began. In two hours we were riding down the Squamish highway recounting the last couple of days events and planning future trips in the spectacular Coast Mtns.

David Hague

Party: D Hague, C Cooper, R Fabische.
Total travelling time 18 1/2 hrs, ski time 16 hrs. Peaks climbed: Blackcomb, 8000 ft; Shudder, 8800 ft; Whirlwind, 8000 ft.

Recommendations

As there was little exposed glacial blue ice on the glaciers travelled skis were mandatory at all times. The covering of soft sun cupped snow made the ski descents of most north facing slopes very enjoyable. Route finding was made very easy because of the excellent weather but could become very difficult under less favourable conditions hence this trip is not recommended for the inexperienced. An excellent base site for a summer camp is the Shudder Glacier. It is a broad flat expanse with apparently no evidence of crevasses and with very accessible peaks of varying difficulty in the immediate area.

Golden Hinde South Face First Ascent

To approach reach Burman Lake in Strathcona Park on Vancouver Island then hike to a tarn at the base of the south face. Float planes can land at Burman Lake; otherwise it is a two to three day hike in from the road to the lake.

Ascend the southern slopes aiming for a left diagonal heather ramp and scramble up ramp to its end. Climb up and right through a weakness in a prominent left facing dihedral then straight up the face to a sloping rocky ledge. From here scramble up and right to a groove leading straight up the face. Climb this and when it deepens ascend the face on the left reaching another sloping ledge. Scramble up and right and climb up a prominent granitic rock band to a rotten red coloured ledge. From here traverse right for about 70 m. Reach a left diagonal hidden gully and ascend this to the summit ridge. Scramble up ridge to the summit. Loose rock in places. Protection is

difficult. Helmets recommended. Descend via south-east gully.

Jim Sanford

Golden Hinde, 2200 m, 7219 ft. First ascent south face. II 5.4. John Gresham, Don Newman, Jim Sanford. 30 July 1983.

Remote Peak Area, ACC Vancouver Section Camp, Summer 1983

The 1983 Vancouver Section camp was to Remote Peak, a seldom visited area situated about 50 kms north-east of Vancouver. Base camp was situated 2 kms from the Golden Ears/Garibaldi Park boundary near Pukulkul Lake on the divide between the head of Corbold Creek and Stave River. In 1963 R Culbert, G Woodsworth, and A Ellis climbed Pukulkul Peak and some rock towers to the north of the main summit. The area had no visits after this until John Clarke did first ascents on many of the remaining peaks in the area. Also in 1971 a VOC group did a traverse from Garibaldi Lake through the Remote Peak area. They apparently did not climb any of the peaks in their poor weather trip past Pukulkul Lake. In 1972 K Haring and P Olig did a trek that started from near Wedge Mtn and ended at Alouette Lake. They climbed some of the peaks near our camp, doing a first ascent on Old Pierre's west summit.

Our first day started with a two hour boat ride up Pitt Lake. After a short wait and five helicopter trips all 13 of us were at camp, the meadows covered with up to a metre of snow and the small lakes nearby just starting to break up around the edges. By late afternoon everybody had set up their tents, the communal tarp was up, and the sky was still blue.

The second day was sunny and three main climbing groups left camp. The first group, comprised of Les Suchy, John Cicero, and Mike Thompson, set out just after sunrise, their objective Pukulkul Peak. Approaching directly from camp by the east ridge, they climbed the east gendarme by a sort of class 3 pitch, reached by getting into the gap between the gendarme and the next false summit. From here a short thrash in the moat lead to a snow and rock gully and

the summit. No cairn was found. To reach the false summit to the west a half pitch of class 5 led up to the ridge and the top. They met Howie Rode, Gouin Barford, and David Ney at the main summit. This second group climbed up to a point just below the east gendarme whence they traversed under the false summit to a gap that separated it from the main summit. The glacier on the north side had no real crevasse problems and was not very steep. The only record in the Pukulkul cairn was a very battered pair of binoculars. Both groups ultimately used the very easy south face, reached from the north side by way of a large gap. One other large group started off at around 0700 for Remote Peak. Carol Tilley, John Lixvar, Doug Willie, George Hamilton, and Warren Bell approached from the west, after a long slog across a relatively flat glacier. The ascent of Remote was by way of the west ridge and easy south face. After climbing Remote, Carol and John tried Piluk by the east ridge, turning back after finding some good class 5 with no hardware. As the night neared we were greeted with incoming clouds and the pressure dropping.

On day three David, Gouin, John, George, and Howie set off to climb Skyuk, a short hike from camp. Some steep snow slopes put them onto the ridge to the west of the summit. By the time they reached the summit the clouds were getting thicker and it started to rain just as they reached camp. Some time was spent at this time improving the communal tarp, needed for the next couple of days. Carol, John, and Mike had decided to try for the 6700 ft peak north of camp. Upon arriving at Stave Glacier it started to rain but they compass navigated with rope length visibility to a point near the col north of the peak. At this point all hope for the weather was abandoned and a three hour walk in the rain brought them back to camp. The evening was spent drying socks and clothing by the fire, with short spells under the tarp to avoid the sporadic rain. The next morning it stopped raining long enough for most people to get out of camp for a couple of hours but on the fifth day it rained all day, only slowing down late in the night.

The weather looked much better on Thursday with the pressure rising and the rain stopping. Carol, John Cicero, Les, Doug, Gouin, Warren, and Mike headed off to try Old Pierre, the highest peak in the area. Old Pierre turned out to have lots

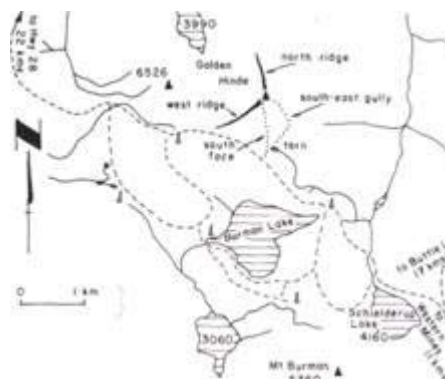
of very loose rock and some initial route finding problems. The group approached from the north, crossing the 'schrund between the easterly main summit and the lower west summits. After passing through this gap they dropped down the south face and crossed some ledges to the first gully which led up to a second gully and then the summit. At times there were views of Remote Peak but for the most part it was misty and windy. We found John Clarke's summit record in the cairn on this summit. The 'schrund was quite easy to cross but had visibly melted back while we were on the climb. We actually crossed the 'schrund by crossing to a rock face and doing a short traverse to get to the snow in the gap. This large 'schrund could be a real problem late in the season.

The last three days were very sunny and hot, with lots of bugs. Friday saw almost everybody head over to Peak 7000 north-west of camp. The views from this summit were great, from Glacier Peak in

Washington to the Lions and Garibaldi in BC. We left this summit and went over to some bluffs and small peaks to the east. Warm tarns gave some of us a chance for a bath and a bit of relaxing. From here we got good views of the Firespire Group and the Snowcap Lake area. Howie, David and Warren headed for Peak 6700, climbing a nice route up rock and snow to the summit. They were followed by Gouin, Les and Mike, their route almost entirely on snow going up a large snow face on the west side. This route was used as an exit by both parties. The summit of this peak had a recordless cairn and the remains of a cloth survey marker.

On our last day everybody was out from

Golden Hinde approach. Jim Sandford/M Irvine



Golden Hinde: south face of Golden Hinde from tarn at base
Left skyline is west ridge; route marked, except hidden gully. Jim Sandford



Golden Hinde first ascent route. Jim Sandford



camp. Howie and Gouin climbed Remote Peak, Doug, Warren, and George were off to climb Pukulkul. Both groups went by routes used earlier in the week. Carol, John Cicero, Les, and Mike climbed Skyuk and Chowuk. Chowuk was the name given to a small summit directly to the west of camp by John Lixvar. David was off exploring around Pukulkul Lake, and John was up on Chowuk by himself. Janet and George Hale were off exploring around camp, this time to a snow ridge south of camp.

On the last day the helicopter was late but before long we were all sitting on the boat, beer in hand. After a four hour wait for the wind to die down we were on our way home, after a great camp.

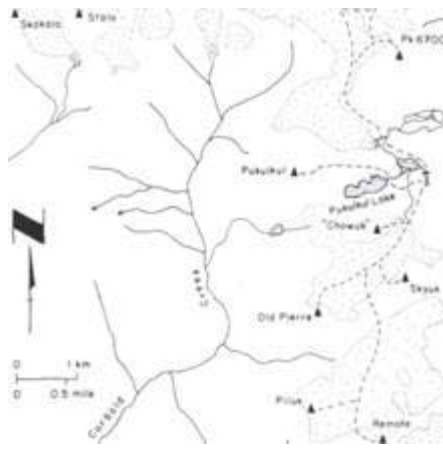
Mike Thompson

Mt Tatlow North-East Face

While driving to and from Taseko Lakes to make a trek to Mt Winstone our group coveted the remarkably isolated form of Mt Tatlow as it makes its position as a sentinel to the heart of the Coast Mtns. The steep, narrow, cascading glacier on the north-east flank looked inviting as an ice climb. Blue alpine ice was already showing while we were on our way to the Waddington area. On our return at the end of August 1983 Bill Pilling, Greg Collum, and I hiked to a base camp at Dolly Lake. Rain splattered on the tent that night and the day kept a gloom, one which coaxed us to hike out. Little could we know that the next three days would be clear ones — such are the quick changes with weather.

Not to be denied, Mark Bebie, Mark Hutson, and I returned late in September, this time finding the promise of good weather not holding as we arrived at Konni Lake. In an attempt to fool the weather gods we drove back to Williams Lake and obtained a new forecast. Clearing! We drove back and, true to the new prediction, the day held brilliant as we hiked to a timberline alp replete with solifluction lobes. Fresh snow from a recent storm was beginning to melt. That night we watched the full moon reflecting its light onto Mt Tatlow's snow covered rock faces and lateral ridges.

The three of us became separated as we wandered up the frost shattered slopes and ridges leading to the unnamed glacier on the



northeast face ("Tsoloss Glacier"?). About ten o'clock we found each other standing in the shade of the hollow north-east face, our boots making a crunchy impression on the new snow surface. The route looked exciting - a large ice wall on the lower portion of the glacier and a cascading, crevassed upper corridor, flanked by an ice couloir on its left. We found hard, blue ice after crossing the bergschrund and, with belays, slowly frontpointed our way left (east) of the ice wall. More ice climbing permitted a by-pass on its left side where some pitches took us to an inclined central bench of accumulated powder snow.

After a rest and lunch we traversed to the steep final corridor. The only possibility was the chute on the left. The route climbed here for three leads; a rock anchor provided security at one of the belays. Ice pitons held well because of the low temperature. When the chute steepened to a vertical bulge above a belay cubby hole, Bebie led skilfully up the difficult crux pitch, one that involved an overhanging section at about 100 ft. The daylight was ebbing as we climbed the powder covered final ice slopes to a little glacier cradle between the summit peaks. There was no view from the summit, as we had hoped, but on the descent of the normal route the moon's light rewarded us with a mystic landscape. The wind blew hard — a storm threat no doubt. It gave us a pleasant feeling to know that we would not need to bivouac.

Fred Beckey

The Tiedemann Peaks

In early August 1983 Jim Nelson, Greg Collum, Bill Pilling, Chuck Gerson, and I flew to the head of the Tiedemann Glacier with Mike King of White Saddle. The summer had not been a good one to

date but after a spell of clear weather on Mt Winstone, where we made two new routes, a 16 day venture to Mt Tiedemann and peaks fringing the glacier looked optimistic. We were shocked by two heavy rains, one dropping some snow at the higher levels, but on the whole the weather was superb and snow conditions good. Jim and Bill explored the first tower of Tiedemann's eastern buttress then from a new start climbed a new route along that buttress. One night and day was spent in a bivouac tent on the summit ridge. Descent was made by the Asperity col, a route cut by bergschrunds to render an ascent impossible at present. Greg and Chuck climbed the western buttress, another three day epic after an earlier attempt was stymied by a storm and verglased rocks. An elated feeling prevailed at having two of the longest possible technical alpine routes in the range.

Greg, Chuck, and I hiked down the glacier to Whymper Dome and while I was making a study of routes above the lower glacier flanks my companions climbed a fine new rock route up the north face of the Dome. Cascading flanking glaciers made the original Sierra Club party route impossible. We then returned to our upper glacier camp site and divided until helicopter pickup time. Jim, Bill, and I hiked up to the Plummer Hut, then made a new route on the north-east buttress of Dentiform. The crux was a 5.9 jam crack beginning just above the glacier apron, one Jim led. Good and interesting climbing continued until the regular route was joined at the summit tower. Dentiform had been one of my first ascents on the extensive 1947 expedition to the range. Little did I think that I would ever return.

Fred Beckey

St Elias Mountains And The Yukon

Mary Whitley, editorial assistant

Kluane Report 1983

During the summer of 1983 there were 18 groups that spent time in the Kluane National Park portion of the St Elias Mtns. These groups were made up of 89 people and spent a total of 1686 man days in the St Elias.

Lloyd Freese, Kluane National Park

Ted Handwork, Grant Morrison, Peter Judkins, and Jon Iltis successfully climbed Mt Logan's north peak via the King Trench route.

Conrad Baumgartner, David Manzer, Peter Heebink, Boris Dobrowolsky, and Marianne Darragh skied from the head of the Lowell to Harlequin Lake.

Martyn Williams, Maureen Garrity, Stuart Hamilton, Keith Morton, Mary Morton, Susan Fleck, Norman Neil, and Heather McLeod skied from the Upper Kaskawulsh Glacier around Mts Queen Mary and King George and out the south Lowell Glacier.

Ron Chambers, Rick Staley, Doug Buries, Sam Brown, Hal Morrison, Steve Osborne, Clarence Summers, and Lloyd Freese skied along the Seward Glacier on the south side of Mt Logan

Paul Dornisch, Mark Ledel, Janet Dornisch, and Matt Hoggard climbed Mts Hubbard and Kennedy and then skied out to the Slims River.

Michael Demeuth, Alison Cojocar, Norman Lawrence, and Raymond Friesen were unsuccessful on their attempts of Mt Logan's Independence Ridge.

William Weiland, Chris Larson, John Weiland, Scott Etherington, and Julie Etherington were forced to turn back by avalanches on the Abruzzi route of Mt St Elias.

Chris Cooper, Danny Verrall, Ryan Shellborn, DaveTimewell, Stephen Grant, Helen Sovdat, and Stephen Ludwig were successful in their climb of Mt Kennedy. Bad weather forced them to wait one week for a pick up after their climb.

Michael Perry, Pat Caffrey, Tom Armstrong, Don Dixon, and Bill Yohn wisely chose to turn back at 18,000 ft on their attempt of Mt Logan when one member of their party developed mountain sickness.

Chris Shank, Mike Sawyer, Mike Gillingham, Anne Brearly, Jim Tanner, and Bob Saunders were successful in climbing the main summit of Mt Logan via King Trench. They also removed the old AINA camp from the upper plateau.

Ron Whitehead, Michael Chaliflour, Daniel Raynauld, and Pierre Camerand attempted the Hummingbird. They made it to the horizontal traverse at 13,500 ft and due to food shortages chose to abandon the route.

Jim Rawding, Greg Leger, Jim Hennessey, Joseph Brostmeyer, Jeff Stirn, Bob Galeys, Matt Harris, and Doug Sevon successfully climbed Mt Steele.

William Hersman, Doug Etten, Peter Hoose, and Peter Reed were unsuccessful on their attempt of Mt Steele.

Bob Holmes, Bernie Smith, Steven Wondell, Joseph Borshaniau, Daniel Vigil, and Terry Moloney successfully climbed the east ridge of Mt Logan.

Peter Steele, Kevin O'Connell, Brad Neiman, Stephen Bezruchka, Martin Zabaleta, and Peter Cummings successfully climbed Mts Steele and Lucania.

Bob Jickling, Kathy Nilsen, Ron Quaife, and Allen Derbyshire successfully climbed an unclimbed east ridge of Mt Kennedy. They also climbed two lesser peaks on the south side of the Lowell Glacier.

Jerko Kirigin, Branko Separovic, Ivo Tadic, Zdenko Anic, Hrvoje Kraljevic, and Hrvoje Lukatela were unsuccessful on their attempt of Mt St Elias but three members climbed Mt Newton.

Gonzola Suarez Pomedá, Santiago Alvery Respuela, Enrique Lobeto Fernandez, and Baldomero Rodriguez Rodriguez were unsuccessful on their

attempt of the Centennial Ridge of Mt Logan.

The 1983 Sequoia Ski Touring Mt Kennedy Expedition

We all go to the mountains for different reasons - scenic beauty, isolation, adventure, camaraderie. There exist many beautiful ranges upon this globe but few compare to the beauty of those found in North America. Having been on two expeditions to the Alaska Range, I began looking for an area that offered glaciated terrain, exceptional beauty, and an aura of isolation. I wanted to explore.

The idea of climbing Mt Kennedy was born while reading a July 1965 issue of National Geographic Magazine describing the first ascent. The climb appeared mostly non-technical, plus highly enjoyable — two important factors for my personal happiness. As an added bonus there appeared to be a feasible route that could be skied out to Kluane Lake, some 100 miles distant, via five different glaciers.

May 1st found our team of four dumped on the shores of Kluane Lake, an expedition waiting to happen. Sitting out seven days of poor flying weather is frustrating but something I've come to expect. Matt and Mark found the waiting nearly unbearable. Jan was in no hurry as she wasn't sure she wanted to be where she was in the first place!

The afternoon of 8 May promised good weather and pilot Andy Williams of Alkan Air had us all neatly tucked in at base camp by 4.30 pm. Crevasses at 8300 ft prevent our landing there so we settle for 5700 ft on the Lower Cathedral Glacier. I will say it now to avoid repeating myself later. "Base camp and the entire trip was simply beautiful. We had our ups and downs but the experience will burn within me forever." The weather also excelled. During the 19 days out not one was unsuitable for travel. This is not the norm, although the month of May is considered by many to be the finest for climbing in the St Elias Range.

We found the Upper Cathedral Glacier

more crevassed than expected but steadily moved upward to camp 1 (6800 ft), camp 2 (8000 ft), camp 3 (Avvy Camp, 10,300 ft), and finally high camp at 11,300 ft. Camp 3 was a front row centre seat for viewing avalanches at a safe distance, although care must be taken as avalanches are common along this route. The next morning Matt and Mark climbed 15,015 ft Mt Hubbard while Jan and I enjoyed some much needed privacy. The ascent was uneventful except when the slope moved slightly while on the 45 degree crux, exposing a 60 ft long crack. Time up and down was 10 hours.

May 14th dawned perfect as we departed for Kennedy's 13,905 ft summit. The climb remains easy until the base of the west ridge is encountered which has a 20 ft long 65 degree pitch plus a 300 ft knife-edged section which is airy, exciting, and beautiful. Jan was first on the summit, followed by myself, Matt, and Mark. An hour was spent on top in 0°F temperature and 15 mph breeze. Lots of excitement and back slapping ensue as our main goal is achieved. The north face drops steeply 7500 ft to the Hubbard Glacier. In the distance lie other dreams: Vancouver, St Elias, Logan, Steele. The Kluane Lake area looks so incredibly far away that we temporarily consider flying out but lack of funds prohibits any such thought. On the descent a short and somewhat steep section prompts Jan and I to remove our skis. Within 200 ft, we suffer five waist deep crevasse falls. Lesson learned, the skis go back on. The two day ski down to base camp goes smoothly except for the avalanche that stops 30 ft before engulfing Jan and me. Surviving the wind blast and shaking off two inches of spindrift, we curse the numerous hanging glaciers then beat feet out of there.

Back at base we sort out all climbing and some cold weather gear. A Canadian group we had met at high camp generously offers to fly out any gear we don't need for the ski out, including our radio which never did function properly.

We coin the term "death march" for the journey back to Kluane Lake. The unknown weighed heavily on our minds. Departing base camp with 12 days of supplies, good weather allows us to ski out in nine days (see map for camp locations). We eventually met another Canadian ski group guided by Martyn Williams who extended us valuable

As Matt Hoggard ascends the west ridge of Kennedy, Jan and Paul Dornisch prepare to climb the crux 100 yards ahead. Mark Ledel



information regarding the exit off the Kaskawulsh Glacier terminus.

Everything seemed to be going our way as we approached the Kaskawulsh Glacier but what headaches would we encounter at the terminus? Expecting crevasses every 15 ft we found smooth sailing as we headed directly for "the Hump", which was to be our beacon of passageway. We had calculated 81 miles of glacier travel to this point, with another 19 miles to go. Bidding a fond farewell to the Ice Age, we followed Grizzly and large cat tracks northward. We never sighted any wildlife during this stretch but we're sure some wildlife spotted us. The mud of the Slims River can be a problem in the final few miles, so avoid the flats whenever possible. During the early afternoon on 26 May we rejoined the civilization of the Alaska Highway.

Sequoia Expedition: Paul Dornisch/M Irvine



I would highly recommend this trip for the team who desires such a journey. Although the route is non-technical, avalanches, crevasses, and weather are to be taken seriously. We had the best gear and clothing available, plus our team was open and honest, therefore avoiding big problems before they were out of control. Our team would be happy to assist anyone planning a trip to this area of the St Elias Range.

Paul Dornisch

Participants: Jan Dornisch, Paul Dornisch, Matt Hoggard, Mark Ledel.

Mt Kennedy Expedition 1983

Finally, after six months of preparation and planning, The Gang of mad skiers arrived at Vancouver Airport with a mess of climbing gear, skiing equipment, and food for 24 days. Prior to our trip Dave and I had searched through the July 1965 National Geographic to see if the pictures indicated a possible first nordic ski descent of the west ridge Mt Kennedy.

Our thoughts almost became a reality on 14 May when we saw the summit ridge a few miles away at 13,000 ft. As we moved closer to the peak at around 13,500 it appeared that the ridge was icy and quite knife-edged. This changed our suicidal tendencies and we cramponned the rest of the way. From the summit the views were the finest imaginable — Logan, Vancouver, St Elias, Alverstone and Hubbard to name just a few for a day to remember in the hills.

We spent four very full days getting from base camp at 5600 ft to high camp at 11,300ft under reasonably good conditions. Camp 1 was established at 7250 ft above the first icefall and across from the Weisshorn. High camp at 11,300 is a safe place and well above all the debris that pounds the upper icefall several times a day.

Upon arrival back at high camp from Mt Kennedy Steve Grant, a bold and dedicated mountain man, comments, "Well We Really Haven't Had Our Money Worth Yet! A St Elias Storm." Less than 24 hrs later we really got it, "Didn't We Steve!"

The 7500 ft north face of Mt Kennedy
As viewed from the Lowell Glacier; north
ridge has only been climbed once; west ridge
not visible. Mark Ledel



70 cms of snow fell that day and from then on shovelling became routine for the next week until we abandoned high camp with two days rations in a freak break in the stormy weather. I must admit that we all enjoyed the excavation of giant underground caverns constructed during our six day confinement.

Our descent through the upper icefall was slow as there was a lot of fresh snow — the ice cliffs above were intimidating but spared us from being blasted to oblivion! Later that day we arrived at a ghostly looking camp 1 where the igloo had protected the remaining cache which we divided up. Strong winds and what looked to be another storm approaching convinced us to keep moving through the lower icefall and on to base camp. Bogganing downhill was hilarious, requiring advance planning so as not to get the “Dog” wrapped round one. A prussic loop attached from the rear of the boggan to the climbing rope can be helpful. Then when you plunge into a slot it won’t land on top of you. Wishful thinking? On the lower Cathedral the winds were impressive enough to warrant sailing techniques but unfortunately we just didn’t take the time to break any speed records with boggans and skis. By the way Dave Timewell, crazy carpet specialist, did convince everyone that he was the fastest in the St Elias. Procedure was strap onto the carpet, an ice screw in each hand, and launch off, digging in with both screws. Dave covered a mile or so in just a few minutes.

Poor weather conditions plagued us for another week or so and base camp became Fortress Cathedral Glacier. An eight foot high by twelve foot long igloo dominated the rest of the engineered buildings. Even though the weather was marginal on 22 May some desperate souls bagged a peak. Dave and I, being forever optimistic, stomped out a landing for that plane we kept hearing but it never came. On 28 May, aerial pick up

Lower icefall on Cathedral Glacier en route to camp 1. Ryan Shellborn



Hauling loads on upper Cathedral, Mt Seattle at centre left. David Timewell



Base camp at 5650 ft on Cathedral Glacier. CG Cooper



prospects nil and six days food, we set out in miserable weather to ski the 100 miles to Kluane Lake.

Several hours of breaking trail to the east towards the southern Lowell Glacier we found that it was great to be on the move again. The change of scenery was appreciated by all. Seventeen hours later, one of the longer days, brought us to a very obvious point where we got onto the main Lowell Glacier just north-west of a large and avoidable icefall. Camp was made at 2400 hrs. Hot drinks and quick bite to eat brought an abrupt end to the day. 0600 hrs came too soon on 29 May but weather to the south-east looked very encouraging and by 0900 hrs we were off and skiing towards Pinnacle Peak, miles off in the distance. By noon we were across from Peak 9275 and in good position for pick up. We pulled out the radio and called Whitehorse. Within a few moments Phil Upton was questioning us on the conditions. Next radio transmission from Phil, “We’ll send in Andy to check things out.” An hour and half later in comes that sound of a small aircraft - a sight for sore eyes. “The plane boss, the plane.” By 1800 hrs and three exciting flights we were all on the strip and heading for those long awaited showers. Those poor people that have to put up with stinking, foul smelling

climbers were compensated well. It was hard to believe that we had such incredible luck getting out with less than 24 hrs to be on the CP flight to Vancouver on the 30th.

Chris Cooper

CG Cooper, D Verrall, S Ludwig, H Sovdat, D Timewell, R Shellborn, S Grant. 7 to 30 May 1983.

Equipment: skis Kazama Tele Comps, Kazama Mountain Highs, Fisher Expedition; bindings Villom Threepin Tele-mark, Cable (Joffa); boots (singles worn with overboots) Asolo Doubles, Vasque Singles, Asolo Singles.

Many thanks to the following for the making of a fine trip: my wife Barbara for again being understanding; Lloyd Freese of Parks Canada for permits; Phil Upton and Andy Williams, truly the finest pilots in the North American climbing scene; Danny Verrall for all those great contacts up north; Mountain Equipment Co-op for testing of new gear.

Ski Touring in the St Elias Mountains

On 1 May 1983 we flew into the divide between the Kaskawulsh and Kluane

Glaciers. We set up camp and got used to the altitude (8500 ft), each other, and our environment. The latter involved getting used to telemarking down slopes of untouched powder and practising crevasse rescue and rope handling techniques. All of us had extensive ski touring backgrounds but many were fairly new to telemarking. The snow was fresh and deep. Not ideal for travelling but great for frolicking. As a result everyone became a keen nordic downhiller, seeking out ever steeper slopes of untouched powder. Our motto was, "Look good till you hit!" or "Ski the face!"

We didn't make very good time toward Mt Queen Mary, the divide between the Kaskawulsh and Hubbard Glaciers. But then our sleds were heavy, the snow was good, and no one was in a hurry. Once onto the Hubbard we found a hard crust on the lower elevation snow over which the pulks skidded easily. We made Water Pass, the divide between the Hubbard and Seward Glaciers, in very short time. The skiing at Water Pass was fantastic. Slopes long enough, steep enough, consistent enough, and snow deep enough to allow runs of hundreds of consecutive linked turns. Furthermore the view from the pass was beautiful. The weather was holding clear and calm as it did for most of our trip.

We had to wait here for McNether and RB. Andy Williams was scheduled to fly them in the following day. Meanwhile we participated in a mini Olympics. The events included telemark slalom and ski jumping. Willow wands were used for slalom poles and we had enough for a dual slalom. The highlight of the day was the ski jumping. In this event two distinct styles evolved. Martyn and I opted for high speed launches which carried us through low trajectories for tremendous distances. Norman chose a lower speed approach from which he bounded into the air off the lip of the jump. He achieved tremendous altitude though for somewhat shorter distances. His landings were often quite catastrophic. The resulting craters added survival value to the benefits of a long jump. McNether and RB arrived with a plane load of goodies. Ice cream cake, watermelon, beef stroganoff, Caesar salad, and apple pie were some of the delights we feasted on after their arrival.

The weather was clear and the sun scorching hot when we left Water Pass to

ski down the Hubbard. The men wore fairly traditional ski garb and suffered horribly in the heat. The women wore long white nighties and skied in comfort, protected from the sun.

Our route from the Hubbard onto the Lowell involved crossing two passes. The first pass we called "Pulk Train Pass" because the descent was so steep we had to lower the pulks by rope using a carabiner brake. We tied the pulks into a train for lowering them four at a time. This procedure was working so well the person responsible for guarding the ice axe anchor felt confident enough to come forward to watch the pulks' descent. At this point the anchor pulled, and the four pulks got away to bound over a bergschrund and disappear into the distance. The second pass we called "Pulk Revolt Pass" due to snow conditions which caused the pulks to roll over like dead dogs no matter how carefully we loaded them or adjusted them or our harnesses.

Travelling down the Lowell wind and snow conditions were favourable for sailing so we got out the fly from the North Star Tent and at first took turns sailing in pairs. As our confidence and the wind increased we eventually all hooked on. This worked well until the wind increased to the point where we were going so fast the pulks overturned and some fell off, increasing the speed of those still hanging on. It took a quarter mile to get stopped after which the survivors could turn around and have a good laugh at the devastation strewn all over the glacier.

Our scheduled pick up day was near but since it was the Saturday of the Victoria Day weekend and we had a couple of days of food to spare and nobody wanted to leave we convinced Martyn to postpone the pick up until Monday. We still had to ski up a small arm of the Lowell to cross over onto the south arm of the Kaskawulsh. We had a lottery of sorts, betting on the amount of time it would take to cross this last pass. The price was a citation cookie, so we named this "Citation Pass".

A fog rolled in on our last day and all hoped to be "weathered in" for a few days as nobody was anxious for the adventure to end. But Andy Williams found a break in the weather to come in and end our trip.

Stuart Hamilton

Participants: Martyn (Asshole) Williams (leader), Keith (Guppy) Morton, Mary (Maid Marion) Morton, Susan (Lizard Bait) Fleck, Stuart Hamilton. Later Maureen (Ratbag) Garrity and Heather (McNether) McCloud.

Mt St Elias Abruzzi Route

We flew into the 3800 ft level of the Seward Glacier on 1 May 1983. Our aerial view revealed an almost unsolvable maze of crevasses at the Agassiz/Newton junction. Gazing further up the Newton, past the junction, we observed a chaotic jumble of séracs and crevasses. Clouds shrouded everything above 8000 ft so the perspective granted us was not particularly optimistic. Mike Ivers of Gulf Air Taxi gracefully landed us on a small arm on the right side of the Agassiz Glacier below Dome Pass. We set up a cache with a twelve foot probe and hooked up our sleds. Our journey began.

We dropped down to the 3500 ft level, made a right turn, and headed up the Agassiz Glacier. A day of relatively flat going through intermittent crevasses brought us to the Newton/Agassiz junction. What had seemed an impassible maze of crevasses was solved quickly and flagged. Our confidence grew with our success. In fact the view up the Newton seemed quite reasonable.

We proceeded slowly expecting a devastating avalanche from one of the many couloirs which surrounded us. The stories of the "Digger Route" had made us cautious. Time dispelled our doubts and we moved easily up the Newton to the Upper Newton icefall. We sent two ahead to reconnoitre and flag the upper icefall. Near the top our progress was halted by a huge bergschrund, solved by climbing a very steep upper wall through four feet of snow.

At this point we were on the left side of the Newton Glacier under a large, loose looking group of séracs which formed an end of the south-east ridge. We placed a camp near the centre of the Upper Newton in full view of the east ridge and Russell col. Just as we began to relax in the relative safety of our camp a huge sérac broke off high in the north face of St Elias and thundered down the face across the "Valley of Death" and up the south-east flank of Newton. There was no doubt in anyone's mind about the feasibility of existence if we

were in the path of one of those mammoth slides.

The next day we skied up the Savoia Glacier, traversed to the right and climbed up the east ridge. We placed what we considered a safe camp. That evening the weather came in and forced us to sit in our tents. Everywhere séracs were breaking off, reminding us of the potential dangers. After waiting three days we set off at 2 am and were greeted by a small avalanche off the north face. A light dust covered us. A particularly evil looking glacier on Mt Newton hung over us as we began to ascend the headwall of Russell col. Just 500 ft above we cached our skis on the uphill side of a large crevasse, hoping all avalanches would go over them. At that moment the hanging glacier we had just passed broke off erasing our trail for about a quarter of a mile.

Kicking steps in heavy deep snow with twelve days food and high altitude gear, we slowly moved upwards. What sounded like a fighter jet strafing the mountain was heard high above us. We could see nothing moving. The sound reverberated back and forth across the headwall. Seconds passed and then, with astounding power, an avalanche shot over us. A billowing white cloud preceded a darker mass rushing at speeds well over a hundred miles an hour. The lighter cloud enveloped us while the dark mass of ice missed us by feet. We hung on as the wind tried to tear us from the mountain. We gathered forces and continued up while the sound still rung in our ears. We ate lunch at about 11,200 ft. We felt that we could reach the col safely if we could get another 500 ft where a traverse to the right would take us out of the danger zone. With optimism we started up again.

High above on the right side of the north face of St Elias we saw a huge sérac break off. The mass of snow falling was many times larger than any we had previously witnessed. Each person dug in the best they could. There was very little time before it was upon us. Once again a huge billowing white cloud preceded a darker one but this time the black cloud hit us. The upper lips of the crevasses protected all but one person. He was lifted off the snow and came to an abrupt halt as the line grew taut. The ice thrashed him quite badly, deeply gashing his right hand and leaving him in

a state of shock. The violent wind swept one member's pack off the mountain. The force of the avalanche amazed us - it rearranged the topography of the headwall. Séracs of a size we thought safe to hide behind were gone and indentations in the slopes were filled with huge masses of snow and car sized blocks. One of these deposits was within ten feet of our injured friend. The valley below was completely covered for about a mile from the base of the headwall down. The depth of the debris was approximately two to four feet.

So with one pack gone and one member injured we directed our energies downward. We all returned safely and particularly happy to be alive. During our 20 days on the mountain there had been no significant snowfall - only light winds and temperatures ranging from +5° to +75°.

John Weiland

Mt St Elias Abruzzi route attempt, 1 to 20 May 1983. John Weiland, Bill Weiland, Scott Etherington, Julie Etherington, Chris Larson.

Croatian 1983 Kluane Expedition

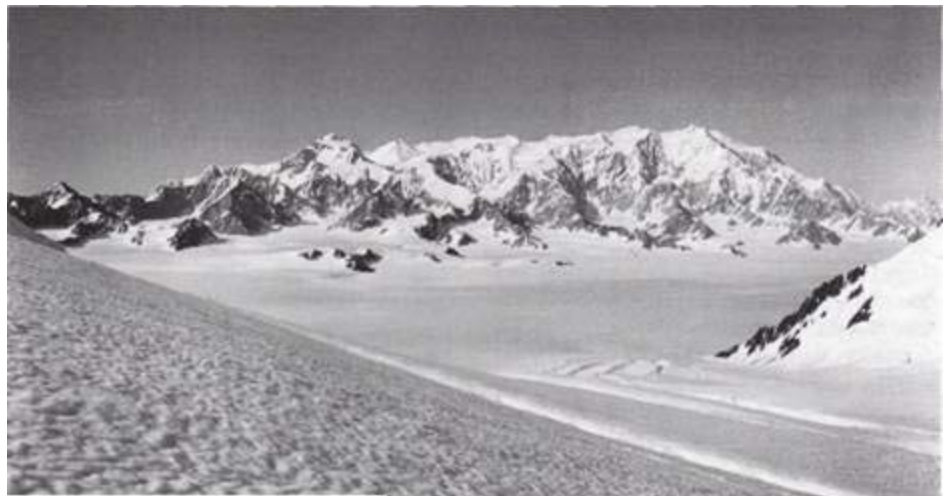
University of Zagreb mountaineering club Velebit organized an expedition to Kluane summer 1983. The objective was ascent of Mt St Elias from a base on Seward/Columbus Glacier. Under stress of weather our climb had to be abandoned but three members (Anic, Kirigin, and Šeparović) reached the summit of Mt Newton (4210 m) and an interesting journey into the southern environs of King Peak was undertaken. Following is a short account of

our activities around Mt St Elias.

After some frantic intercontinental mail traffic, the usual expeditionary deficit financing, foreign exchange and customs regulations infringements, motor vehicle breakdowns in the middle of Alcan Nowhere and similar light diversions, we checked in at the Park headquarters as planned on 22 June and proceeded immediately to Kluane airfield. By the evening of the same day Andy Williams had airlifted all the expedition members and equipment to the Seward/Columbus divide where a base camp was established. Over next two days (in perfect weather) we concentrated on exploring the possibility of direct ascent to Russell col from the upper cirque of Columbus Glacier. Unfortunately this route could not avoid areas of extreme avalanche exposure, there being an almost uninterrupted flow of ice and snow down the width of the north shoulder of St Elias. We therefore decided to try a safer but much longer route traversing Mt Newton, descending to Russell col, and up the north-west buttress of Mt St Elias.

Anic, Kirigin, and Šeparović reached 2800 m on the north ridge of Mt Newton by the 26th but the weather deteriorated and everybody returned to the base camp. Low clouds set in for the next nine days. Occasional breaks in rain and wet snow provided opportunity for short ski trips on Seward and Columbus Glaciers, on both sides of the international border. The weather finally improved somewhat on 3 July. By that date however time left for the climb was getting short. Anic, Kirigin, and Šeparović set on an alpine style, single push climb of Newton/Elias traverse. Kraljevic, Lukatela, and Tadic, after helping the Elias

Croatian Expedition: Mt Logan from the south. H Lukatela



On approach to north Newton ridge
Left to right Šeparović, Kirigin, Kraljević, Tadić,
and Anić. H. Lukatela



party with the loads half way up the Newton ridge, returned to the base and crossed Columbus/Seward with the intention to climb King Peak from the south.

Weather, unfortunately, closed in again on the evening of 5th. Late that "night" Anić, Kirigin, and Šeparović reached the summit of Mt Newton. There was little hope that Elias could be reached now but they decided nevertheless to stay there until the morning. In clouds and with more wet snow on the morning of 6 July they started their descent towards the base. Likewise the rest of the expedition found itself carefully retracing its tracks in low clouds and fog, first through the maze of crevasses in a system of small lateral glaciers underneath King Peak and then across the flat, featureless Columbus/Seward divide.

Base camp was packed up on 6 July and next morning, in weather that was as perfect for flying as it would have been for climbing, we were flown out as quickly and efficiently as we were on our way in. The now familiar scene of turning our vehicle into a movable object ensued and ended, as usual, with a sweet but expensive victory on our part. We left with a firm resolve to return some day. Mountains of Kluane have impressed us as much as those of only a handful of the other major ranges of the World.

In conclusion, a few observations that might be of interest to others attempting a similar climb. 1. As far as we know direct access to Russel col from the upper cirque of Columbus Glacier has been attempted before but never with success. Elias probably gets (due to its proximity to the coast) more snow and bad weather than Logan. We were expecting that some periods of the day might offer decreased avalanche activity on the approach route, but that was not the case. An attempt earlier

Mts St Elias and Newton from across the Seward Glacier. H. Lukatela



in the season might encounter different conditions. 2. We had only a vague idea of the load capacity of Mr Williams' flying machine. Because of that we left behind some items which would have been extremely useful: large heavy (indestructible) snow shovel that would make igloo building much faster, several small plywood sheets that could be used as 'tables' in cooking and food preparation, double foam pads for tents at base camp, reading material and other "foul weather gear", spare skis, more trail markers, etc. 3. All members had short (170 to 180 cm), strong touring or alpine skis. We considered these much safer than the so called 'cross country' skis in the type of terrain we encountered.

In both our correspondence with Mr Lloyd Freese and personal contacts with Parks staff in Haines Junction, we found them efficient, understanding and more than helpful. I suspect that only a most skilful administrator can deal with success with such an ill-organized and unpredictable segment of the population as most mountain climbers are. Nevertheless, in my opinion, Parks Canada is still seeing itself primarily as an incorruptible guard protecting the Gate of Paradise and not as a public institution facilitating unrestricted and affordable access to Kluane for thousands of Canadian (and overseas) mountaineers. ACC should be doing more to change this perception.

Hrvoje Lukatela

Expedition members were Zdenko Anić, Jerko Kirigin (leader), Hrvoje Kraljević, Branko Šeparović, and Ivo Tadić from Zagreb, Croatia, and Hrvoje Lukatela from Calgary, Alberta.

The Ridges of Mt Logan — *Corrigenda*

Unfortunately many of the features named on the map which appears on p 80 of CAJ 1983 are incorrectly positioned. The accompanying map corrects those errors and adds the names of various sub-peaks which have also been the source of some confusion. Peaks are also shown on a line drawing panorama.

Don Serl and Dave Jones

FIRST ASCENTS AND SELECTED REFERENCES

King Trench, 1925; CAJ 1925:1.

East Ridge, 1957; CAJ 1958:17, AAJ 1958:31.

Independence Ridge, 1964; AAJ 1965:309.

Hummingbird Ridge, 1965; AAJ 1966:8.

Hubsew Ridge, 1967; CAJ 1968:141, AAJ 1968:46.

Catenary Ridge, 1967; CAJ 1968:51.

Northwest Ridge, 1974; AAJ 1975:140.

Centennial Ridge, 1976; CAJ 1977:12, AAJ 1977:196.

Warbler Ridge, 1977; CAJ 1978:8, AAJ 1978:539.

West Ridge, 1978; CAJ 1979:81, AAJ 1979:118.

Amenity Ridge, 1979; CAJ 1980:5, AAJ 1980:559.

SSW Buttress, 1979; CAJ 1980:8, AAJ 1980:557.

Colorado Route (incomplete), 1982; CAJ 1983:82.

Also: Schoening Ridge, 1st ascent to King Peak, 1952;

CAJ 1953:20, AAJ 1953:416.

Schoening Ridge, 1st ascent of Logan via, 1971;

CAJ 1972:22, AAJ 1972:136.

King Peak west ridge/Trench traverse, 1st ascent of Logan via, 1966; AAJ 1967:258.

With support from a number of sources, including the US National Institutes of Health, the Canadian Armed Forces, and several foundations, a temporary laboratory was established at 5500 m (17,500 ft) on Mt Logan in the St Elias Mtns, Yukon Territory, Canada. Logistic support was supplied by

For the first three years volunteer subjects from the Canadian Armed Forces, doctors, and technicians were flown directly from Kluane 780 m (2500 ft) to the high camp which had been previously set up by a selected group of mountaineers. The climbing team was chosen from volunteers whose backgrounds included mountaineering and who had interests

In 1980 the cache was maintained by

a climbing group who exchanged their labour (digging up and reaching everything on the surface) for Arctic Institute air and logistic support. They were free to choose their route and of course to climb the high peak.

The Arctic Institute decided to maintain the cache and for the next two years the same arrangement was made with different groups. Some of the equipment was taken out each year. By 1983 it appeared doubtful that a new programme would be forthcoming and the decision was made to take out the cache entirely. Dr Chris Shank who had recently joined the Arctic Institute staff volunteered to select a group to make the climb, dig up the cache, and stay on site until the remaining equipment could be flown out.

Shank and his team arrived at the Kluane Lake Research Station on 13 May and were flown into the range the following day. They were landed on the Quintino Sella Glacier at 3000 m (9500 ft) just below the King Trench. They moved some of their equipment through the crevassed area at the head of the Quintino Sella into the King Trench and established their first camp at about 3400 m (10,900 ft) on the 16th. The following day temperatures were much lower and snow conditions and clear weather enabled them to establish a camp at 4000 m (12,700 ft) above the icefall leading to the King Col. On the 18th the weather changed and they were pinned down. This was not an ideal camp, being in the narrow part of the trench where avalanches were apt to sweep completely across the area.

By late afternoon on the 19th they were able to move up to 4200 m (13,400 ft) just below the major icefield leading up to the shelf route to the Prospector's Col and establish camp 2. On the 20th Gillingham and Brearly were feeling the effects of altitude and settled in to rest while the rest of the team made a carry up through the icefall to 4500 m (14,500 ft) with food and fuel. They were again pinned down by high winds and snow on the 21st. Gillingham seemed to be responding to the rest but Brearly was feeling no better. The hard decision had to be made to fly Brearly out as soon as the weather permitted. Radio contact with Kluane had not been good due to atmospherics but a message was relayed through another climbing party. Late on the 21st they were able to make their way

down to camp 1 at 3400 m (10,900 ft) and settle in to wait for the weather to clear so the aircraft could fly in. Brearly was much improved at the lower elevation but it was considered inadvisable for her to try to climb again.

The next two days brought continuing high winds, cold temperatures, and snow, and it wasn't until the 24th that they were able to radio back to Kluane that it had cleared. The aircraft appeared and landed to take Brearly out. The rest of the team used the good weather to dry out and to bring up the food and fuel from their base camp since almost all of the climbing supplies were used in waiting for weather. An American team from Maine landed at about the same time on the Quintino Sella and was also held up by the weather.

The evening radio contact raised the question of whether Ray Freisen, a member of a climbing party which had just been brought out, might join them to take Brearly's place, and the 25th was spent waiting to hear whether he could augment his equipment with skis. On the 26th they decided they could wait no longer and retraced their steps up to camp 2. Just before they reached it the wind picked up, the clouds began to lower, and snow to fall, and that night was spent keeping the tents clear while the storm raged.

On the 29th the skies cleared although the winds continued, and through the deep snow they made careful progress up the icefall to the cache at 4500 m (14,500 ft) where they established a camp. That night the McKinley tent ripped to shreds as the wind increased. A snow cave was dug as the storm continued through the 31st. Radio contact with Kluane assured them that a tent could be dropped as soon as weather permitted.

The weather finally cleared on 1 June although the wind was still blowing almost a gale. Everyone was cheered by the radio contact that said the aircraft was on the way with a tent and fuel. It finally arrived looking very insecure as it was buffeted about by the turbulence but after one pass over the camp site it returned and dropped the bundle as climbers scattered to avoid being hit.

The next day saw them camped just below Prospector's Col at 5300 m (17,000

ft) and the following put them over the col and down to the cache. They made camp at the cache and morale was considerably improved by a fairly easy dig to 'new' rations. The main complaint was the extreme cold, made even more bitter by the continuing wind.

By 5 June they were ready for the first flight for equipment to go out, having excavated the cache and readied the gear according to priorities set up previously: the portable buildings, one belonging to the Canadian Armed Forces and one to the Institute; a generator; oxygen bottles; medical equipment; tools, and climbing gear. Because of high winds the airplane did not arrive until 3 pm. The load was quickly put on board and after a short discussion about the possibility of another trip, the engine was started and the pilot made ready for takeoff. Even in this short time it was apparent that the wind gusts were increasing and to the group watching it seemed an intolerably long time after the tiny plane disappeared over the crest of the slope that it reappeared far below but (Phew!) airborne. The pilot quickly confirmed that there would be no second flight.

High winds continued throughout the night and the next day and temperatures ranged between -30°C at night to a high of -10°C during the day. When the 7th showed no signs of let up the group decided to head off to the North Peak. By the time they had successfully made the climb and returned to camp Mike Gillingham, who had been experiencing intermittent severe headaches and a bad cough, was feeling decidedly worse and the decision was made to fly him out on the next flight.

June 8th was clear and windless and the morning radio contact was answered from the aircraft, already on its way. As soon as it landed the generator was wrestled aboard, along with odds and ends of light, bulky equipment, and Gillingham with his personal gear. Although the snow conditions were good, it was another long takeoff because of the heavy load. The aircraft returned shortly after lunch time, just as the wind began to pick up again, down glacier as usual. The final load was put aboard and as the group watched the aircraft slowly gain speed it suddenly swerved sharply to the right, almost facing back up slope. The propeller continued to

turn and slowly the plane started to move, heading back down slope and disappeared from view. Everyone took a long deep breath as it reappeared, wagging its wings, either from the turbulence or from relief. The remaining team members set about making an emergency cache of the rest of the food and fuel and setting up a marker for the possible benefit of any other climbing party in need.

They left very early on the 9th for the summit of Mt Logan. The weather was excellent (cold!!), the going was good, and the ascent was successful. After a long, long day, they returned to the cache to find the American group camped nearby. One of their party was suffering severe mountain sickness and a call was relayed to see if it would be possible to fly him out. The aircraft took off but before it reached Mt Logan the weather closed in and the decision was made to get down as quickly as possible. The sick man managed to get down under his own power to 5300 m (17,000 ft) where they camped for the night. Late the following day they all arrived at the Quintino Sella Glacier, in spite of almost continuous snow showers. The 12th of June was spent keeping radio watch for a possible break in the weather which finally came late in the day, enabling Saunders and Tanner to be flown out. Bad weather continued through the 13th but both parties made it out on the 14th. It had been a successful venture under harsh, cold conditions, not exceptional for a Mt Logan climb but an experience, nevertheless.

Note! The emergency cache of food and fuel left at the Institute campsite on Mt Logan at 5500 m should not be considered available in 1984. It is possible that the marker pole could be visible, but it is much more likely that it will be covered and the cache would be extremely difficult, if not impossible, to find.

Philip Upton

Chief Pilot, Arctic Institute of North America

POSTSCRIPT

Phil Upton, the Arctic Institute's Chief Pilot, retired in fall 1983. Phil flew

climbers and researchers into the St Elias Mtns for 23 years and knows the region like his backyard. For 15 years he made regular landings at 5500 m (17,500 ft) on the summit plateau of Mt Logan. As Phil is fond of saying, this is not the highest that a fixed-wing aircraft has ever landed, but it is the highest altitude that one has ever successfully taken off again. Phil experienced many adventures — forced landings, rescues under adverse flying conditions, ski-wheels dropping into crevasses and even an engine change on the summit plateau. But in all those years there was never a serious accident or fatality despite the often marginal safety conditions. This is a tribute to Phil's abilities and judgement. If Canada is looking for a folk hero, Phil Upton seems to be a likely candidate.

Chris Shank

The team: Chris Shank, Anne Brearly, Mike Gillingham, Bob Saunders, Mike Sawyer, Jim Tanner.

Rock Climbing in the Whitehorse Area

Several new areas were explored for rock climbing potential in 1983. The season began with a mid-March trip to Lime Peak, a 15 minute flight from Whitehorse by ski plane. Warm weather and south facing rock allowed a quick route on the main buttress, a fairly nondescript ca 1000 ft. But it proved that there was good climbing on fairly good limestone. Brain buckets should be worn. Some very attractive lines still unclimbed and an extremely nice setting. Fossils are common and there are some exquisite cave-like formations on the south-west face of the main buttress.

Ken Sylvester and Paul Christiansen were successful in pioneering a route called Dr Watson I Presume (5.8, 160 ft) on a moderate sized granite crag down in Skagway. It is a two pitch route of mixed face climbing and jamming. Located off the Dyea Road, it is the prominent feature opposite Skagway on the west side of the river.

Another new climb done by this team is called Cranberry Jam (5.7, 30 ft). Located 300 ft south of Grand Finale in the Golden Canyons, the route is reported to be an enjoyable crack climb. The excellent jamming to be had on the main canyons' Jammies has led to their being the most climbed on rocks in the area. A new development on the main overhanging wall, just right of Grand Finale, has been the successful top roping of Sky Traveler (5.11, 70 ft). After many feeble attempts to lead this fearsome route ethics were discarded and the top rope used. It is a beautiful continuously overhanging hand crack with a 5.11 crux finger jam one third of the way up. The rest of the route is straightforward jamming but the stamina to hang around and place protection is something I have not developed yet. A generous helping of adrenalin is available to whoever does.

On April First weekend Tom Law, Eric Allen, and Norman Brown flew from Whitehorse to Glacier Lake, NWT in Tom's Cessna 172 ski plane. The purpose was to see what the Cirque of the Unclimbables was like in the early spring. We found very deep snow which showed no sign of having seen a breath of wind all winter long. During our three day stay we never had a single whiff of wind either. Our hopes of making an ascent of something easy were dashed by bad weather and waist deep snow. We swam up through the steep boulder slope that leads into the Cirque. We managed a quick look around the mouth of the Cirque before time considerations forced us to head for home. It was an enjoyable trip and we're looking for another area to explore this winter.

The rock climbing community of Whitehorse is steadily increasing and believe it or not, this is a welcome event. It is really sad when you have good routes to do and can't find a climbing partner. Next year should see some really good developments. If you wish me to record your ascent so others can benefit by your discovery, get in touch.

Eric Allen

Interior Ranges

Interior Report from Kamloops

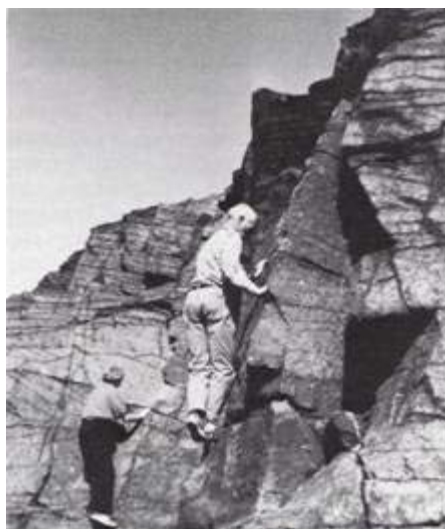
A good level of activity and enjoyment was maintained by the local climbing fraternity throughout 1983 although no really monumental ascents were achieved. Skiing dominated the first months of the year and many successful day and longer trips were made culminating in the third ski ascent of Mt Albreda in the northern Monashees. After an interregnum of rock climbing a visit was made to the little frequented Coldwater River area resulting in the ascent of Kwoiek and Kumkan Peaks by Pat Trigg and Amund Groner. The annual summer camp of the local club was held at the Lake Lovely Water cabin. During this week the ten participants ascended many of the surrounding high points in this delightful area. Denis Rimbault and Simon Fitzsimmons successfully made the ascent of the north-west arête of Sir Donald during a fine spell in August, but a reconnaissance trip to Mt Lempriere via Moonbeam Creek in the same month was turned back by bad weather. Mt Begbie was climbed in September by B Kent, A Groner, and P Trigg. The same trio added a South American flavour without going too far by re-visiting the upper Clearwater River in October and climbing Vicuna, Guanaco, Llama, and Alpaca. The Wheeler and other huts have been visited at various times and special mention should be made of Jim Milligan and his group for installing the propane stove and building the woodshed at the Wheeler. One member of the Club had a serious fall on the Marble Canyon face this summer resulting in multiple injuries. He is now back in circulation and the circumstances will be fully covered in a report to Accidents in North American Mountaineering.

Some of us managed to get further afield. Amund Groner made his second trip to Nepal, this time participating in a pilot project of the American Alpine Institute which entailed trekking and climbing in the Annapurna vicinity. The party was small (two guides and three clients) and covered the period 18 October to 13 November. They followed the Marsyandi River to the village of Pisang and climbed the 20,000 ft mountain of that name, then on through Manang to the 17,700 ft Thorong Pass from which they climbed Thorong Peak, another

20,000 footer. Several bleak days and nights at the pass made the religious village of Muktinath seem doubly delightful. After several delays they finally managed to get a flight out of Jomosom to Pokhara and then on to Kathmandu and more disrupted flight schedules. Amund concludes that 20,000 ft bumps in the Himalaya may be a challenge in endurance and stamina but our local Monashees and Selkirks are more fun.

My own contribution to higher yearning was even more modest than usual. Last year's sub-human existence in a snowbound bivouac tent had again evoked visions of the luxurious Austrian Alpine Club huts with their warm dry bunks, hot meals, wine, and social amenities. There comes a time in the life of any climber when degeneration sets in and I don't mind admitting that if climbing can be combined with the fleshpots, I'm all for it nowadays. So mid August found my brother Roger and me busing up the Mutterbergtal rejoicing in the easy approach to the Stubai Alps. The bus deposited us at the start of the Dresdner Hut chair-lift. Secure in the knowledge that there were no other ACC members around we shamelessly put our heavy packs on it and had a leisurely hike up to the hut. The Austrian AC operates about 500 huts of all shapes and sizes. The Dresdner is one of the larger ones and a few specifics will indicate what to expect. It has 80 beds, 6 to 8 to a room, but the main masses of humanity sleep side by side on foamies in large dormitories (Matratzenlager) which

Roger Neave and older sister Anna enjoying the superb rock of Windhover Crags in Derbyshire.
Hugh Neave



are designed to accommodate a total of 120 but the lebensraum expands or contracts according to need, though I've found that the 'Bergwander Law' prevails, ie "The greater the press the grosser your neighbour," which leads to the Neave extrapolation, "That the proximity of your neighbour is inversely proportionate to his/her attractiveness." Perhaps some public benefactor could research this phenomenon in our own huts. Back to AAC huts - cafeteria or table service is provided; dinner offers a choice of three or four hot dishes, usually good but, unless you're a dry rye bread addict, pack your own breakfast. All utensils, blankets, etc are provided. You don't have to be an AAC member to enjoy all this. To get back to climbing, a great deal of energy and one day were wasted in an abortive attempt to reach the Hildersheimer Hut (2899 m) in dense cloud and heavy snowfall. But the day after we did reach the hut we had one of those perfect sunny days especially designed for mountaineers so we headed for the Zuckerhutl (3505 m) the highest point in the Stubai. A very neat route liberally supplied with steel cables as handholds took us down the one fault in the sheer rock face to a moraine where a steady slog, first on a path then snow slopes, took us to the Phaffen Joch (3212 m). A large snowfield with well defined crevasses lifted us to the Phaffensattel and that's where we ran into heavy traffic. Several large guided parties were festooning the fairly steep final pitch of the Zuckerhutl with much rope. We're both allergic to line-ups so we decided if we dispensed with the rope it would give us enough manoeuvrability to avoid the concourse, a move that worked out well and allowed us a good summit sit. While on the summit one of the guides diffidently asked Roger how old he was. He seemed a bit taken aback to be told that our combined ages were over 150 years. Maybe he had been brought up on the 30 year Canadian equals 60 year Swede myth. We intended to do more in the Alps but had to curtail our visit and head for England. However we had some delightful gritstone climbing in Cheshire and Derbyshire, the early proving ground for many of the top English climbers. The rock is absolutely superb - no loose stuff and the tiniest holds can be relied on — what a change from Kamloops.

Hugh Neave

Rogers Pass ACC Ski Camp, 27 March to 3 April 1983

We met at the winter parking area on the side of the TransCanada Highway, nine skiers from across Canada and the United States, all here with hopes of good times and great skiing. After introductions we spent the morning carrying food and equipment up to Wheeler Hut. The afternoon was spent getting settled into the hut and doing odd jobs inside.

Monday we woke to snowfall. We packed up and after doing a pieps test started up the Asulkan valley. After skiing to the 7000 ft level under clear skies most of the group headed back down the valley except Brian and Sue who made some runs on a nice treed slope. We all got back to a great dinner and a fun night for all. Tuesday we again woke to snowfall. We headed up through the trees to the Illecillewaet Glacier and skied up to the 6500 ft level under grey skies. An interesting run for everyone, with lots of spills and tumbles. A second run was made by Brian and me followed by a frightening out of control descent through the trees to the hut.

Wednesday the group attempted to reach Marion Lake while I stayed back to do some work in the hut. Early in the afternoon they returned from their ordeal with tales of iced slopes, trees which attacked unsuspecting skiers, and no lake to be found. However all was soon forgotten with the vast quantities of wine and excellent food. Thursday found Sue, Bill, Bob, Brian, and me again heading up the Asulkan valley under clear skies. After a lunch stop at the 7500 ft level Bob descended the valley as the rest continued up to the Asulkan Pass. At the pass we were rewarded by an outstanding view of the impressive Dawson Range. As we started the long descent down to the hut we realized that this is what we had travelled all this way for. While relaxing in the hut all recounted stories of the exhilarating run, vast powdered slopes, and contented skiing. Friday was declared a rest day by all. Bob, Neil, and I made a speedy trip to Revelstoke in Bob's car for supplies. The others took a short trip up the Illecillewaet valley but returned shortly due to poor snow.

Saturday, after awaking to fresh snow,

Neil, Sue, Brian and I skied down to the parking lot. After driving a short distance up the highway to the glacier we started up to Balu Pass. We followed up Connaught Creek for a couple of hours but were forced to turn back due to poor snow and foggy conditions. Bob and Bill did a short trip up the Asulkan valley but returned due to poor snow and weather conditions. Later in the afternoon Bob drove Brian down to Revelstoke to catch the train home.

Sunday, our last day, was a clean up day in the hut. Then we packed up all our gear and skied down to the cars. Lengthy good-byes were said with promises of other ski trips together in the near future.

All in all Rogers Pass was a good ski camp. Although the skiing conditions were not the greatest we all made new friends and enjoyed a wonderful time. One of the highlights of the trip was Jane's excellent cooking which everyone, including Henry the resident marten, enjoyed! Another was a visit by Don Forrest and friends who stayed in the hut Thursday night on their way into Glacier Circle. Oh yes, then there was Henry the marten, whose hut we had borrowed for the week. Henry was a friendly chap who used to check us at night to make sure we were all in our sleeping bags and who took a great liking to the soup ham bone! Rogers Pass was a great, fun time for all.

Scoff Hagarty

Participants: Jane Steed, Bob Grindley (manager), Bill Clifford, Neil Gunderson, Brian Money, Ruth Oltmann, Susan Port, Paul Wisnicki, Scott Hagarty.

Wheeler Hut ACC General Mountaineering Camp, 23 July to 6 August 1983

WEEK TWO

The Clubhouse in Canmore was the assembly point where Club Manager Ron Matthews introduced Ferdl Taxbock, chief guide for week two, and Louise Guy, camp manager. We had fine weather for the spectacular drive over Kicking Horse Pass into Golden then over Rogers Pass to the Wheeler Hut. Here we were welcomed and fed by Heather Taxbock and introduced to

Wayne Bingham, assistant guide for the week.

Eight of week one GMC veterans were met by eight new climbers to share a week of exceptionally fine weather in Selkirk summer. Spurred on by the contagious enthusiasm of Louise Guy, the dank dark confines of the Wheeler Hut were illuminated by shared accounts of the peaks conquered as wood chopping, water toting and dish washing progressed. Six Canadians, nine Americans, and one Swiss mixed well to assault peaks, cols, and trails. The sign up system permitted a choice of two climbs daily which offered everything from 19 hours of maximum exertion to complete relaxation in the Canyon Hot Springs. Distances to peaks from the hut required 10 to 12 hours with five o'clock wake up calls and carried lunches.

Sunday Ferdl and four tackled nearby Uto while Wayne led an exploratory hike on MacDonald which turned out to be an initiation for the 11 participants. Within earshot of Trans-Canada Highway we stumbled through brush into a raging stream across which guide Wayne Bingham stretched a handline for boulder hopping. All crossed wetter for the experience. We followed the stream bed uphill until a wall diverted us into a bushwhacking ascent of alder thickets. Spurred through thicket by wasp bites we gained rocks on the right side of Herman couloir to climb up the talus and scree to attack the steep snow leading to the col. Donning crampons we roped up and kicked steps to the col for magnificent views east to Avalanche Mtn and beyond. Turn around time required us to retreat from the col avoiding most alder and finding a sandy river bottom to cross with all clothes held high above heads. We arrived at our van just as the threatening rain commenced.

Bear, wolverine, Columbia ground squirrel, and smaller critters visited the Wheeler Hut just half a block from Illecillewaet camp ground. Fish were in the nearby stream and the forest floor beneath Douglas fir, red cedar, and pine offered challenges to those identifying wild flowers and ferns. From five o'clock breakfast to delayed dinners Heather Taxbock and chief assistant Peggy Magee with help from Cathy and Barby fuelled with food the ravenous returning climbers.

Monday's 5 am call was not well answered. Wayne took Richard Guy up Sapphire Col and Castor while Ferdl led four on the north-west ridge of Eagle. Most everyone else headed for Canyon Hot Springs to recover from Sunday's exploratory climb. And it was just as well for rains turned back the intrepid climbers from their summits. Later Ferdl was overheard asking Wayne, "Why did you climb? It was raining every hour?" and Wayne replied, "We climbed on the half hours".

Tuesday Richard Guy undaunted by Monday's soaking was joined by Louise and led by Herb Kariel on an assault on Hermit. They took the week's honours (?) for staying out latest, making it back at 1 am Wednesday. The same day Ferdl and four climbed Sapphire via Asulkan Pass.

Wednesday Wayne led six to the summit of Avalanche in weather perfect for climbing and photography while Ferdl and three attempted Sir Donald. Time limits forced them back before gaining the summit but next day Tom Seamans conquered its height with Wayne Bingham. Thursday scored other successful climbs with Ferdl and four on Tupper and Herb and two on Avalanche.

Friday Herb with two climbers took on Eagle while Wayne and one won out on Lookout. The superb trails in the area led to many high ridge hikes for those wishing to 'rest' from a day of climbing. Glacier Crest, Great Glacier, Hermit Meadows, and Abbott Ridge afforded views of peaks climbed and added leisure for photography.

The six days of superb climbing weather, great trails, fine guides and good company made for a mountain top GMC week at Wheeler Hut.

George Waddell

Wheeler Hut ACC Hut Camp, 10 to 24 September 1983

WEEK ONE

In 1982 Bill Hobeck wrote me an excited letter about his summer camp with the Alpine Club of Canada. After reading this I decided to apply for this year's camp at the Wheeler Hut. So here I am, a guest from the German Mountain Club, at Rogers

Pass. A two day stay with the Hobecks in Vancouver gives me an idea what the preparations of a camp manager and a cook are like. They certainly have to think about everything. On our way to Rogers Pass we pick up all the groceries needed for the camp. Shopping for 13 people is quite an undertaking.

When the group drops in on Saturday afternoon the weather doesn't look very promising at the hut area and so the main problem of this day — and all week — is to get the fire started. The wood is too wet and some stoves just don't work properly. Under these circumstances Erika, our cook, does a marvelous job and her delicious meals are always appreciated.

Sunday, our first hiking day, starts with rain and snow and we have to break up our tour to Perley Rock at the end of the trail. Monday is more promising and we get some welcome sunshine on our way to Marion Lake and Abbot Trail. It's the first time we catch sight of the very impressive Mt Sir Donald appearing from behind the clouds. It is a memorable day. The highlight of the week is our tour to Grizzly Mountain on Tuesday. Bright sunshine matches the warm spirit of a wonderful group and everything fits together. Even the pouring rain of the next two days cannot dampen this friendly spirit. In spite of the bad weather we hike to Asulkan valley and Glacier Crest and Bill and Erwin have a Grizzly experience on their way to Perley Rock. A mother Grizzly and her cub encourage them to spend quite some time in the rain, taking a long way home. On Friday we must all find our way home, leaving our cook and camp manager and the ongoing rain behind. We take with us memories of the beauty of the mountains and of new friendships formed.

Christine Zaszke

WEEK TWO

The week began with a six inch snowfall on Saturday afternoon and evening. Was this to be the Camp of the Heavy Snow? Not so, as the weather improved and was clear, sunny, and beautiful for the rest of our time. Highlights of the week included a cross over trip by four of the group, led by the camp manager Bill Hobeck, hiking from the Glacier Crest trail, across the Illecillewaet Glacier and down the Perley Rock trail. The Magnificent Mouse hunt took place during the very early hours of the morning on Wednesday and the noise

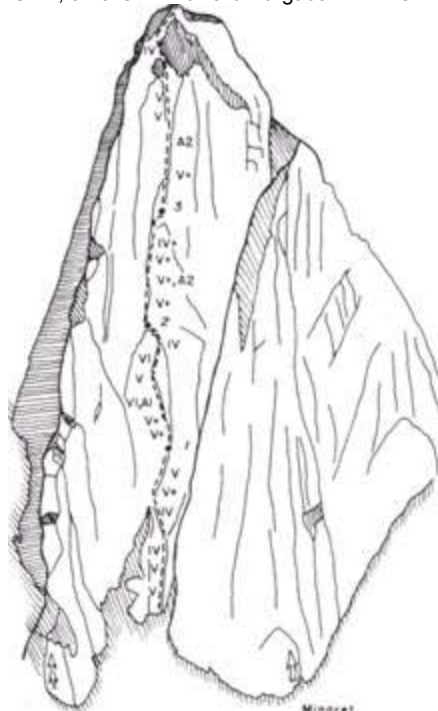
makers used to distract the Grizzlies caused a raid of the kitchen utensils and included pots, can openers, spoons and similar paraphernalia tied to our packs. A gourmet dessert made by cook par excellence, Erika Hobeck, was blueberry cheesecake with the blueberries provided by the hikers as they came home along the Balu trail. A great week, good company, excellent weather, what more can you want?

Corinne Hanon

Catalonian Route on South Howser

A new line on the west face of South Howser Spire, Bugaboo Group. The route goes up the central wall between the Minaret and the Beckey-Chouinard route. From the obvious gully in the back of the Minaret, climb up the corner just left for about two pitches to big ledges. It's possible to arrive by the gully but there are snow and a little waterfall. Climb up the wall at left, easy. Climb up and right a crack, and at end on friction a little slab to a good ledge. Walk to a chimney. Climb up to a big ledge and bivouac. From its right end, climb up and right to reach a good corner with chockstones. Good ledge to the end at right. Climb up the wall with big overhang above and, when possible, turn left to reach a lieback corner to a tiny stance. One bolt. Next, climb left — easy to reach a dirty

Catalonian Route on South Howser
Route diagram; in Spanish rating system 5.9
is V+, 5.10 is VI. Edward Burgada/M Irvine



corner with poor protection. From the top of it move up several feet to a good belay ledge. Scramble about 60 ft to big ledges. This is the top of the central shield and second bivouac. Next climb right another ledge. Climb up the lieback above and then a bit left to reach a crack to a little ledge.

One bolt. Climb up the gully/chimney above and after, moving right a little overhanging corner to a tiny stance. One bolt. Move up several feet and then a corner and a good belay. Another pitch leads to the foot of a steep wall. Third bivouac, in a little ledge. Climb free up and after mixed moves to the foot of a steep corner. Climb it using aid and when it's possible turn left and up to a niche. Moving right and then at left to reach a corner. Climb it (one aid move). Scramble easy 400 ft to the summit.

Edward Burgada

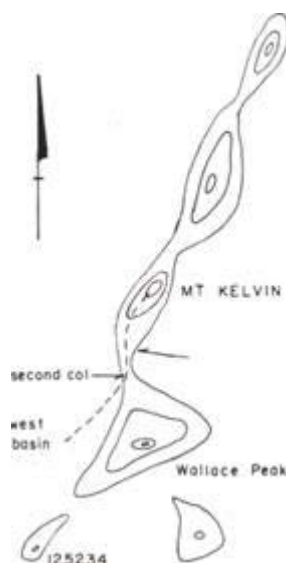
South Howser Spire, 10,850 ft. Catalanian Route, VI 5.10 A2, 2600 ft. First ascent J Cabau, T Masana, J Wenceslao, E Burgada, from Barcelona, Spain. 14 to 17 August 1983.

No good weather; very cold wind all days. We climb slowly as a result. Five pitches with aid moves. Possible to do more free on some pitches. 7 pins and 3 bolts, latter for belay, left. Pitches mainly to 150 ft. KB, LA, angles (little and middle size), good selection of nuts, stoppers, and Friends (2 sets of each).

Mt Kelvin New Route

On 5 August 1982 Howard Bussey, Gerry Caron, Martin Taylor, and I decided to have a look at the western approach to Mt Kelvin which lies directly north of Mt Wallace in the Vowells. On the approach just below Wallace Gerry had a bit of bad luck and fell into a rather deep glacial stream. This somewhat dampened his enthusiasm so he returned to our camp near the toe of the Vowell Glacier while we continued on to the west basin. We kept close to the south-west flank of Wallace and began our ascent of the obvious col between Wallace and the south spur of Kelvin. To the best of our knowledge there had been no previously recorded ascent of Kelvin from this route. This south col is visible from the east as is the more northerly south col which is the popular ascent route of Kelvin. This south col however, is a fairly attractive line from the west as the

Mt Kelvin. Kevin O'Connell/M Irvine



more northerly south col is not readily apparent from this approach. The ascent of the couloir crossed a good bergschrund but was mainly fourth class over steep and freshly avalanched wet snow. The top of this col lies at approximately 9200 ft and a number of choices are available. Under the circumstances, we chose to descend 150 ft on the east side then begin an ascent over good fifth class rock (5.4) to the crest of the ridge on the north-east face. On the lead I kept hearing a buzzing sound in my ears but couldn't figure out what was happening until I looked up and spied a fine ruby-throated hummingbird a few inches from my nose. At the time I was not in a position to do anything except observe the creature but have since referred to the route as the hummingbird ledges. We by-passed a large gendarme on the ridge and descended the east face under very poor snow conditions eventually reaching the north col (and descent route) with a short rappel. The top of this col was easily gained and thence to the summit of Kelvin via the south ridge, the common route. We descended via the more northerly south col to the glacier, rappelling a large bergschrund on the east face and then traversing over to the west end of the Archduke Trio below Wallace on the east. We then continued below Wallace until reaching the Vowell and our base camp. This circuit took our party about 12 hours under the conditions stated. The accompanying map should help to clarify any route details.

Kevin O'Connell

Mt Eyebrow North Glacier

In July 1983 a KMC group of eight climbers led by Fred Thiessen ascended Mt Eyebrow using a new approach from the north - the Tea Creek logging road. From the end of the road steep bush finally yielded a pleasant high camp at 7500 ft on the north-west ridge of Birthday Peak. The next day an easy ascent of the glacier north of Eyebrow led to its north-west ridge and summit.

Hamish Mutch

Birthday Peak North Ridge

Following an ascent of Mt Eyebrow Fred Thiessen, Ken Holmes, and I decided to traverse Birthday Peak on our way back to high camp. We went up the standard south-east ridge and down by the north ridge. We had planned to descend by the north-west ridge but blew it in the whiteout. Although neither ridge had been climbed before the north-west would have been more aesthetic.

Hamish Mutch

Mt Toby Complete East Ridge

In July 1982 Bob and Harriet Kruszyna and I climbed the complete east ridge of Mt Toby from a camp at Earl Grey Pass. The upper half had previously been climbed by a party led by Peter Wood who had gained the mid point of the ridge from the south side. A steep snow slope on the north enabled us to gain the lower rock section of the east ridge. This was followed for many pitches, over, under, and around a series of gendarmes and notches, until we reached the central section of the ridge which led more easily to the summit. A rapid descent was made by a snow crest which parallels the base of the east ridge on the south side. A long and pleasant climb at low class 5.

Hamish Mutch

Leaning Towers - The Footstool

In July 1982 Gary Staples, Peter Tchir, and I made the first ascent of this feature. Although not technically a summit, it still provides a worthwhile climb. The route

follows a left to right diagonal line up the west face and consists of five pitches of easy but exposed class 5 slabs. Descent is by rappel - just look for the pins.

Hamish Mutch

Mt Lees North East Face

Having made two long treks into the base of Mt Lees in the Findlay Group, South Purcells, both unsuccessful because of unfortunate weather, I opted for a more expensive but certain method — the helicopter based at Cranbrook. Eric Bjornstad, Sam Streibert and I made the flight in mid July 1983, landing in a meadow just aside the prominent recent lateral moraine north-east of the mountain.

In the morning, under clear skies, we ascended the moraine and the sloping glacier to where it steepens beneath the upper rock face. We climbed a steep ice apron above the bergschrund then made four belayed leads up thin snow atop granite slab — using the rock for protection. Mixed climbing in this sector proved to be the key to the climb. Once on the north-east buttress we donned rock shoes for the final pitches, which were enjoyable. One mantle and crack problem just beneath the summit proved to be class 5.8 or 5.9. We descended the route, reaching the glacier just as a thunderstorm began. We became soaked that night hiking into the trees for a more protected site. The next morning we began the long hike out Findlay Creek.

Fred Beckey

How I Spent My Summer Holidays -The Two Sunny Days of Them

String of Diamonds. Some of the moves on it are real gems and as far as the setting - well there's nothing else quite like it.

How does time fly! It was in 1981 that Klaus Streichert for reasons of his own (or was it just plain greed?) decided to bar any climbers/hikers from using the portion of the Passmore Slocan City road passing through to Bannock Burn Creek and thus put us all back into the pre-Mulvey Creek Trail Stone Age. Good-bye to easy after working hours access to "our" Mulvey Basin. Unfortunately Mr Streichert's resolve and ill will towards climbers (he now lets the odd hiking party through the gates) was

greatly strengthened by the results of a long night's work by a party of imported space cadets (cleverly masqueraded as climbers) who, in summer of '82, managed to destroy one of the gates.

The lure of Mulveys is stronger than ever; our KMC hut is still in good repair and with access being so difficult the basin is clean and unpeopled and unpolluted. We used to make several trips there every year and the two year hiatus (on account of Mr Streichert's action) was just too much. So we caved in to the lure of clean rock, creeping middle age, and not enough holiday time and after one phone call to Highland Helicopters at Castlegar we found ourselves high up above the now defunct Mulvey Trail.

The basin was as it always has been; it was great being alive and back again. Weather, for a change, was perfect. There was more snow than ever (for August). We were raring to go, several great lines awaiting. So after a warm-up day on south face of Asgard (what a classic — gets better every time), pleased with our good form we set out, late as usual, for our first major objective — the unclimbed west ridge of Gimli. For quite a few years I've been looking at its fierce overhangs and trying to find a reasonably moderate route through them. As the north face is unpleasant at the bottom (grass and moss) we walk a little way south of the ridge proper, planning to ascend what appears to be moderately sloping ledges to top of the first step on the ridge.

Because of our packs I by-pass a relatively easy squeeze chimney, start up a face to the right, and immediately run into a typical Kootenay rock problem — 5.6 moves right off the ground. Actually it's not the 5.6 that's so bracing, it's the lack of protection on the first 30 ft or so. "If I can make this nothing will stop me higher up," I said to myself (and this time I was right). I was a bit dismayed though, when upon reaching a diagonal fault line running parallel with the top of the ledges, to find an old piton with a karabiner in it. So much for a first ascent. Derek, logical as ever, deduced that this was a high point of some previous attempt. Apparently discouraged by the difficulties on the first rope length they rappelled off, leaving the hardware behind. Lack of any other signs of climbing on the rest of the route (and there's

not much room for variations) leads us to believe that ours was a first ascent.

When we were getting ready to climb we were surprised by being drizzled at out of a clear blue sky. I solved the puzzle while bringing Derek up the first pitch. We were still in shade, the sun behind the huge bulge of the south face, and looking at the face I could see in the clear morning air a falling string of diamonds backlit by the sun-water running from the summit plateau and falling from the big overhangs closing off the top of the south-west face. Beautiful sight, highlighting the severity of the setting. The next two pitches were easy and we gained altitude quickly. The top of the ledge - the Big Step so clearly seen from the Mulvey Basin - was higher than we thought and the view from its edge exhilarating. It confirmed our choice of route to the top of the step; the north face at that place is dirty, steep, and not as protectable as our route. Best of all it appeared that the way to the top was clear and short. Well it was fairly clear but not that short - four 165 ft pitches, and I mean 165 ft. I stayed on the north face, never more than 20 to 30 ft from the ridge proper, sometimes climbing right on its edge, looking down the overhangs. Again, because of the packs, I by-pass what appears to be a fairly easy squeeze chimney and thus we enjoy two pitches of 5.7 face climbing on good firm granite. At times it was almost like climbing on quartzite — small sills. It certainly was steep enough — basically a series of vertical often overhanging short faces (20 to 30 ft) with less steep broken up sections thrown in for our relief. After the second 5.7 pitch we exited on a great platform on the north face, had our first look at Mulvey Hut, and could hear our friends answering our "Yorkshire Yodels". Across from us was the big central gully that practically bisects Gimli and the summit plateau. As I feared the way to it was barred by a band of overhangs but we found a perfect hand crack splitting the one and only vertical section in it and we were up. It was 6 pm. We did not start climbing till 10 am, thus eight hours for eight pitches on a new route was not too bad a time. We changed, ran up to the summit, then down the east ridge aiming for a good bivi spot, a small meadow behind the Cubs. It had a small snowfield, enough water, and it was clear night with full moon and shooting stars. So much for our traditional annual summit bivi. Next day weather moved in and foiled our plans for a complete traverse

(Muzzle, Wolf Ears). It rained three days, till the end of our stay, so other great lines will just have to wait another year.

Steven Horvath

First ascent, west ridge of Gimli. Steven Horvath and Derek Moule. 22 August 1983. Length eight pitches (165 ft rope). Time two hours approach, six hours to climb, two to three hours down to hut. Grade 5.6 to 5.7 depending on size of packs.

Approach. From Mulvey Hut up to Jones/Gimli saddle then walk some 100 yards south to where a great diagonal ledge

(The Big Step) abuts the south-west face. Some two hours from the cabin.

Route. Gain the top of ledges either via a chimney (5.4) or a short face (5.6). Then follow obvious joint between ledge and face to top of the Big Step; from there climb the edge of north face, immediately next to the ridge crest -two full pitches of 5.6 to 5.7. Last two pitches are either outrageous class 4 or easy class 5.

To descend to the hut down climb east ridge then either: drop down to top Mulvey Lake, go to Wolf Ears - not col or, traverse

round south face of Gimli and reverse the approach.

Gear. Chocks are sufficient. Pitons are nice to have for peace of mind (I placed two) but not necessary, especially if one chooses to climb the chimneys.

Perhaps not as classic a line as the south ridge of Gimli but a nice climb with good exposure higher up. It appears that the overhangs can be climbed through on the southwest side if one can bolt (or take chances on) the first 30 or so feet above the ledge (at the top of the step).

Rocky Mountains

Kananaskis Country Explorations

Following is a list of some recent first ascents and new mountain routes in Kananaskis Country. Bracketed figures give the grid reference and the number of the appropriate 1:50,000 NTS map sheet.

British Military Group

“THREE ISLE PEAK”, 2900 M, (221118, 82J/11)

An unnamed peak immediately north of Three Isle Lake. Follow the south-east ridge, which gives excellent views of the Royal Group, directly to the summit. Class 3. Murray Toft. 1972.

MT PUTNIK

A simple climb by the south slopes. George Kinnear, Ron Quaife, and party. 1979.

From Three Isle Peak descend east to a high col and climb the west ridge. Class 3. John Martin. 1981.

Mt Putnik from the top of Three Isle Peak. John Martin



MT SMITH-DORRIEN, EASTERN APPROACH, WEST FACE

From the newly upgraded Smith-Dorrien road follow the valley of the unnamed creek between Murray Creek and Warspite Creek to the col between Mt Smith-Dorrien

and its eastern outlier. Climb class 3 and 4 rock to the crest of the ridge that joins Mt Smith-Dorrien with peaks to the south, then descend west until it is possible to contour around to the south base of the mountain. Continue around the base of the south ridge and follow the margin of the glacier between Mt Smith-Dorrien and Mt French. Near the north end of Mt Smith-Dorrien's west face is a prominent right facing corner. The route follows clean slabs somewhat south of this corner, then joins the north-west ridge near the summit. Smooth sole boots are advisable for a section of class 5 friction climbing.

J Martin. 1981.

Leaning Mtn from the north. John Martin



Summit area of Leaning Mtn.

The sharp profile was caused by a major recent rockfall; another large mass of rock (partially snow covered and extending from foreground to nearly the sharp peak) has already slumped away from the main mountain and will soon fall as well. John Martin



“LEANING MTN”, 2900 M, (232191, 82J/11) An unnamed peak on the ridge between Mt Black Prince and Mt Smith-Dorrien. Use the eastern approach to Mt Smith-Dorrien to gain the ridge crest north of Leaning Mtn, then descend west and contour south below steep slabs to the west face. Climb this to the summit, traversing back and forth among slabby walls to find the easiest line. Class 4.

J Martin. 1981.

French Military Group

MT SARRAIL, NORTH RIDGE Walk about 3.5 km west along the south shore of Upper Kananaskis Lake, then climb a long gully to a col at the base of the east buttress of the minor peak that forms the northern extremity of Mt Sarrail's north ridge. Alternately, reach the col by way of Rawson Lake. Climb the buttress over steep rock bands (class 4 and 5) to gain the main north ridge, then traverse the narrow ridge crest to the summit, which is about 1600 m to the south. Descend by the easy west ridge.

Don Gardner and Neil Liske. 1979.

MT FOX, MT FOCH, UNNAMED 3125 M, GREAT DIVIDE TRAVERSE

From Kananaskis Lake take Elk Pass Trail and the first part of Blueberry Hill Trail, then bushwhack to the east ridge of Mt Fox and follow it to the summit. Descend to the Fox/Foch col, by-passing two steep cliffs on the left, and continue up Mt Foch by the east and north-east ridges. Near the top of Mt Foch it is necessary to by-pass a steep tower by descending a gully to the left and then re-ascending clean 4th class slabs. From the summit of Mt Foch continue west

1500 m along a high ridge to an unnamed peak (class 4), then descend south and west over scree to the col between this peak and Mt Marlborough. Complete the loop, which is a long day trip, via Foch Creek, Hidden Lake, and the newly completed Kananaskis Lake South Shore Trail.

J Martin, 1982.

Kananaskis Range

“MT LILLIAN”, 2870 M, (217373.82J/14)

The peak at the head of Ribbon Creek valley; west buttress of Guinn Pass. From Engadine Lakes (aka Galatea Lakes) climb the complex, broken south face to the narrow summit ridge near the east end. Traverse west to the top, detouring left where necessary. Class 4. To descend, follow the ridge further west to a scree slope that leads back to Engadine Lakes.

J Martin, 1982.

“KIDD SOUTH”, 2900 M, (256378, 82J/14)

A peak 2 km south-west of Mt Kidd and joined to it by a high col. The west ridge is a simple climb from Guinn Pass; however a tedious traverse over quartzite blocks is required to by-pass a cliff band about halfway up. First ascent unknown.

“HEADWALL PEAK”

A long ridge separating the valleys of Headwall Creek (aka Ranger Creek) and James Walker Creek.

Main Peak, 3020 m, (244292, 82J/14) Follow the west fork of James Walker Creek to meadows above timberline. Climb the easy southeast slopes of the mountain to the south ridge near the summit. A short narrow section of ridge leads to the top.

Gail Fraser, Lynda Howard, J Martin, 1981.

South Peak, 2900 m, (240279, 82J/14)

From lower James Walker Creek, gain an outlier southwest of the peak and continue into a cirque in the west face. Scramble up slabs and broken rock to the top.

J Martin, 1981.

North Tower, 2990 m, (245299, 82J/14) Follow the west fork of James Walker Creek to a small unmapped glacier at the head of the valley. Head up west through a break in the lowest cliffs, then diagonal up right over broken rock to the summit ridge. Scramble south to the impressive final tower and climb it by a steep break on the east side. Class 4.

J Martin, 1982.

Opal Range

“MT GITA”, 2660 M, (377132, 82J/11) A sharp peak 2 km west of Mt Elpoca. It is referred to as Gap Mtn in The Rocky Mountains of Canada — South and on a recent Kananaskis Country map; however the suggestion of “Mt Gita” by the first ascent party in 1949 undoubtedly has a prior claim. The climbing route of the first ascent party is not recorded in the summit register. They may have followed the south-west slopes and south ridge, an obvious and pleasant route with a short class 3 section. Hans Schwarz and party, 1949.

“NORTH OPAL PEAK”, 2900 M, (334288, 82J/14), WINTER ASCENT The northernmost peak of the Opal Range. From Highway 40 near the Fortress turnoff walk to the top of Opal Ridge, the lower western outlier of the Opal Range. Descend on the far side to the headwaters of Rocky Creek and climb the peak by the south-west slopes.

J Martin, 1977. First ascent unknown.

“CAT’S EARS”, 2960 M, (384177, 82J/11) Two prominent towers 700 and 900 m southeast of Mt Jerram.

South Cat’s Ear

Approach by way of Whiteman Creek (aka Opal Creek) and walk up toward the col between the two Cat’s Ears, then follow a long, obvious, right trending ramp to its end. A pitch of 5.6 climbing is encountered at the top of the ramp. Above, easy scrambling leads to the top.

Don Forest and Gene Fraser, 1981

North Cat’s Ear

Approach as for the South Cat’s Ear, but continue to the col between the two towers. Climb two short, steep walls (5.6), then continue more easily over a rib into a prominent steep gully/chimney. Climb the chimney until it is possible to exit left and follow an easy ridge to the summit. Four short rappels were required on the descent to the col. Frank Campbell, D Forest, 1982.

Misty Range

MIST TOWERS

Three sharp towers on the ridge between Storm Mtn and Mist Mtn, easily reached from Highway 40 (Kananaskis Highway).

North Tower, 2930 m, (468049, 82J/10) Directly below the towers on the west side is a creek that drains two cirques. Walk to

near the head of the northern cirque, follow a rib of rock that slants up to the right, and then as soon as practical traverse back left above a slabby face to the central, upper portion of the cirque. Climb broken rock directly to the summit.

J Martin, 1983.

Central Tower, 2960 m, (468044, 82J/10) Starting at the same creek, gain the head of the southern cirque. Scramble up left, following the lines of strata, to a break in the slabs above. Climb up the break, detour right around a band of steep slabs, and continue up a scree slope to a steep gully near the top. Climb the gully to the base of two pinnacles of equal height. The southern pinnacle is reached from the right over a short but exceptionally narrow ridge. Class 4.

J Martin, 1982.

Elk Range

MT ODLUM, TRAVERSE

Approach from Highway 40 by the valley that drains the north-east side of the peak, following good game trails. Climb easy rock to the north ridge near the col between Mt Odium and the unnamed peak to the north. Walk up the north ridge to the top. Descend by the east ridge. J Martin. No record of first ascent.

UNNAMED, 2810 M, (453957, 82J/7)

A prominent peak 1500 m north of Mt Odium. Approach as for Mt Odium and climb the short, entertaining south ridge. The final section is best negotiated by a steep class 4 groove in firm rock to the right of the ridge.

J Martin, 1983.

“ELK PEAK”, 2810 M, (443975, 82J/10)

The prominent summit 3 km south of Mt Storelk. Starting from Highway 40, gain the ridge crest over class 3 and 4 rock about 1 km south of Mt Storelk. Walk and scramble south to the peak.

L Howard, J Martin, 1983.

John Martin

Calgary Area Rock Climbing

1983 was again a productive year for new rock routes in the Calgary area. Most of the activity involved short climbs of three pitches or less. Interestingly, good

new routes were found on several easily accessible but previously unexplored cliffs.

In Grotto Canyon Rusty Baillie and Murray Toft opened up the previously unclimbed Armadillo Buttress with No Place for a Friend (5.9), a well protected three pitch climb on steep rock directly above the trail. Repeat ascents of this excellent route followed almost immediately. At His and Hers Cliff, an established ice climbing area, Chris Perry and Albi Sole climbed the first rock route with Breakaway (5.8), which takes a line close to the centre of the cliff. A difficult alternate start in a prominent steep corner (5.10) was subsequently added by Geoff Powter and partner. At Grotto Slab, John Martin and Lynda Howard worked out Wearing Thin (5.10c), a slippery but well protected eliminate problem on water polished rock near Runnel Route.

Heart Canyon also continued to yield new routes. At Jupiter Rock the first led ascent of Callisto (5.9), a former top rope problem on an impressive black wall that rises directly out of the creek, went to Chris Perry and Martyn White. At First Rock, Walter Lee and John Martin climbed Cavebird (5.9), a short crack and roof problem; at Lower Heart Crag they added Heartland (5.8), a face climb near Patriot's Groove. At Heart Slab, Martin and Howard climbed Black Slab (5.7), which takes the rib overlooking The Scoop, and White Slab (5.8/9), which takes a line immediately left of The Scoop. Also at Heart Slab, Lee and Martin made the second ascent of Skid Row (5.10b).

In the Canmore area, two noteworthy achievements were made on the big North Face of Chinaman's Peak. After a lapse of six years following the first ascent, Dave Cheesmond and Urs Kallen finally repeated the route, taking a variant line in the middle third. They narrowly missed freeing it on account of rain. Dave Morgan and Chris Perry made the first free ascent shortly afterward, following the original route throughout. The grade remains at 5.9. Morgan and Perry also opened up Kanga Crag, which lies between Whiteman Crag and EEOR, with California Dreaming (5.10). The crux comes on the first pitch, a spectacular vertical flake crack.

At Yamnuska, Lee and Martin climbed A Crack (5.8), a short, steep hand crack

at the east end of the cliff. At the base of nearby Nanny Goat Crag they established the gripping Overnight Sensation (5.10c), a steep, bolt protected face climb on water polished rock; and on Kid Goat Crag they added Dawntreader (5.9), another steep face climb. Several other new routes have been initiated on Yamnuska and Goat Mtn by various parties.

To the north of the Bow valley in the Ghost River area, Jeff Marshall and Mark Champagne found Teenage Wasteland (5.9), a fine two pitch face climb on the small tier of cliffs below Phantom Tower. To the south, in the Kananaskis valley, three short new routes were established in the long dormant Wasootch Creek area. Lee and Dave Yates climbed Canadian Debut (5.9), a short corner and slab problem on a newly discovered cliff a short distance upstream from Wasootch Slabs. At the slabs Lee squeezed in 99 (5.10d, A1) up the steep wall between routes 26 and 27. A cheat stick was used to clip the first bolt, which was the only aid point. Also at Wasootch Slabs, in 1982, Marshall led Absolutely Unethical (5.10a), a former top rope problem between routes 35 and 36.

The long awaited guidebook to Bow Valley rock is now nearly complete and hoped to be published in time to spur on developments during the 1984 season. 1984 developments might also be affected by the new Fire rock boots from Spain which have already replaced EBs as standard footwear in California. These boots have superior adhesion characteristics and were used locally during 1983 to climb Wearing Thin, a slab problem that had resisted previous top rope attempts in EBs.

John Martin

Cascade Buttress New Routes

THE CROISSANT

1. Climb the slab to the left of the obvious easy gully/ramp. Belay on the top (tree).
2. Climb the rib left of the gully and belay at a tree.
3. Continue on the rib passing two small overhangs and belay on a big scree ledge, halfway up the cliff.
4. Climb the dihedral to its top and belay.
5. Climb the obvious rib to the right of

the gully/chimney.

F7. Rene Boisselle and Daniel Bonzi. 1981.

THE LEANING TREE

To find the start, one should be almost directly under the leaning tree high on the face. The route starts with a thin slab and a small left facing corner and follows corners, aiming for the left side of the big tree ledge halfway up the face. Once you get towards the left side of that big ledge some overhangs block the way. Traverse left and climb a steep little wall (F8). From here, two pitches bring you to the leaning tree. The last pitch is a right traverse going towards the exit of The Croissant.

6 pitches of F8. Rene Boisselle and Mike O'Reilly. August 1983.

Rene Boisselle

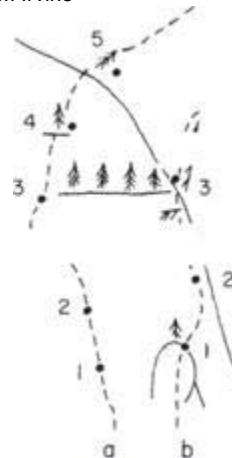
Cascade Buttress New Routes

1 -The Croissant, 2-The Leaning Tree, 3-Auger-Smith 1976, 4- Lion's Layback. Rene Boisselle



Cascade Buttress New Routes

1 -The Croissant, 2-The Leaning Tree. Rene Boisselle/M Irvine



Prism Falls

On 22 January 1983 Mike Shaw and Alan Dunham made the first ascent of Prism Falls, located a hundred feet east of the upper falls at Johnson Canyon. The upper falls is 1.5 miles from 1A highway and can be reached via the walkway or the fire road. A wall of ice extends from the



upper falls along the east bank for a couple of hundred feet. The wall has a bottom half of solid ice while the top half consists of massive hanging icicles and a few pillars. At the time of our ascent there were three formed pillars, one of which went behind a curtain of icicles while another was of small diameter.

The route up the central pillar is a short steep Grade IV, ca 35 m long. From a belay on a snow covered ledge about 15 ft above water level, 15 m of moderate and steep ice leads to a rest ledge and the base of the pillars. The central pillar is vertical for 10m and then eases slightly. The pillar consisted of chandelier ice with numerous mushrooms. Descent was by a walk off downstream of the climb.

Alan RC Dunham

Mt Bourgeau Crag Climbing

The main avalanche slope, righthand side of the big lower cliff, crossing the Sunshine Road before the parking lot. Just a few hundred feet up the slope a small crag deserved more attention. Investigation resulted in a few routes on solid limestone with difficulty ranging from 5.5 to 5.10. The crag was named Double O Seven (007) Crag. Routes like Octopussy follow a big chimney of solid F8. For Your Eyes Only

follows a steep corner crack at F10. More routes were climbed, all following cracks at F9, such as the one with the bone stuck in it. This new area constitutes a good spot for a solid introduction to hard crag climbing on excellent rock with a short approach. All the routes climbed were done on the lead.

Rene Boisselle

Mt Rundle Crag Climbing

Above Rundle Rock and to the right of the start of Rundle Ridge a small face with two main looking corners and a third, not too obvious, proved to be of excellent quality.

Route 1 - right facing corner crack, F6; one section is loose. Route 2 - right facing

Mt Rundle Crag Climbing: routes climbed.
Rene Boisselle



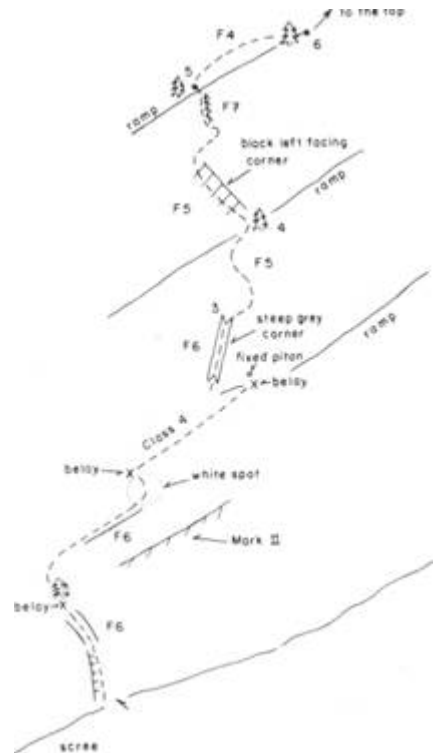
corner, F7 or 8; one section is loose. Route 3 - a steep crack, solid rock, F8; the crack is in the upper part. Route 4 — done in three short pitches, F7; end in the small corner. Route 5 - done in two pitches F9+; small bulge on the second pitch. The descent is by two short rappels on the other side (using trees).

Rene Boisselle

Tunnel Mtn North Side

A route was done on the north side face in June 1983 by Philip Monod and Rene Boisselle. We climbed the first pitch of Mark II which consists of a corner chimney (the beginning of the black band in the middle of the face). The second pitch, climb the crack above and parallel to Mark II. The entire crack can be climbed, diagonally to the right, or exit at the big white spot - crumbly. Then exit at the big white spot and "Class Four" it up for about 175 ft. Find two fixed pins for a belay. From here the third pitch climbs the grey corner on the left - some slabby wall to get into it. Once in the

Tunnel Mtn. North Side: Route on Tunnel. Rene Boisselle/M Irvine



corner, climb it to its top and belay inside (good crack). For the fourth pitch exit the corner (on the right side facing the rock) and aim for a tree belay situated higher on the left. From the tree belay you should be at the base of a big left facing corner; once on it (by a left traverse which is a bit loose) climb it to its top and follow some slabby rock onto easy rock. Before it gets too easy climb on the left a steep looking corner with the crux on top (F7). Belay by a small tree. The sixth pitch is the easy slab to the big tree ledge. From here unrope and find many easy possibilities to the top. Look at the cairn built with the help of a nice small stiff tree.

Rene Boisselle

Selenium Falls

On 8 March 1983 Frank Campbell and Alan Dunham made the third ascent of a waterfall on the east side of Sulfur Mtn. The first ascent party (1982) was from France thus the climb has not been reported. I will refer to the climb as Selenium Falls. It is quite similar to Louise Falls but a little more demanding.

When skiing from the Canmore end of the Spray River to Banff golf course there is a trail (with sign) which ascends to the Upper Hot Springs. The climb is in the first major gully north of the switchbacks on the trail. The quickest approach is from the



south end of the Upper Hot Springs parking lot. The first waterfall visible is not Selenium. Keep going past a small switchback to a large gully. Selenium Falls can be recognized by a single pillar on the right, half-way up the climb. It is visible from the trail and is apparently also visible from the Youth Hostel. From the trail to the base of the climb might take half an hour on a packed trail, considerably more in deep snow.

A short steep wall (half gone at the time of our climb) is followed by moderate ice to a belay ledge. A low angle gully leads to a snow slope. Above the snow moderate ice leads into the steepening ice going to the base of the pillar. We found two old bolts behind the pillar. At the time of our ascent the base of the pillar was about three feet in diameter. Once at the wall of ice at the top of the pillar steep and vertical ice continues up to a large ledge. Moderate ice is then followed to a large bowl containing ice outcrops in deep snow. Descent was made up and right to trees, traversing above the rock bands to treed slopes that were rappelled and down climbed. Grade IV

Alan RC Dunham

Mt Babel East Face

In August 1979 Murray Toft and George Kinnear claimed a first ascent of a new route on this face. The same route was actually climbed a few years earlier by Jay Anderson, Rene Boisselle, and the late Jean-Pierre Cadot. We did not record it, thinking we had repeated the Greenwood/Grillmair route. However having described the route to Murray Toft it seems that they are the same. The route starts at a buttress north of the Greenwood/Grillmair; a

huge chockstone is the prominent feature defining the start. F6 or F7.

Rene Boisselle

Mt Temple North-East Buttress

In August 1983 Bernard Faure and Rene Boisselle repeated the Greenwood/Jones route over a period of two days, including the descent. We climbed the 3000 ft pillar, starting left at first for a few pitches and then following the crest for most of the way. The climbing was quite sustained -F7 and some F8. We bivied some eight pitches from the top. The last candle was climbed following the original line and all aid was freed at F9. We finished the route following the east ridge in a snow storm with some lightning and flakes the size of ping-pong balls. An excellent route with some very good rock.

Rene Boisselle

Climbs in Kootenay National Park

In an effort to complete the park's Climbers Guide Kootenay National Park Wardens pioneered the following mountain peaks in 1983. Some of the climbs were first ascents and some were second ascents.

"SÉRACPEAK", 3002M, VERMILION RANGE*

Located at head of Sérac Creek between Mt Verendrye and Floe Lake Wall. We approached "Sérac Peak" from Floe Lake via the east glacier to a short ice face up the high col leading to the west face. From this col we skirted alongside the west face on loose scree then climbed the first obvious gully with two pitches of class IV to the upper moraine and small glacier area. We chose a route to the left over a long limestone slab then climbed fairly firm rock pitches to the north ridge. We followed the ridge on good rock to the summit (7 hours from Floe Lake). As there was no evidence of previous climbing parties on the peak, we built a stone cairn on the summit and assumed it to be a first ascent.

P Enderwick and H Fuhrer. 9 August 1983.

"VERENDRYE SOUTH TOWER", 3065M, AND "VERENDRYE WEST TOWER", CA 3031M, VERMILION RANGE

The pyramid tower south of Mt White Tail. These eye catching monuments of the Mt Verendrye group west of Vermilion Crossing have surely attracted many mountaineers travelling through Kootenay National Park. From our high camp below the small glacier of Mt White Tail and the "South Tower", we set out for our climb to the east spur, first climbed by K Baker and L MacKay in 1967. We climbed the lower section of the tower mainly on its crest. Higher up we were forced onto the east face, from which the summit was attained via gullies and open sections. The "Verendrye South Tower" can be considered a pleasure climb and does not exceed the class IV level. We descended the west ridge. The jagged ridge sections were easily surmounted on the south face.

At the west col we still had enough time to continue via the east ridge towards the still unclimbed "West Tower". A sharp ridge separation with a deep gap created some problems. We were forced to down climb, over great exposure, a south facing buttress for 5 m. A delicate class IV+ traverse then took us into the gap. From here an easy scramble led to the summit. We built a stone cairn to mark the ascent. Loose rock material for construction of the cairn was plentiful. From this peak a 2 km long ridge via a lower peak leads south to Mt Wardle north ridge. On the descent we avoided the delicate traverse and followed a chute downwards to the Wardle east basin, class III. From the basin we skirted the bottom of the long "South Tower" back to the east spur and high camp where we packed up for the next day's climb on White Tail.

D Vedova and H Fuhrer. 19 August 1983.

MT WHITE TAIL, CA 3082M, VERMILION RANGE

Located 0.5 km south of Mt Verendrye; two widely separated summits with a large gap between them. From the high camp we headed for the south ridge and face. Our route was probably similar to the one chosen by the first ascent party in 1953. The climb was longer and more demanding than the "South Tower" but offered some good route selection. In general most of the rock pitches were solid and the climb can be rated class IV.

To date the north peak is still unclimbed, as the north and south peaks are separated by a formidably difficult gap. The easiest route would be from the Verendrye col via

Pinnacle Mtn from Mt Temple. H Lukatela



Black Towers, Mt Temple H Lukatela



View south-west from summit of Mt Temple. H Lukatela





the north ridge.

D Vedova and H Fuhrer. 20 August 1983.

COMMENTS ON THE VERENDRYE GROUP

Mt Verendrye, White Tail and the "South Tower" offer excellent climbing. The approach route is a long and tiring walk from Vermilion Crossing via Verendrye Creek. The trail is partly cleared for the first 5 kms then the valley steepens and one is forced to travel along the creek bed and/or alder slopes to the high camp.

CORRECTION TO GUIDEBOOK

In The Rocky Mountains of Canada South, 7th edition, pp 350 and 351, re Mt White Tail. The elevation indicated is incorrect and should be ca 3082 m. In the photograph the names White Tail and Unnamed ("South Tower") should be reversed.

UNNAMED PEAK SOUTH-EAST OF BALL PASS, 2880 M

Located 2 kms south-east of Ball Pass, 1.5 km north north-west of Haiduk Peak; a double summit, the east being 0.5 km from the main peak and 30 m lower. From the high camp at Ball Pass we hiked up the huge west bowl and gained the north ridge. We followed the ridge on shaky rock to the final summit buttress which was climbed directly on class IV rock. There was no evidence of previous climbing parties on the main summit so we built a stone cairn.

On the descent route we took the west ridge, alternately down climbing both sides until a major gap 15 m deep separated the ridge. We rappelled in the gap then re climbed the other side on dangerously loose and overhanging rock boulders. With no further obstacles, we descended down a

small glacier and moraine. From Ball Pass we looked back on our summit traverse. I would recommend future climbers reverse the trip as the gap in the west ridge would create fewer problems on the ascending route.

D Wilkinson and H Fuhrer. 29 August 1983.

COMMENTS

For detailed climbing information on Kootenay National Park ask for the park's Climbers Guide. It will be on display by 1984 in all Kootenay National Park Warden Stations and information outlets as well as in the Banff Warden Headquarters.

Hans Fuhrer, Kootenay National Park

* "Sérac Peak", "Verendrye South Tower", and "Verendrye West Tower" are still unnamed mountains. These names are only used locally for identification.

Mt Stephen North Ridge

In August 1983 Daniel Bonzi and Rene Boisselle repeated the Locke/Scott/Walsh route in a very long day. The ridge rises over 6000 ft from the highway to summit. We reached the top of the first buttress by climbing the east side - 1500 ft of enjoyable class 5 or 4 climbed unroped. The upper part (about two thirds of the route) was climbed in about 26 pitches, including two of ice in a gully. Generally the rock meets Canadian Rockies standard most of the way. Some bands are very good, some others doubtful. Overall the climb is very recommended, being quite difficult (route finding at the beginning), very long, and never too hard. About F6.

Rene Boisselle

Arras Mtn: A First Ascent

At the far western edge of the Forbes Group, between the Valenciennes River and Icefall Brook, is Arras Mtn (10,800 ft). From the north it looks like an arras or drapery, formed by an anticlinal fold weathered into gigantic creases. It looked beautiful enough to want to climb it.

On 23 July 1983 we were flown in by Okanagan Helicopters to a basin below the south side of Arras. The fly around gave us up close views of the north-east and north-west faces - 500 to 600 m of high angle rock. Feeling a bit intimidated and seeing an end of the clear weather coming we started up the easy south face after lunch. Our route was right of centre, F5 through the first cliff band (could have been avoided), angling to the left near the top to the highest point (Grade II). There was no evidence of a prior ascent (on the mountain or in the literature). We built a cairn and left a film canister with a note. There were great views of Rostrum, Icefall, and Lyell to the north.

We started back the next day contouring at about 2500 m to the north of Zillebeke Mtn and then along the south side of several minor peaks to Bush Pass, dropping down to 1900 m to cross the Valenciennes River. From Bush Pass, where there was a very large grizzly bear scat, we laboured up to the col west of Mt Niverville, down the Niverville Glacier, up the Freshfield, through the Gilgit/Helmer col and down the Mummery Glacier to camp with a KMC party opposite Mt Mummery. What with whiteouts and fresh snow at two critical cols it took us four days to walk out.

John Christian

Participants: Kathy Bushnell, John Christian (leader), Gary Duncan, Pete Grant.

Pete Grant on Arras summit
Prominent peak at left is Rostrum, one at centre is Icefall Peak. John Christian



Clemenceau ACC Ski Camp, 26 February to 5 March 1983

Not all camps will be remembered for their mountaineering achievements. In fact, the most difficult ascent was prussiking up the Mica Creek Ski Chalet rafters while waiting out two days of rain and fog.

Having caught the last flight of the day, we proceeded with a map and lots of enthusiasm in the hope of finding a buried hut in deteriorating visibility. Soon we spotted the Royal Mortimer. The helicopter felt a portion of Cummins Ridge and we bailed out while under full power. Excavating the hut would be our reward for being the first occupants of the season. Monday broke in glorious sunshine. Descending the north-east powder slopes from Cummins Ridge, we toured to "just another half mile" pass — the névé of the Cummins Glacier — to get a great view of the Canoe River basin, which you can't see from there. By Tuesday the weather had closed in for the rest of the week.

To solve the problem of frozen stalagmites Ron Matthews had supplied us with a tent, two porta-potties, a lifetime supply of goody bags and instructions — don't bring back the tent. I regret to report that the bags leaked, the tent collapsed, and the potties broke (obviously not built to accommodate enthusiastic ACC'ers). Undaunted, we dug a snow biffy complete with graffiti. It soon filled up with blowing snow. Our ultimate solution was a five gallon bucket lined with garbage bags! (We brought back the tent for Ron.) Guided by memory and imagination, we traversed the Cummins Glacier, ascended the icefall towards Tusk, and tried a run from below the Shipton/Irvine col. Aside from occasional trips up the ridge and to the bowl, the weather was too poor to leave the hut. Temperatures all week were 0° to 5°C with high humidity. The radio was a good idea. We joined CMH for their daily sched and traded weather, snow, and achievements. "We skied 432 m today."

We cut a cross section of the snow pack near the hut (east exposure). The depth was 190 cms, firm at the top but quickly deteriorating to sugar at the ground. West facing slopes had a depth of 70 cms, the bottom 50 being like

ball bearings -absolutely terrifying. We observed numerous avalanches and the Pic Tordu icefall was very active. We judged Clemenceau to be extremely hazardous at that particular time.

Highlights of the trip were George Stefanik's cooking, the many scrabble tournaments and the desperate humour..."and I say to the judge...."

Erik Laerz

Eremite-Tonquin ACC Ski Camp, 19 to 26 March 1983

It had been a very dry winter in the Rockies and as the group started into the Wates Gibson Hut the poor snow conditions along the Astoria River were not very encouraging. In fact the first several miles were walked rather than skied. By lunch time at the Warden's cabin we were able to put on skis and experiment with combinations of wax to find the most effective. The closer we got to the hut the better the snow conditions and it was even snowing lightly at the hut when we arrived in late afternoon. The week had mixed weather - light snow interspersed with hot sunny days. There were excellent trips up the Angel Glacier, across the Amethyst Lakes, and even a try at the Fraser Glacier. The Maccarib Pass trip was done under low cloud and in spite of the group's ability to read a map we were misled by a series of poles high on the left hand side of the valley. An enjoyable trip, if somewhat different from our intended destination and after applying a coat of fast wax it was a good ski back down to the creek. Temperatures during the week ranged in the -5°C to -8°C at night and rose above freezing on sunny days so we could work on our tans. When the weather was not suitable for full day trips a number of the group headed for Telemark Hill, just beyond Surprise Point, and endeavoured to improve their technique. For the trip back out the group split; some opted for Maccarib Pass and the rest took the regular trail back to the Edith Cavell Road. Much better snow and trail conditions were found on the high summer trail, which is in the shade much of the day and in years of little snow it is to be recommended rather than the slog along the river. It might be longer but the more favourable conditions make it much more enjoyable. All in all a fine week of skiing,

renewing old acquaintances, making new friends, and gaining weight as a result of Bunty Jordan's excellent cooking.

Bev Bendell

Andromeda and Robson First Descents

Upon accomplishing a first descent by skiing the north face of Mt Athabasca autumn 1981 there was a neighbouring peak which harboured an inviting, untouched by skis, 55 degree north bowl face. Since I was already committed to ski Mt Robson from the summit, Andromeda seemed like an exceptional setting for a prelude or trial run. On 16 August 1983 Megan Hanson and I drove to the end of the access road leading to the Snowcat Tours on the flank of the Columbia Icefields. I packed light for a one day jaunt, toting only skis, climbing hardware, and a touch of food. I proceeded over the scree towards the third visible glacial tongue on the horizon. Within three hours I crossed the bergschrund and gazed upwards to see the top portion of my route shrouded in storm. Nevertheless I kicked off, frontpointing up the 1500 vertical feet of snow and ice for nearly two hours. Half of the face was besieged by a blizzard and the strong wind kept me occupied making my placements sink home. Finally the pitch ended and I stood in total white-out on the summit pass of the bowl. I put on my Dynastar skis and proceeded, very slowly and carefully, to jump turn my way down my ascent route. Sections of the run were treacherous, conditions varying from wind blown slab to sections of greyish ice. About half-way down the face I emerged from the cloud and was confronted with an unpleasant traverse over three foot deep avalanche troughs. Finally again I stood above a free fall line run down to the bergschrund 200 or so feet below. It was nearly over. I gathered my wits for a series of faster turns, jumped the six foot or so wide 'schrund and mellowed out into GS cruising speed on its far side. The actual ski took maybe only 20 minutes. The remaining hour and a half was spent down climbing the horrid ice scree combinations, marching back to the car, and meeting Megan with the kitten. The total affair lasted a little under seven hours.

Megan, the kitten and I began the trek to Berg Lake on 18 August. Under the weight and agony of packs weighing 120 lbs (mine)

and 80 lbs (Megan's), we finally reached the lake the following day, establishing a base camp on its southern shore. I devoted all of 20 August to find a suitable approach to the mountain direct from Berg Lake. Between Berg and Mist Glaciers I found a possible route between the segmented shelves of loose rock debris which led me directly to the glacier beneath Robson's north face. Returning to base camp that evening I felt a glimmer of hope that I would succeed. At dawn next day I awoke to absolutely clear skies. I donned my 60 lb pack and set off, crossing the numbing cold stream which flowed out of Berg Lake at its southern end. After four hours of scrambling, battling every moment due to the protruding skis, I finally arrived at the junction of snow and rock below the north face. I left my bivi gear here.

After negotiating the 12 ft high bergschrund I found the remaining 200 ft of sheer ice to be no match for my edges on the way down. The upper portion of the face looked inviting to ski. Maybe some other time I thought. Instead I spent the day delightfully touring and skiing run after run in the bowl between the Helmet and the

north face.

The following day was again perfectly clear. From my bivy site I went towards the col which separated me from the Kain face and the Dome beneath it. I reached the pass and had to negotiate a tricky descent into the bowl beneath the Kain. It was a 500 ft vertical pitch of still frozen corn snow in excess of 55 degrees. By noon I had toured to the base of the Kain face and was busy kicking steps into the 1000 vertical feet of wet snow which occasionally only disguised the ice with a thin layer of mush. Four hours later, after a tiring climb on the Fuhrer ridge, I stood on the summit of Robson. Here I paused for a brief rest and recalled all my struggles with this mountain in the past and finally felt that I had conquered it the right way. I clicked into the faithful Ramer bindings and pointed the Dynastars down towards the Kain face. The ridge was indeed frightening to ski as it was only 30 ft wide at its broadest sections. I swung careful turns in between the overhanging cornice on my left and the séraced gargoyles to my right. The Kain face was now in total shadow and frozen solid so skiing it was out and I

had to down climb which took two hours. Finally at 6 pm I skied up to an American camp from Montana. I was not able to ski out that evening and had to backtrack to the American camp, narrowly missing being wiped out by an avalanche.

The following day I slept soundly till noon. The Americans had set off at 2.30 am and reached the summit in time to see the rising sun. After they had rested we set off at around 1 pm towards the Robson Glacier far below. I skied by them as they were climbing down. We took many photographs recording my tracks on film. Within two hours of skiing, waiting, and skiing some more the snow ended and we continued, they in crampons and me foot-fanging it, down the lengthy Robson Glacier. By 6 pm the three of us arrived at the southern end of Berg Lake where Megan was beginning to get impatient for my return. I looked back at Robson and began to see the beginnings of cloud formations swirling around its summit. The following day we hiked out from Berg lake and encountered rain 10 minutes before reaching the car. The weather had held and I'd managed to ski from the summit at last.

Peter Chrzanowski

Ontario

Ontario Climbing Report for 1983

Interest in new climbing areas has increased steadily over the past year and Ontarian climbers have shown a greater attention toward ranging further to undeveloped crags as well as established but remoter sites. This is demonstrated in the production of several new guidebooks, the reporting of new areas, and the general increase in dissemination of information pertaining to a larger variety of locales.

As reported last year, Robert Chisnall has been compiling a list of established and potential rock and ice climbing areas in the province, pending the publication of the Ontario Rock Climbing Association's safety manual. The list now includes 200 locations and it has been decided that a cursory guide to climbing areas in Ontario should be produced under separate cover in order to keep the safety manual's cost and length down. The preparation of a provincial guide is only a tentative plan; the ORCA wishes to complete this safety manual first.

Michelle Lang seconding on the first ascent of High Society (5.10+) at Mt Nemo near Toronto. Dave Smart



Dave Smart leading Moby Fly (5.11) at Cow Crag near Toronto. M Lang



We would like to urge all climbers to report their discoveries and climbs. The ACC Toronto and Ottawa Section Newsletters, as well as the ORCA Newsletter, are avenues for sharing this information. Alternately queries or reports can be directed to Robert Chisnall. All communication is welcomed.¹

TORONTO AREA AND THE NIAGARA ESCARPMENT

This year has been a very busy one on the escarpment; over one hundred new routes were completed (mainly 5.8 and up). This report should reflect some of the most exciting and interesting developments from this season.

At Rattlesnake Point, "Sacred Cow" was repeated by Pete Riley and Dave Smart and is thought to be 5.11 + or 5.12-.

Kevin Lawlor, a relative newcomer, made first ascents of "Scilopa" (5.10, seconded by Steven Born) at Kelso Cliff and "Hyperextension" (5.11 -) at Buffalo Crag. Dave Smart made the second ascent of "Scilopa", a short but impressive thin crack. "Hyperextension", a tall man's problem, remains unrepeated except by Kevin who enjoys warming up on it! Also at Buffalo Crag Dave Smart, Michelle Lang, and Kevin Lawlor made the first ascent of "Georger Picans" (5.10-), a pleasant, well protected but thin crack.

Also at Buffalo Crag "Sad Eyed Lady of the Lowlands" (5.11) was repeated only after a mystery climber placed two pins in a previously unprotected 5.10+ section of the route. This is unfortunate as this was reputed to be the boldest lead in the area. Another phantom climber removed pins from "Brain Salad Surgery". Such after the fact subtractions and additions are deplorable; participants in such activities should be more thoughtful and responsible. At the same cliff Dave Smart produced a very steep and sustained face route called "Crank if You Love Jesus" (5.11).

At the Mt Nemo Quarry "Whore of Brisbane" had several ascents and has become a local classic. John Kaandorp, the first ascensionist, graded it 5.11 but subsequent ascents of this finger crack have found it to be more in the region of 5.10. "Salon Kitty", a very thin crack to the left of the previous route, was climbed by Dave Smart at 5.11-.

At Mt Nemo's south end John Kaandorp repeated "Strike One" and confirmed its quality, noting a useless pin placed next to a potential A1 nut placement. Steve DeMaio and Kaandorp also put up "Fly Away Dreams", one of the area's nicest 5.9 routes; Dave Smart and Michelle Lang repeated this aesthetic line.

Again at Nemo Reg Smart and Ziggy Isaac repeated "Summertime Dream", making the third ascent of this classic 5.10 route put up by Brian Hibbert and Dave Moore in 1980. Kaandorp and DeMaio also put up "Peanut Butter Brothers" (5.10), an excellent route up a hard dihedral. It was repeated by Hibbert and Smart. "Carnal Sin" received its second ascent by Dave Smart confirming its grade at solid 5.10; Brian Hibbert and Michelle Lang seconded. This excellent, strenuous handcrack was initially done by Kaandorp and DeMaio. "Sister Morphine" (5.11+) received its second ascent by two unidentified Gunks climbers who apparently enjoyed it.

At the same crag Kevin Lawlor climbed "All Chalked Up With No Place to Go" (5.10+), a bouldery thin crack about 15 m in length. It was repeated several times. Lawlor also climbed "Red Line Fever", a 5.10 climb with lots of neat moves and a classic overhang with a jugs finish. This route was first led free by Pete Riley, with no falls, followed by Ziggy Isaac and Reg Smart. On the same section of rock Peter Riley and Ziggy Isaac made the first free ascent of "Legitimate Grievances" at 5.11, renaming it "The Big Gulp". This excellent line has a 2 m roof followed by a huge overhanging arête. "Legitimate Grievances" is a former aid line first established by Dean Lister.

At Nemo's north end Smart and Lang did the first ascent of "High Society" (5.10+). It has some committing run outs and is probably the most demanding face climb in the area. Brian Hibbert and Dave Smart made the first ascent of "The Punk and the Godfather", an excellent 5.9 finger crack. They also made the first free ascent of "Sweet Relief" at 5.8, originally rated 5.7 A1.

At Cow Crag Dave Smart and Michelle Lang put up the excellent, bolt protected route "Moby Fly" (5.11) which was repeated several times. Ziggy Isaac led "Fearless Warrior" (5.11) on sight with no

falls.

Metcalf Rock or Kolapore Crag also saw some activity. This cliff is located 15 kms south of Thornbury and is the site of the University of Toronto Outing Club cabin. John Kaandorp and Pete Zabrok made the first ascent of "Dynamic Duo" (5.11). This off width crack overhangs 5 m and is the hardest crack climb on the escarpment to date. On repeating the line Dave Smart thought it was a good notch harder than "Return of the Degnoird" (see CAJ1983:95).

There are lots of other routes worthy of mention but the ones noted here are amongst the best done this year. A new guidebook to the escarpment, written by Dave Smart, is due out in the spring. While being a thorough and detailed description of established routes on southern limestone, it is hoped that this guide will encourage climbers to visit the lesser known areas.

MAZINAW LAKE AND VICINITY

Many of the classics and former 'terrors' were climbed again, but productivity was a little slow this year. John Owen, Kevin Lawlor, David Franklin, and Joe Prokopiak made the first ascent of "The Last Shall be First" (FA Eric Marshall, Helmut Microys, 1974, formerly 5.8, A3) at 5.10- and named this free version "Mrs Niggerbator's Just Exploded".

Steve Adcock and Pete Zabrok attempted to repeat "Knight of Faith" (FA Rob Rohn, Tom Gibson, 1980, 5.11), but were thwarted by the last pitch, attesting to the sustained and serious nature of the line. The first ascensionists dedicated this unrepeated route to the memory of George Manson, Sean Lewis, Alan Chase, and David Carroll who perished in the Mt McKinley area in 1980. After attempts by Kevin Lawlor, Rob Chisnall and others, Chisnall managed to free up the roof on "Romp of the Geriatrics" at 5.11. This is a well protected and enjoyable bouldering type problem.

Steve Adcock published a revised guide to the area, *Descriptions of Rock Climbs at Bon Echo*,² listing 105 routes therein. The book is intended to complement *Climbing in Southern Ontario*.³

Tower Ridge (sometimes referred to as Pinnacle Point or Crag X) is a cliff

located north of Mazinaw lake and east of Highway 41, just across the water from Pethick's gas station. Although this crag has drawn little attention it does have several established routes, and it may have had a winter ascent via an ice route some years ago. The climbing is no higher than one pitch and the rock is generally solid except for localized sections near the top. Ian and Liz McKay and Rob Chisnall put up "Scary Monster" (5.8) at the end of the summer. This is an aesthetic line that ascends the centre of the face on Tower Ridge, surmounting the prominent overhang through an obvious slot. At the same time Philip Gassin and Stephen Connolly added "Chicken for Vegetarians" (5.8), an equally enjoyable route to the left that shares the same crux notch. On 18 September 1983, Jay Danis and Rick Freeman put up "Last Dangle in Paris" (5.3) which skirts the two major overhangs left of "Chicken for Vegetarians". At the same time, Lyle Clarke, Wendy Roberts and Darrell Snyder climbed "Pi R round Cornbread R square" (5.2) just left of "Chicken for Vegetarians". There are several smaller crags located between Tower Ridge and Mazinaw Lake that might offer possibilities.

KINGSTON AREA

In April 1983 Rob Chisnall and Dave Smart shared the first lead of "Camisole Cusp" (5.12) at Kingston Mills. Chisnall later did the first continuous lead of this classic route. Although rather short, sustained difficulties are encountered on this mildly overhanging face climb. Later in the spring Chisnall put up "All Alone in the World" (5.10+) on autobelayed lead. Chisnall also did the first leads of "Star Dust" (5.10), a delicate and somewhat strenuous overhang problem, and "Triad" (5.8) a very aesthetic face climb involving sparse protection. In the fall Chisnall managed to lead "Sorcerer", formerly A3, at 5.12, A1. The protection is generally reliable on this pumper except at the 5.10 start and around the unfreed aid move. While attempting to free up this elusive section Chisnall pulled a rump. Kingston Mills has seen increased activity in the past year with frequent visits by Ottawa area climbers and since the formation of the Queen's Climbing Club earlier in the fall. A revised guidebook should be available in the spring of 1984.

Morton Rock is another spot Ottawa area climbers have been visiting. This out

of the way, single pitch crag is located midway between Smiths Falls and Kingston on Highway 15. It is situated just north of Morton and Morton Creek, a short walk west of the highway. A private drive leading almost to the base of the cliff should not be employed for access; use the gate located between the private road and the road cut to the north. Hike uphill. The crag was discovered by Ron Halka and most of the routes there were put up by Halka and friends, starting in 1980 or perhaps earlier. Routes include "Hole in the Wall" 5.3, "The Chimney" 5.4, "All the Nasties" 5.4, "Wish You Were Here" 5.8, and "Heartbreaker" 5.7. In the spring of 1983, Rob Chisnall led "RURP" (Real Ugly Rotten Protection) at 5.10. Although the crux is close to the ground the landing is dubious and a single rump protects the move. This line connects with "All the Nasties" and a harder variation is possible. Ample room exists for new lines, particularly steep, difficult face climbs.

OTTAWA AND VICINITY

The local climbing spot for Ottawa climbers is a well known series of outcrops located near Luskville in the Gatineaus, just across the Ontario-Quebec border. Steve Adcock produced A Guide to Rock Climbs at Luskville in the spring of 1983.² Although the guide contains some first ascent and first free ascent name and date errors, it is remarkable that Steve was able to put it together considering the limited available information and fragmentary records.

Rumours filtering through the grapevine indicate that Ottawa area climbers have been checking out the crags in the Deep River/Chalk River/Pembroke region along the Ottawa River. Nothing has been reported as yet.

Bluffs situated east of Calabogie (south of Renfrew), in an area designated as the Mt St Patrick Mountains on topographic maps, have been the scene of some activity over the past few years. Crags located north of Lake Dore and Golden Lake (near Eganville) have also been investigated. The specifics of routes established in these two areas are rather vague but outcrops around Eganville and Renfrew seem to hold considerable potential.

BANCROFT AREA

Eagles Nest, just outside Bancroft,

has been a popular ice climbing spot for several years and some sporadic rock climbing has occurred. Ghost Crag is another popular cliff near Bancroft that has seen some development. Graeme Smith is currently compiling material for a Bancroft guidebook and is requesting the input of any climbers who have information pertaining to routes and crags in the area. If you have any route information please write.⁴ The most significant solo in 1983 was Ian McKay's ascent of "Dirty Harry" (WI IV) in February. The past few years have seen some lean ice conditions and short lived ice climbing seasons.

Through investigations made by Jay Danis and others numerous new outcrops have been discovered around Bancroft. These are near Bay Lake, Diamond Lake, Baptiste Lake, Buck Hill Road, McDonald's Mine, Farmer's Chutes on the York River, Birdscreek Road (ca four crags located north of Birdscreek Road and west of Highway 62 North).

It has also been reported that there are climbing sites in the Wilberforce region. Graeme Smith has indicated that ice and rock climbing potential exists near Bear Lake. Smith, Adam Gibbs, and some others did a couple of 5.6 routes and a nice 5.8 crack route there. Bear Lake Cliff is located east of Dorset and north of Kawagama Lake.

KILLARNEY PROVINCIAL PARK

Climbs in the George Lake area have been previously briefly reported (see CAJ 1977, 1983). Jean-Marc Filion and Rob Chisnall published their guide to the George Lake area in the spring of 1983 and sales were steady throughout the summer.⁵ It is presumed that at least some climbing activity in Killarney was prompted by the availability of this guide but nothing has been reported as yet.

The Ontario Rock Climbing Association conducted its Professional Development Weekend in Killarney during the last weekend in August. At this time Brian Hibbert had opportunity to make the second ascent of "Of All the Nerve" (5.9+) at Paroi des Camarades, followed by Dave Moore and Harry Hoediono. The excellence and difficulty of this line were confirmed. Hibbert, Moore, and Hoediono also had occasion to check out the routes on Baby's Bottom and Coup de Tonnere. Filion

repeated Dave Smart's "Getting to the Point" on aid (A2) and Chisnall struggled upon second by free climbing (5.12). The crux is easily the hardest single jamming problem in the province to date. Filion and Chisnall are planning to investigate the climbing potential offered by neighbouring unclimbed crags located on satellite lakes.

NORTH BAY AND VICINITY

In fall 1982 Jean-Marc Filion and Jean-Guy Charron made the first ascent of The Bear, a 65 ft pinnacle guarding the Lion Chutes on the Antoine River near Mattawa. Three lines were established: "Bearback" (5.2), "The Flea" (5.5), and "By a Whisker" (5.9). A pin and a bolt were left on top for rappels.

Another new cliff, Hillbilly Haven, received some preliminary cleaning in fall 1982. This crag features another 60 ft pinnacle named Zippo's Hideout. Hillbilly Haven is situated 1 km downstream from Lion Chute on the Antoine River. In spring 1983 Charron led "Silhouette" (5.7) followed by Filion. In August Rob Chisnall and Jean-Marc Filion established the following routes: "Pas d'Elephants SVP" (5.4), a narrow chimney; "Combination" (5.8), a steep slab route involving a brief but awkward overhang; "Ghost Slab Supreme" (5.7), another fine slab route with some loose rock; and "Gettin' a Lickin's Worth" (5.5) an easy but buzzy face climb owing to unpredictable rock and protection.

Fall 1982 saw Jean-Marc Filion, Jean-Guy Gagnon, and Jean-Guy Charron put up "Twang", an A4 artificial line on the overhanging main wall at Crow's Nest near Field and Sturgeon Falls. "Twang" is probably one of the hardest and most aesthetic aid routes in the area. In August 1983, Chisnall and Filion freed up "Forche du Demon" (5.8), a route put up by Charron during the winter. Dave Smart freed up an aid line originally established by Uwe Embacher, naming it "Deep Woods Respect" (5.11); this overhanging dihedral is described as being one of the best 5.11 routes in the province.

Dave Smart and Michelle Lang also put up an off width crack called "Hoserama" (5.9) at Paroi du Lac Talon. This smooth, Yosemite like rock is located near Rutherglen.

Idole Vert, a virtually untouched crag

located near Powassan, also received some attention in 1983. Filion and Charron put up "Elegance" (W1 II) in winter 1982 and it has since become a popular classic. In the spring of that year Jean-Guy Charron, Daniel Courchesne, and Daniel Vachon climbed the impressive crack to the left of "Elegance", producing "Eternite" (5.7, A3). In winter 1983 Rob Chisnall and Jean-Marc Filion established the following excellent ice routes: "Blue Water Stroll" (W1 II, Filion led), "Purgatoire" (W1 V), "Maelstrom" (W1 III), and "In Limbo" (W1 IV). The latter was done in such warm conditions that the ice fall was flowing water and ice screws melting out! In the fall Dave Smart and Michelle Lang put up "Mercury Poisoning" (5.10a) to the left of "Eternite". This is a beautiful climb that follows a 20 m crack, starting at thin fingers and widening to thin hands. The pro is bomb. There is room for many more routes at this crag.

Mont Ruban, one of the nicest crags near Sturgeon Falls, was the site of some developments. This multi-pitch, granite crag was first investigated by Uwe Embacher, Jean-Marc Filion, and others. In September 1983 Rob Chisnall, Jean-Marc Filion, and Jean-Guy Charron put up the following routes: "Red Herring" (5.11), a very clean, smooth and Yosemite like climb involving some unprotected 5.7 slab climbing, dubiously protected 5.11 face and crack climbing, and an enjoyable 5.8 exit through an overhang; "Panache" (5.8), a licheny route that involves some unprotected face climbing and an enjoyable 5.8 hand crack finish; "Arc-en-Ciel" (5.10-) an impressive route that follows a large arching dihedral. In fall 1983 Filion and Smart top roped "Rumblings in the Wild Country" (5.9) which follows a long crack and dihedral to the right of "Arc-en-Ciel".

At Paroi du Roche Fendu near Sturgeon Falls Chisnall put up "Which Way Do I Go?", seconded by Jean-Marc Filion. Also in September Chisnall freed up "Tension Traverse" at 5.11. This route was first done by Jean-Marc Filion at 5.5, A1. A 5.10+ traverse protected by equalized number zero brassheads is followed by a superb finger and hand crack.

Paroi du Lac Clair and La Tombe were hosts to quite a bit of activity in 1983. Rob Chisnall, Dave Smart, and Michelle Lang put up "Cujo" (5.10+) at La Tombe in

September. Some excellent and sustained face climbing is protected by A3 pins. Chisnall took a twenty footer onto a tied-off shallow angle when a hold broke loose! In the spring Dave Smart repeated "Spring Madness" free on top rope at Paroi du Lac Clair, confirming the grade (originally led at A3 by Jean-Marc Filion and seconded at 5.11 by Chisnall). This route has yet to have a free lead. "Up the Nose on Tippy Toes" (5.9), a line that was first top roped by Chisnall and Filion, was given its first lead by Jean-Marc after the addition of a bolt at the crux. Many others repeated it. Chisnall also made the first free ascent of "Smoke Stack" (5.9) and Dave Moore bagged the second free ascent. Chisnall and Jean-Guy Charron put up "Deliberations at the Brink of Ecstasy" at 5.10. Dave Smart and Michelle Lang made the second ascent of this brilliant route and Brian Hibbert and Harry Hoediono grabbed the third. Smart also free soloed the classic and popular "A-Bomb" (5.8) in running shoes. Chisnall and Filion added the following routes to the growing list: "Ca Recommence", 5.6 variation; "Lover Boy", 5.6 variation; and "Off Route", 5.9. Chisnall also did the first lead of "Prelude" (5.5).

Chisnall and Filion prepared a rudimentary guidebook describing the two dozen routes existing at Paroi du Lac Clair as there was an urgent demand for information. During the last weekend in September 1983 the Ontario Rock Climbing Association's annual certification weekend was held at this site, and many of the routes were repeated. This was the first certification weekend to be held outside of the Toronto area and 18 instructors were certified, among them Michelle Lang, the first woman to be certified in Ontario. The workshop was an immense success and the 1984 certification clinic is slated for September at Kingston Mills.

THUNDER BAY AREA

The Thunder Bay area has seen considerable activity over the years, but this area has remained somewhat isolated from southern interests. Shaun Parent has reported developments in the ORCA Newsletter and in CAJ (see 1983: 97-98). See also Thunder Bay Update this volume.

On occasion southern Ontario climbers have visited Sleeping Giant, an impressive multi-pitch crag located just east of Thunder Bay. Jean-Guy Charron and Jean-Guy

Gagnon repeated a couple of the classic routes in the summer and reported that although there exists ample potential for new lines the rock is unpredictably loose, even on frequently climbed routes.

KENORA AREA

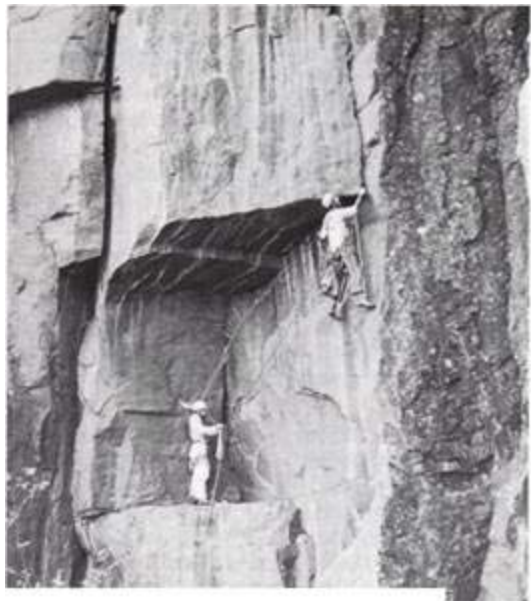
Developments in this region have been almost solely through the efforts of Manitoban climbers. Everett Fee and Peter Aitchison have been reporting these new climbs and sites fairly regularly in CAJ (see 1976, 1978, 1979, 1981, 1982, and 1983). Route information is available by writing to Everett J Fee.⁶ But there should be little need for this as the CAJ reports have been quite thorough. In summer 1983 Jean-Guy Charron and Jean-Guy Gagnon put up "Indian Head" (5.5 A3) on a crag located on Lake of the Woods just outside Sioux Narrows. Charron and Gagnon established several other fine lines this past summer and during summer 1982 but no details are available at this time.

Robert Chisnall and Dave Smart

FOOTNOTES

1 ACC Ottawa Section Newsletter, c/o Mark Edwards, 2121 Navaho Drive, Ottawa, Ontario K2C 0V3. ACC Toronto Section Newsletter, c/o 98 Miller Road, Oakville, Ontario L6H 1J9. ORCA Newsletter, c/o Brian Hibbert, 60 Bexley Crescent, Toronto, Ontario M6N 2P7. Robert Chisnall, 12 Stephen Street, Kingston, Ontario K7K 2C3.

Thunder Bay Update: Shaun Parent and Andre Van Schaik on first ascent of Visitor Services (5.6, A1), Thunder Bay area. Dave Pugliese



2. Available from Steve Adcock, RR1, Baillie Rd, Aylmer, Quebec J9H 5C9.

3. Available from ACC Toronto Section, 167 Erskine Avenue, Toronto, Ontario M4P1Z6.

4. Graeme Smith, 5 Sagebrush Lane, Don Mills, Ontario MSA 1X4.

5. Available from Jean-Marc Filion, Box 81, Corbeil, Ontario POH 1K0.

6. Everett J Fee, 759 Dudley Avenue, Winnipeg, Manitoba R3M 1P8.

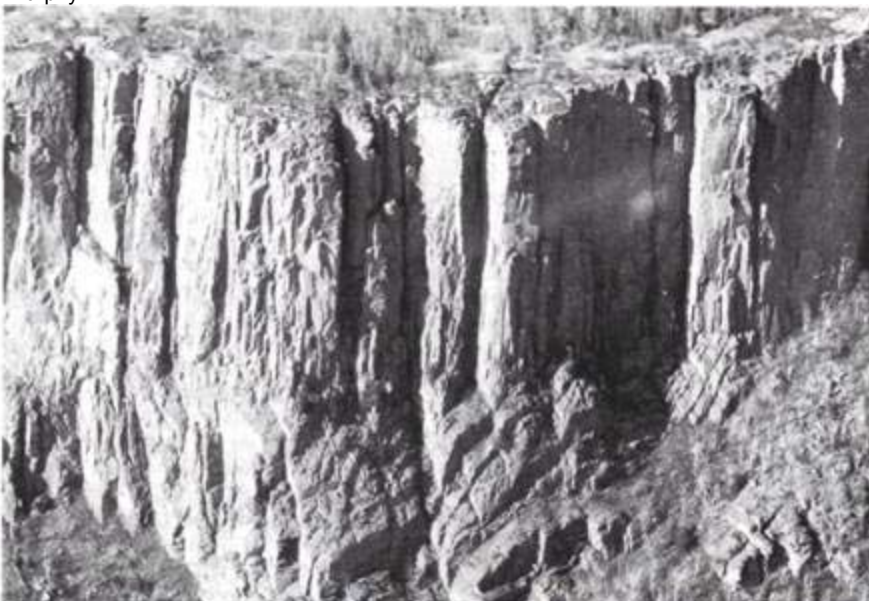
Thunder Bay Update

As was reported in the CAJ (1983:97-98) climbing in and around Thunder Bay is well under way. This past 1982/83 season proved to be a year for many fine first ascents of both rock and ice climbs.

The local climbing guide was finally printed and the market is wide ranging with orders from the southern states, eastern provinces, and from England. Rumour of the area's potential is quickly spreading. In the future it will certainly attract more climbers. During the past summer local climbers had the chance of meeting visitors from the Minnesota area. This was the first known visit to the Thunder Bay area by an American party armed with a guidebook. Their enthusiasm was high. There was much respect for the objective dangers surrounding the unclimbed faces and for the climbers that developed the area.

Most of the interest seems to be directed towards the Sleeping Giant where some of the highest cliffs in Ontario are found.

Thunder Bay Update: an example of the untouched potential of Thunder Bay Rock. Joanne Murphy



Many climbers were met along the trail systems that lead to the cliff faces. It seems that cliffs are so alluring that visitors will hike for two to three hours in an attempt to see a close up of their potential. This past summer's concentration was directed to the Top-O-Talus wall. High temperatures and bad insect swarms made climbing in other surrounding areas of Thunder Bay unbearable. Each weekend a party of two or three were attempting new routes, dodging falling debris or rappelling the cliffs in an attempt to clean new routes.

Many free standing pillars on the Sleeping Giant were finally climbed and developed. Most important of these was the Popeye Pillar which yields many short climbs: "Whimpy" (5.4, Parent, Jones) "Popeye" (5.5, Parent, Jones), "Olive Oil" (5.6, Parent, Van Schaik), "Brutus" (5.7, Parent, Van Schaik), "Sweetpea" (5.1, unknown).

There was also more development next to the original "Discovery" (5.7, Parent, Morrissey) line. These were "Centaurian Travels" (5.9 A1, Parent, Murphy), "Obscured by Clouds" (5.5 A1, Parent, Van Schaik), "Freak Show" (5.8 A2, Parent, Bingeman), "Jody's Butterfly" (5.9 A1, Parent, Murphy).

The major accomplishment of the season was the first ascent of "Visitor Services" (5.5 A2, Parent, Van Schaik) found on the wall opposite "Discovery". This 15 ft roof had caught the attention of locals as well as visiting climbers due to

its easy identification from afar. Only after many hours of difficult cleaning of the free climbing section was it possible to gain access to a ledge below the roof. It seems that if interest continues at the Sleeping Giant the area will develop into an area of excellent climbing with all variations of climbing.

From explorations summer 1983 a fine granite face a short distance from Highway 11-17 was discovered. The Pearl Roadcut proved to be an excellent face climbing site. During two weekend visits some ten routes were climbed on the 60 ft face. Exploration is continuing in the same general area for more of the same.

The 1982/83 ice climbing season saw the ascent of the most aesthetic waterfalls along the Orient Bay Palisades. The season lasted from late October to mid-April. Throughout the winter mild weather and plenty of runoff brought the total number of waterfalls climbed to 18. The total climbed waterfalls at Orient Bay now exceeds 22. Further reconnaissance has revealed another 10 to 15 possible routes. Many of the waterfalls are seasonable runoffs and their formation are dependent on the source drainage area. The short distance to most of the waterfalls from highway II make their access no problem. The distances from the highway range from the closest of all waterfalls Obsession (grade 3) a mere 100 m, to Go-Mar Falls (grade 3) at 1 km. A newly re-opened area for the climbing community is Kakabeka Falls, called the Niagara of the North and a major attraction during the summer. It is only 35 kms from Thunder Bay on Highway 11-17. The falls, which reach a height of 40 m, form within the confines of a huge bowl that faces south. It is an excellent training ground and contains all possible degrees of difficulty.

Slowly the Thunder Bay Area is developing a reputation as central Canada's most outstanding area for both ice and rock climbing. The climbing areas are centred around the city of Thunder Bay north of Lake Superior.

Shaun Parent and Joanne Murphy

Visiting climbers are invited to send new route details and/or queries for more information to Thunder Bay Climbing Guide, Box 391, Thunder Bay F, Ontario P7C 4V9, Canada.

Climbing Around Ottawa

After a lull in activity in recent years, rock and ice climbing is now surging forward in the Ottawa area. Many attempts have been made in the past 25 years to produce a guidebook to the Gatineau Park cliffs but all were unsuccessful until the FQM published *Parois d'Escalades au Quebec* in 1978. The only weak spot in an otherwise excellent publication was the coverage of the Ottawa valley. This situation has been partially remedied by the production of a guidebook to the four most popular cliffs in Gatineau Park.¹ It describes over 60 routes, ranging in difficulty all the way up to 5.11. Many new routes have been climbed and many old ones re-discovered. Route lengths vary between 10 and 50 m and the cliffs are close enough to Ottawa for evening climbing.

Slightly further afield, Ottawa climbers have been visiting Bon Echo (CAJ 1967:78, 1973:88, 1979: 101) very frequently. A flurry of activity by Toronto based climbers whilst the 1980 guidebook was in press made the guide out of date before it appeared. A revised and updated guide has been produced for all those eager to repeat Knight of Faith, When Shrimp Learn to Whistle, Yonge Street etc (all 5.11) and too lazy to copy out the route descriptions from the Bon Echo hut book for themselves.²

Neruda (5.5) in the Western Cwm, Gatineau Park. Steve Adcock



Bon Echo is an excellent place to develop the skills necessary for safely pioneering new routes on the ancient fractured rock of the Canadian Shield around Ottawa. First ascents almost invariably encounter loose rock. Some of the best new routes have been "created" on a top rope by peeling off the outer layer of loose rubble to reveal the solid rock underneath.

New cliffs are being discovered or re-discovered continuously, varying from a 30 m high marble cliff near Kingston to the 100 m high cliffs on the Ottawa at Chalk River (CAJ 1957:81, 1967:76). Judging by all the old ironmongery frequently found on "new" cliffs there has been a lot of unrecorded activity around here in the past. Information on cliff locations, access, and routes is now being systematically collected and published in the Ottawa section newsletter.

The winter of '83, with its repeated freezing and thawing, was an excellent one for ice climbing. Several routes came into condition for the first time in recent years. As with the rock climbing many new areas were explored and much remains to be discovered.

What lies in the future? The rate of discovery of new cliffs will surely start to decline within the next year. There will be a period of consolidation as people develop preferences for certain cliffs. The stock of new routes will not run out for many years to come.

S W Adcock

FOOTNOTES

1. A Guide to Rock Climbs at Luskville

Peggy (5.5) at Home Cliff, Gatineau Park. Steve Adcock



is available for \$5 each from S W Adcock, RR#1, Baillie Road, Aylmer, Quebec J9H5C9.

2. Descriptions of Rock Climbs at Bon Echo is available for \$10 each from SW Adcock, as above.

Quebec

Quebec Report 1983

1983 was a lean year as far as important new routes and repeats of difficult routes were concerned. However worth noting was the second ascent of the spectacular ice climb the "Dent de Dracula" in the Saguenay region by Louis Babin and a companion. Although the ice was very visible during the winter due to very little snowfall no important new routes came to our attention. In rock climbing, Luc Martin and Sylvain Bourdon achieved what is thought to be the 20th ascent of Cap Trinité. They climbed two thirds of "Les Grands Galais"; the other third was a variation to the left of the middle section which they named "Mort de rire". A new route was put up by Gaétan Martineau and a friend on Mt de l'Ecluse in the Malbaie River valley. It follows the clean diedre at the extreme lefthand of the wall (see section A on page 129 of the Quebec guide). They named the route "Monarque" and graded it 5.10.

Information finally reached us from Paul Laperriere regarding recent developments in rock climbing in the Laurentians north of Montreal. A large number of climbs have been achieved on "La Bleue" and "Les Fesses" in the Val David area in the past three years. Many of the new routes are in the 5.10 and 5.11 range of difficulty. A bouldering contest was organized in Val David during the Halloween weekend. Approximately 40 climbers took part, some appropriately costumed for the festivities. Imagine pulling over an overhang and coming face to face with Frankenstein's monster! An interesting rock climbing stage called "Ballet-rock" was organized by Paul Laperrière and friends. For five days the trainees worked on refining their technique by concentrating on the various climbing moves from a bio-mechanical point of view. A 5.5 climber was able to climb at the 5.9 level on completing the session. Both the bouldering contest and the ballet-rock stage are expected to increase their notoriety in 1984.

François Garneau

The Sandbaggers

"Want to go climbing?"

"Sure!" I'd had enough of house repairs to last me a lifetime.

"How about Mt King?"

"Why not?" Looming up barely a mile from my patio-to-be the cliff (15 kms north-west of Parliament Hill in Gatineau Park) had been a temptress all year long, beckoning me away from the workhouse. I'd resisted until last Sunday when I'd raced off with Ron in the early evening to snatch a very pleasant two pitch 5.4 route. Lots more pleasant easy looking lines remained, just the thing I needed after such an inactive summer.

A five minute ride and we're bushwhacking up to the base. Not a bad bushwhack really but how much easier it would be if only we could stand up straight and see more than ten feet ahead. Still, only 15 minutes (and it'll be less than ten once a trail is established) and we're at the base.

The morning downpour had left large parts of the cliff dripping. That restricted our options somewhat. But an easy angled crack system here, a slabby route underneath impressive overhangs there - I could still see plenty of attractions. It soon became apparent that Ron and John were not on the same wavelength. They settled down beneath an overhung shallow diedre of red, rounded, rubbishy rock. The most obviously difficult feature on the whole cliff up which to put a route. Well - no way was I going to venture out onto this thing without the security of a tight top rope. I settled for a spot of trail clearing.

Twenty minutes later I hear the ting ting of hammer against piton. I return to see John 25 ft up, safe and secure with a piton at chest height and no holds above him for a long way. Things look interesting so I sit down to watch. After a couple of steps up and steps down he declares he's "spooked" (I'd say "seen the light") and is back down

to the ground. Ron isn't (or hasn't) and so up he goes. The pin (which apparently is not as good as its "buried to the hilt" appearance would suggest) is backed up with four stoppers. The stoppers look as if, combined, they might hold body weight. Ten feet diagonally to his left is what looks like a good hold. How, to get to it? Ron tries going up, then left. But all the holds are rounded and sloping the wrong way and there aren't very many of them anyway. Trying to be useful, I suggest "why not go left, then up?" The going left part turns out to be a reasonable proposition, apart from creating the possibility of a nasty pendulum fall. So, hammer meets piton again and safety is regained (but did I really hear that huge block below the pin creak on the final hammer blow?). Ron makes several valiant efforts to get past the pin but runs out of strength. John has memorized the sequence of moves which Ron worked out and goes back up. But without Ron's reach and with the good hold covered in dirt he comes skidding off onto the pin. Back down to the ground.

Rethink. The climbing really does look very good. It looks very safe (though our subconscious tells us it probably isn't at all). Ron already has a name for it - "Desperate Land". The man with the "wealth of climbing experience" is being urged to give it a try. I agree to "take a look". I'll be safe if I don't go above the second pin. I won't take many runners, just a few for show. Why weigh myself down; I'm not going above the second pin? I'll top rope it at a later date to clean off the dirt and loose rock.

Up I go. The holds up here really are small. Three times to the pin, three times back for a rest, and each time the holds get bigger. My fourth "look". This time I'm on jugs. Up past the pin. Hand on the good hold. Other hand on another jug. Feet past the pin, on ledges. Climbing by instinct. Committed. Unintentionally. But now I'm safe. No I'm not. A crrr-aack and my right foothold vanishes. My foot lands on the pinhead. Now I'm scared. My right handhold is creaking. The pin won't hold a fall from here. I'm forced to place

protection with my left hand. Why am I here? Some luck! I get a lousy hex in. Good for a horizontal fall. Somebody please position Jupiter ten feet to my right.

Calm down. Relax. The pinhead, at least, is solid. Straighten my body. Reach up. Holds. Small holds, and they creak, but holds. Foot in the good one. Slow down. Think things out. Foot traverse going out left to an arête and easy ground. I'm safe and can laugh. Somebody's going to have to second this and they'll be facing a huge pendulum after that second pin.

A name? Aren't these two guys the ones who stole that prize plum from me on the Western Cwm cliffs, the one I'd already named Free Bird? And didn't they insist on renaming it Radical Moves. Well methinks, two can play at that game.

The pitch, despite the different rock, was typical Gunks 5.9 climbing. So how about something reminiscent of the Gunks? How about Birdland?

S W Adcock

Birdland 5.9 AO. First ascent Steve Adcock and Ron Halka. 1 August 1983.

Ice Climbing in Montreal — A Review

Eastern ice climbing, as well as a means of training for more difficult mountain climbs, has long been practised as a sport in its own right. Difficult routes can be found in the Adirondacks, White Mtns, Vermont, and Quebec. Poco-Moon-shine, Huntington Ravine, Smuggler's Notch, Lake Willoughby, and La Malbaie, all but a few hour's drive from Montreal, are among some of the more familiar areas where practitioners of the 'cold arts' annually gather to ritually 'beat the ice'. Even closer the Mt St Hilaire and Shaw-bridge areas can provide ample weekend challenges. Even on the island of Montreal there is an excellent ice climbing area, a few minutes drive from the downtown core. One can quite literally be climbing right after classes or work if one so chooses, from about December to late March in any given year. This remarkable opportunity, as yet unnamed is popularly referred to as the U of M wall. Located directly behind the University of Montreal's sports complex on rue Edouard Monpetit, it consists mainly of a north

Ice Climbing in Montreal: Central Pillar. Kevin O'Connell



facing cirque partly created by blasting out the football field during the construction of the complex.

As far as I know the area has been visited for only about the past ten years. Among the earliest visitors were Ben Poisson and friends. Later members of the McGill Outing Club, including myself, discovered it as a better alternative to the short ice wall on the reservoir behind McGill University. Federation Quebecoise de La Montaigne members have also been active here in addition to ACC members from the Montreal Section. Today many ice clinics and schools are regularly held here. Three years ago one could meet just about all the ice climbers around by visiting the site on ideal days. Most of the time however other climbers were a rare event. In recent years, with the increasing popularity of ice climbing, it is rare not to find other climbers pounding on the ice at almost any time during the season. In fact it is often necessary to wade through a deep layer of shattered ice at the start of the more popular routes.

There are a good many routes on these cliffs as the photographs will reveal. It is possible to run out 40 m or more on some of the longer routes, although many of the lines are shorter and usually somewhat steeper. One can find vertical sections, short overhangs, traverses, and even mixed climbs. In short it is an excellent area for practice and development of ice climbing techniques. Its proximity for most Montrealers allows one to keep in good shape for the harder and longer weekend climbs. Many of the routes are now soloed, all routes can be top roped, and there are ample opportunities for developing

leadership skills. The moral is clear — when in Montreal during the winter don't forget your ice tools! You may be pleasantly surprised.

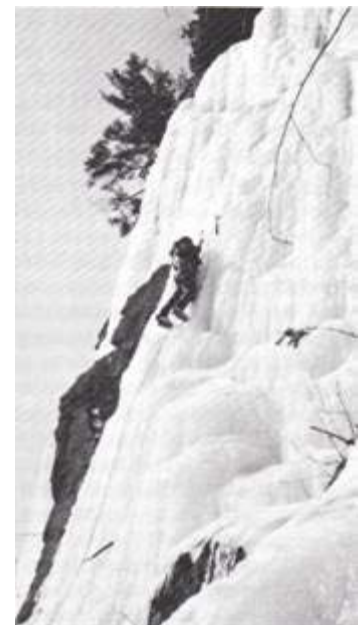
Kevin O'Connell

Ice Climbing at Shawbridge — New Routes 1983

Since the first major ascent of hard ice on the Shawbridge cliffs in Quebec in 1975 (Diableret by Jotterand and O'Connell) the area has gained steadily in popularity. Diableret has become a deservedly popular route from about December until March with ice conditions tending to be very consistent throughout the season. This is due in part to the sheltered location of the climb, in spite of the general west facing orientation of the entire cliff. It is also due to the stream run off which feeds the waterfall all year round.

On a recent weekend in February I observed over 30 persons ice climbing individually, in small groups, or in ice schools. This year and perhaps the previous one have been exceptionally good for the formation of ice and as a result, routes which have not been seen for quite a few years have reappeared. This abundance of good ice has attracted large groups from as far away as Boston, although usually the climbers are from the Montreal region, about 45 minutes away. The increased popularity of the area has led to more soloing of all

First ascent of Sirius. Kevin O'Connell



Ice Climbing at Shawbridge: first ascent of Sirius. Kevin O'Connell



routes and also to more accidents. On 19 February a solo unroped climber fell about 30 ft to the base of Diableret and fractured his ankle. This occurred on the easy lower section of the climb emphasizing that any miscalculation on steep ice can result in serious consequences. On the same day C Lund and I climbed two routes halfway between Diableret and Little Eiger on an area called "Stalacticicle Slabs" so named as a result of a prominent stalactite like icicle hanging free from part of the cliff face. The two routes described lie just to the right of this prominent feature which is directly above the north end of the shallow lake in Paradise valley.

One of the routes was apparently climbed the previous year though it is not clear which one. The routes described here lie on either side of a rock prow and are easily identified as one approaches the cliff. The righthand route is probably in condition more often than the lefthand one due to a better water supply. The righthand route is referred to as "Sirius" and is about 120 ft in length. It is a moderate climb, consisting of short steep walls, intermixed with good rest shelves. One can make the climb easier or harder by choice of exact line as there are many small variations possible. The route, which lies mainly in a well sheltered corner, finishes at the right-hand end of an old tree at the top of the cliff immediately to the left of some bushy cedars.

The lefthand route is about 130 ft in length and is quite sustained. "Devi's Delight" consists mainly of steep walls

with little rest opportunity, although it is possible to traverse off right onto easier ground if necessary. However the route takes a very direct line up the most difficult ice to the top of the cliff and finishes about 10 ft to the left of the log described in the previous route. From the top and bottom of the cliff the line has a definite ice prow appearance. On this ascent my second was unable to complete the route, although it is only a grade more difficult than "Sirius". Ice conditions may not be optimal as this route is west facing and is directly exposed to the sun. Both routes are easily protected.

Kevin O'Connell

First Free Ascent of "Off"

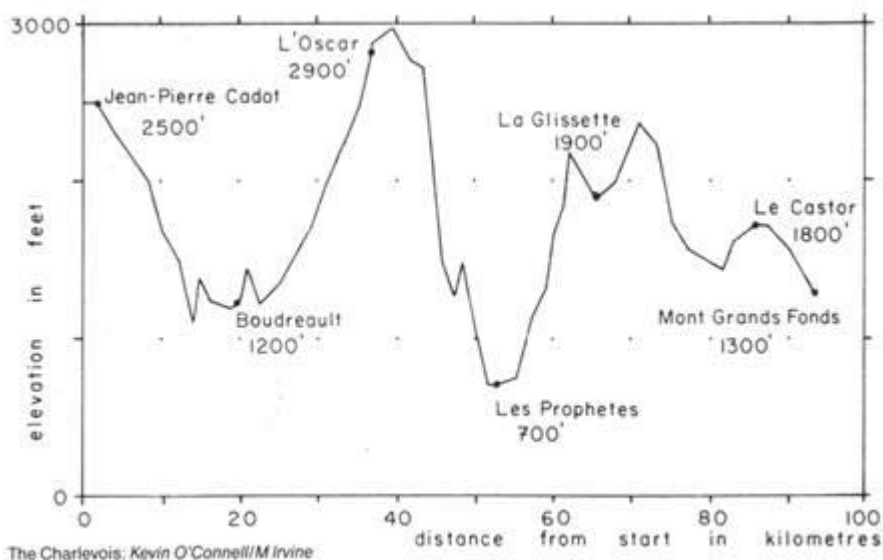
In July 1983 Dave Smart and Brian Baxter made the first free ascent of "Off" at Mont Catherine, north of Val David. The route consists of a painful 5.12a finger crack which is well protected.

Dave Smart

Among early visitors to the region were Jacques Cartier who landed at L'Isle aux Coudres on his second voyage in 1535 and Champlain who in 1608 named the Cap a l'Aigle and a bad anchorage in a small bay which is still called La Malbaie. The area remained rather isolated until the mid eighteen hundreds when it was increasingly visited and explored by the residents of Quebec City. To Montrealers the names Murray Bay, Baie St-Paul and Manoir Richelieu have been well known for generations. To Quebec climbers the areas of St Urbain, St Simeon, and the Malbaie have been the object of much interest for both summer and winter climbs usually of high standard in remote settings. No matter what time of year one visits the region, you are always impressed by the beauty and apparent isolation as one moves away from the boundary of the majestic St Lawrence.

In recent years a new dimension has opened up to those who would enjoy the Charlevoix in the winter months. The completion of a system of huts allows a ski traverse of the Charlevoix, quickly

The Charlevoix: Kevin O'Connell/M Irvine



Easter Enterprise: Ski Traversing The Charlevoix

On the north shore of the St Lawrence River about two hours east of Quebec City lies an immense semi-wilderness area known as the Charlevoix. According to some sources the area was probably named for the Jesuit Father François-Xavier de Charlevoix, first historian of New France.

The Charlevoix: La Prophete Refuge. Kevin O'Connell



becoming one of the most popular and rewarding of ski tours in Quebec. The system of huts begins near St Urbain and finishes near Mt Grands Fonds and is managed by the Federation Quebecoise de la Montagne. In spite of the relative luxury afforded by these huts, "La Traversée" is a challenging ski trip by almost any standard. The traverse is designed to bring one into contact with some of the spectacular mountain scenery which forms the north shore of the St Lawrence in the Charlevoix region.

The Montreal Section decided to organize a trip to the Charlevoix early in 1982 and in September booked the huts for an Easter trip. Within a short time the quota of ten participants was filled and we soon had a list of eager late comers who, as it later turned out, were not disappointed. On 30 March we assembled at the O'Connell residence just at the start of a very promising spell of clear and cold weather.

Our first day was spent largely in getting to the start of the trail. The main obstacle on the route from Montreal to the start of the trail at St Urbain is the complex of interchanges around Quebec City. This, as well as the tendency for Quebec drivers to tailgate at 120 kms/hr, tested the resolve of our three drivers. We registered with M Fortin in St Urbain, dropped off our passengers and shuttled two of the cars over to Mt Grands Fonds. By later afternoon the drivers too were finally skiing into the Jean-Pierre Cadot hut with the last rays of the sun disappearing in the clear -12°C mountain air. Most of our party had preceded us to the hut, and although the first few kilometres are quite easy the drivers arrived after dark. They were greeted by the cheery glow of candles and many cups of hot tea. This first cabin is spacious and accommodations were comfortable if somewhat cool on the first night. Spirits were high and all of us slept in anticipation of the next day's journey.

The crisp dawn brought with it the promise of another excellent day and, in anticipation, we waxed green for the deep powder that lay ahead on an unbroken trail. As the Cadot hut is located at 2500 ft, the day's journey to the Boudreault hut at 1200 ft meant that many of us expected we would be mainly picking ourselves up off the trail if all went well. In the meantime, Dee decided to accompany us only part of the way on the first major stage, then

return to the Cadot hut for another night. Afterwards, she drove our remaining car to Grands Fonds, where she hoped to absorb some of the local culture while awaiting our completion of the traverse. The descent to the Boudreault was certainly exhilarating and the skiing was superb, although a number of the group experienced difficulty with heavy packs. John and Sue helpfully swept the trail and assisted several of our party while Ron and I forged ahead, breaking trail and chopping down the occasional tree which lay across the otherwise excellent route. Temperatures gradually warmed as the day progressed. Although we started with green we progressed to purple by mid-afternoon — a small taste of problems to come.

I arrived at the Boudreault hut first to discover that a party of four, meant to have passed through several days earlier, still occupied the hut. Basking in the late afternoon sun, they were more than a little surprised to see me and learn that eight more were planning to occupy a hut which could just hold ten. Their enormous packs and sleds clearly explained why they had taken so long to get to the second cabin and guaranteed that they would not be able to complete the trip. As the rest of our party arrived it became clear that for some a hard decision would have to be made for the following day. Boudreault was the last point for a convenient exit along one of the so-called escape routes. Later that evening Don, Joanne, Heather, and Issie wisely decided, in view of their difficulties the first day, to take the exit option and to join us at the Castor refuge at the end of the route. The other party of four soon decided they would do the same.

Another perfect day dawned and as the temperature began to rise five of us started along the Hydro line detour which was this year's special option at the start of an otherwise flat section. Logging operations have eliminated the regular portion of the route but the climb up the hydro cut offered excellent views as partial compensation. Descending, we soon crossed the still frozen Gouffre River and switched to red klister under a blazing sky. This decision turned out to be a mistake although we had correctly anticipated a steady climb to the 1900 ft L'Oscar hut. We discovered to our horror that we were constantly trail breaking wet snow over cold powder. Almost any wax or klister worked well for about ten

minutes when it became necessary to scrape off the accumulated snow and ice from the ski bottoms, a pattern which repeated itself endlessly. Despite these problems we greatly enjoyed this stage of the journey. The weather was near perfect, the scenery superb, and the freedom of the wilderness exhilarating. This section turned out to be somewhat closer to 20 kms and we arrived at the well hidden refuge just near dusk, more than a little weary. Now that we were reduced to a party of five L'Oscar seemed quite spacious for our needs. Our first task was to shovel snow out of the cabin, the previous party having failed to properly secure the door two weeks earlier. We quickly set to work chopping a hole in the lake for water and a hole in the hut's only water pot, the latter action effectively defeating the former. In spite of this we ate well and slept even better until awakened by the smell of burning logs in the early hours of the morning. Another lesson in wood stove operation. Don't dry wet logs on an unattended stove!

The next day began in near perfect weather as we got off to a late 0800 start. A short climb from the hut brought us to the crest of the Malbaie valley with superb views as far as the eye could see. At about 3000 ft this was the physical high point of the traverse. Not high by some standards but definitely in the mountains. The Malbaie valley from this vantage point looks like the Riverworld of JP Farmer's novels. With this in mind we began our 16 km descent to the valley floor and Les Prophetes hut at 700 ft. The descent was a real treat after the steady climbing of the previous day although it was apparent that the snow cover could not be expected to last much longer, particularly at the lower elevations. The climate at the Malbaie River was balmy, definitely red klister country especially on the snow patches between the pools of water. We pulled into the refuge about 1500, still admiring the magnificent rock walls that surround the valley at this point. The cabin is superbly situated above the river, with a fine west facing porch. Somewhat elated from the day's journey we relaxed, warming and drying ourselves in the still blazing western sky.

The following day brought with it the first signs of light cloud and even milder temperatures. Our journey to La Glissett would involve a distance of only 13 kms and a climb to 1900 ft. Nonetheless we

found this to be a hard section of trail which roller coasted its way to the high point, then plummeted its way to the hut in the last kilometre. Along the way we passed an old logging cabin, still in good condition and available for use in emergency as a half-way refuge. Although we arrived shortly after lunch we could not possibly continue on to the next hut, Le Castor. A little disappointed, we relaxed and dried out ourselves and the hut as John checked out the next few kilometres of trail. By 1500 however it was beginning to snow heavily. The snow continued throughout the night and, snuggled in our comfortable cabin we were thankful we had not pressed on.

In the morning we were greeted with 6 cms of new snow around the hut as we awoke to the newly arrived Christmas like weather. In anticipation of the next 21 kms we waxed blue and were off to an early start. A mere hour into the journey however

Ron's binding broke suddenly on the flat section of a snow covered country road. We helped him to temporarily wire the broken piece back into place and continued on in the now 10 to 15 cm deep snow. In spite of the deep trail breaking the skiing was excellent and we had no further mishaps. Perhaps due more to a reluctance to rejoin civilization than anything else we had two route finding problems before reaching Le Castor. On the last third of the route we started to meet more and more snowmobiles, a sure sign that we were approaching Mont Grands Fonds. By mid-afternoon it was once again necessary to scrape everything off the ski bottoms. Ron was rescued from the agony of this final section by Andre Asselin who offered him a lift on his Cadillac like ski-doo for the last few kilometres.

The final 7 kms to Grands Fonds from Le Castor was fortunately mainly downhill on well groomed cross country trails. We

reached the parking lot at 1600 and were greeted by our friends who had stayed at the refuge. Civilization at last! It was really noticeable after such a long and isolated ski trip.

Refilled on beer and grease burgers amidst good friends and warm Quebec hospitality we returned to Montreal, weary but pleased by what we had accomplished. The memories of great company, near perfect weather, and a rewarding traverse will undoubtedly see us through until we someday return to the Charlevoix.

Kevin O'Connell

Participants: Dee Gaiger, Joanne Hebert, Don McLeod, Ron Mason, Sue Nish, John Nolan, Kevin O'Connell, Isse Rabinovitch, Heather Smart, Chris Turner.

Eastern Arctic Mountains

Baffin Island 1983

I was left off at my base camp site just east of the entrance of Kaneetogosiogolo Fiord (south of Padloping Island) in a blizzard on 3 July. Early in July I walked to Reid Bay and to the two unnamed fiords further to the south-east. On 9 July I visited the 1000+ ft top south of Reid Bay. On 13 and 14 July I climbed peak 3453 + ft in the light of the midnight sun.

In the latter half of July I walked south from Reid Bay to Sunneshine Fiord. Eskimo Pass was visited in a waning snow storm. During the only good weather at Sunneshine Fiord I climbed Mt Donard, again in the midnight sun (24 to 25 July).

Following nearly a week of heavy snow the beginning of August I left my base camp by kayak and paddled into Kaneetogosiogolo Fiord. In deep fresh snow on 7 August I climbed an isolated 2500 ± ft top half-way in on the east side of the fiord. On one of the few truly fine days of the summer, 10 August, I climbed, from the head of the fiord, the 3500 ± ft summit due north of the Kaneetogosiogolo Glacier.

Severe ice conditions required two and a half days of backbreaking work on the ice on Davis Strait in the company of 19 Inuit before arriving back in Broughton 17 August. The summer of 1983 was colder

and stormier than normal in this normally cold and stormy place. Every one of the frequent storms during my stay brought snow at sea level. In August new snow lingered on the beaches for days. There was no evidence any of the tops visited had been visited before.

David P MacAdam

Australian Arctic Canada Non-Expedition, or ACNE

Seemingly overnight a non-event was transformed into a non-expedition when John Stone and I finally met in Montreal after a month of confusion, alternative plans, and separate travelling across the North American continent. After two days of hectic shopping and packing and a short stay in Frobisher Bay we staggered up the Weasel Valley to establish a base camp near the Caribou Glacier terminal moraine.

When the first bout of bad weather blew away we were attracted by the Scott/Henneck route on the east face of Mt Freya right there in our backyard. So on the afternoon of 13 July 1983 we were moving together, roped up, on the apron slabs. Heavy spring snow leftovers caused extensive meltwater runoff. Climbing into the bowl like feature on the headwall we

not only struck much snow and wet rock but loose rock as well. An unprotected 5.8 to 5.9 face pitch led to the pendulum section, wrongly reported by Doug Scott (CAJ 1973:2) as being leftwards. In fact it is a rightwards swing to some easy cracks which link up to the ramp. As for the ramp, it was a doddle (trail-bike material). Certainly no precarious crawling along exposed catwalks! The real difficulties were found in the upper chimney pitches, overflowing with powder snow and lined with ice. The second chimney pitch could not be ascended by an obvious square corner because of wall to wall verglas. Instead I had to grovel up a slightly flaring verglased chimney adjacent to the corner with one runner at 10 m (5.10). Needless to say the final two pitches of clean mixed free and aid climbing made up for the rest of the route's problems and we topped out 20 hours after starting.

During the summer of 1983, apparently the coldest for many years, a rare six day fine spell extended from 13 to 21 July. Before and after these dates it was generally too bitterly cold and windy for any serious rock climbing. Luckily John and I made the most of this break. We stumbled into base camp after Mt Freya and recharged ourselves in a few hours for the next route on Mt Loki.

A friend from Australia, Warren Lee, had done the second ascent of the mountain last year with an American. They did the first ascent of the south face via the central buttress followed by a first descent of the east ridge buttress. A south face sounded warm and pleasant after a shady east face so on the evening of 15 July we spent four hours rounding Summit Lake and snowshoeing up the Turner Glacier to reach a bivy site below the 'Matterhorn' of Baffin Island.

The following day we looked at the central buttress on the south face but it had steep and hairy snow access so we opted for an obvious square cut pillar and buttress a few hundred metres to the left. Once we cleared the prerequisite first 100 m of creaking flakes and tumbling blocks we followed clean hand and finger cracks up the corner and out onto the huge pillar. Even the odd hard looking off width roof crack always sprouted hidden jugs in the right spot and the climbing remained sustained 5.7 to 5.8 for the entire 700 m.

Where the pillar merged into the buttress we carried on up easier grooves and cracks to an orange headwall feature. A few slick wet sections of rock (one requiring two aid moves) and balancy ramps kept us engaged until the difficult knobbly crack at the top. No problems. Some ratty jams and in no time we pulled onto the summit ridge as the midnight sun lit up the ice cliffs across the valley and the imposing Penny Icecap.

The descent down the long west ridge was tiring and frustrating. Constant hassles with rope drag, jams, and time consuming abseils into and climbs out of the numerous notches along the ridge. Just before dropping into a scree gully John knocked a small block onto his new Seal rope, leaving a dangerous gash five metres from the end. Added to the tension of weariness, a chopped rope, and rapping down a bio-degradable scree gully, was the sight of cirrus clouds building up on distant peaks - eventually a false alarm.

On the snow we immediately sank waist and shoulder deep. The 500 m down and across to where we had left the snowshoes at the base of the route took an hour. A common story on Baffin Island. It took 10 hours to get down off a 12 hour climb. By now it was 9 am and the sun had been on the side glacier for some time so the snowshoes

only helped marginally. Dangerous snow covered slabs often opened up by surprise and a foot had to be rapidly extracted from a bottomless hole that echoed to the sound of ice tinkling down deep shafts. Needless to say one caught me off guard and I caught a sudden glimpse of the sky rising at an alarming rate amidst a shower of broken ice stalactites and ended up crashing bum first into a wedged section six metres below my last footstep. Luckily rope was to hand and John was able to anchor it to two snowshoes, leaving me to strenuously jumar out and dig a trench through soft snow at the lip. Taking extra care skirting around the remaining crevasses we finally arrived back at the bivy site. John discovered that he had left his gloves and mittens at the bottom of the abseils so we retraced all those steps back up the glacier to retrieve them.

Back on course again we continued our epic prone return to base. Heading down towards the safety of the Turner Glacier medial moraine we discovered that the heat of the day had turned the entire glacier into a crusty sheet of thin ice above a mass of running meltwater. Bear-paw snowshoes weren't made for wading through knee deep slush for several hundred metres. Later in the afternoon we tried to intersect the walking route across the Turner Glacier but only managed to get lost. We eventually tramped down across black lichen boulder fields and spongy beds of moss to Summit Lake.

Noon next day we awoke inside the hot tent, feeling like casseroles inside a microwave oven. Despite the T shirt and shorts weather we needed a rest from day and night climbing so decided to go down the valley and pick up our food cache at Overlord. It was a pleasant little holiday with light packs and time to spare to photograph flowers. Walking back up the valley we struck head winds and rain turning to sleet then snow. Here endeth the six day summer. From then on many days were spent slothing around base paying social tea and biscuit visits to the Nottingham University climbers.

On 27 July 'Huey' took a breather and allowed us to visit Mt Asgard. The Caribou Glacier provided easy walking that evening with a hard 'Aero' ice surface. We bivied on Kings Parade Glacier, hoping to repeat Doug Scott's route on the north-

east buttress. In the morning we reluctantly forced ourselves out of the pits into 4.30 am arctic chill. It was grim when the chocolate Quik froze on contact with the granola in my metal chow plate!

Out onto the lower slabs of this aesthetic buttress we were soon stopped in our tracks when the wind picked up to the accompaniment of hog-back clouds. When the summit cap became enveloped in a swirling cloud of spindrift we decided it was no place to get trapped and piked out. After some contemplation there seemed to be some (not much though) sense in trying the 1953 Swiss route. Even in these conditions retreat would be no problem.

So with a light rack we ran up to the difficulties of the snow basin. Without ice axes or crampons we had to climb a-la-Australian technique, ie scrabbling around in smooth soled rock boots on ice pulling up on the pick of a crag hammer or, in the second's case, a nut extractor. Four rope stretching pitches took us up to the chimney pitch at the col to be bombarded with ice daggers shed from way above. The rock improved and objective dangers lessened when we trod out onto the exposed wall of the north summit and got battered by 60 knot up draughts. Passing clouds flashed around, providing moments of intense sunlight followed by cold grey mist. The large flat summit cap of snow was given a cursory look in the gale force winds and then the ropes were hurled out into space. We abseiled off into the grey, the ropes arching up horizontally in the up draughts. More abseils, storms, and brews followed but the rest of the trip was an anti-climax.

Dave Wagland

Recent Decisions by the Canadian Permanent Committee on Geographic Names: Baffin Island

The Committee was approached in April 1979 with a proposal for several peak names for possible approval. All of the peaks lie in the region of Stewart valley which is near the settlement of Clyde River on the north-east coast of Baffin Island. Of the 22 names submitted 15 were approved, eight with the spelling submitted, the remainder with some changes in spelling.

Kevin O'Connell

AGLU PEAK, not "Agios Peak" or "Seal Breathing Hole Peak", east of Refuge Harbour;

at 70°51'55" N, 71°06'05" W

ATQUT RIDGE, not "Bone Wick Trimmer Ridge", south of Mt Longstaff; at 70°42'40" N, 71°08'05" W. KISIMNQUIQTUQ PEAK, not "Kisimngaaq Peak" or "Solitary One Peak", south-west of Natsiaq Peak; at 70°47'50" N, 71°39'00" W.

MAUJAQ PEAK, not "Mauya Peak" or "Deep Soft Snow Peak" west of Atqut Ridge; at 70°42'55" N, 71°16'00" W

NATSIAQ PEAK, not "Natsia Peak" or "Seal Peak", west of Aglu Peak; at 70°51'35" N, 71°17'05" W.

NAUTTIAQ PEAK, not "Flowers Peak", north of Tullik Peak; at 70°48'15" N, 71°05'40" W. NALLAQTAQ PEAK, not "Snow House Peak", west of Mt Longstaff; at 70°44'45" N, 71°12'00" W.

PANA PEAK, not "Knife Peak",

south of Tiiturvik Peak; at 70°43'05" N, 71°18'45" W.

PIQTUQ PEAK, not "Blown Snow Peak", south-west of Mt Longstaff; at 70°43'40" N, 71°14'00" W.

QABUUNAAQ PEAK, not "Kabloonaa Peak" or "Whiteman Peak", west of Atqut Ridge; at 70°42'20" N, 71°16'45" W.

QAMUTIK PEAK, not "Komatik Peak" or "Sledge Peak", north-west of Piquit Peak; at 70°44'05" N, 71°17'10" W.

SAIL PEAKS, east of "Pana Peak"; at 70°43'00" N, 71°24'40" W.

TIITURVIK PEAK, not "Mug Peak", south of Qamutik Peak; at 70°43'20" N, 71°18'15" W.

TULLIK PEAK, not "Tuulik Peak" or "Loon Peak", north of Mt Longstaff; at 70°45'50" N, 71°07'05" W.

UKPIK PEAK, not "Great Snowy Owl Peak", south of Pana Peak; at 70°41'10" N, 71°19'10" W.

Peaks not approved included the following:

"Nanuq I Peak" or "Polar Bear Peak", south of Natsiaq Peak;

at 70°47'15" N, 71°17'55" W.

"Nanuq II Peak" or "Polar Bear Peak", south of Natsiaq Peak; at 70°47'35" N, 71°16'05" W

"Wedge Ridge", west of Walker Arm; at 70°33'55" N, 71°27'00" W.

"Turtle Peak", south of Sail Peaks; at 70°32'40" N, 71°36'15" W.

"Tuktu Peak" or "Cariboo Peak", south of Aglu Peak; at 70°49'10" N, 71°06'50" W.

"Pinnacle Peaks", south-west of Natsiaq Peak; at 70°49'50" N, 71°24'10" W.

"Iqaluaqpak Peaks" or "Lake Monster Peaks", east of Pana Peak; at 70°43'00" N, 71°24'40" W.

Regarding rejected names, the Committee made comment as follows: Nanuq and Tuktu Peaks are used for many features in northern Canada. Pinnacle Peaks — the use of two generic names is not acceptable. Wedge Ridge — not a euphonious combination of specific and generic. Turtle Peak — out of place in the Eastern Arctic, even though it may be descriptive of the feature. Iqaluaqpak Peaks — Sail Peaks was adopted as proposed

Foreign

Heebila - North to Alaska

Why did we decide to go back to the big mountains? When I think of climbing my mind wanders to sunny California days in just EBs and shorts or a challenging weekend summit, home for Sunday dinner and a hot shower (sometimes!). Those are comfortable memories. After all being cold, hungry, and alone for a month should not possibly appeal to four comfort driven westerners. Regardless there we were, planning and executing an expedition to Alaska.

The Alaska Range offers an incredibly wide variety of expeditionary objectives. Sheer granite walls of the Ruth Gorge stand out from miles away, while classic ridges and buttresses sweep down off the high mountains dominating the horizon — Brooks, Hunter, Foraker and Denali. Accessibility is a very positive factor for the Alaska Range as well. With four companies competing for your business a flight into the Kahiltna Glacier airstrip comes at a reasonable rate. Certainly in a comparative sense when one considers the prohibitive cost of flying into the Yukon's St Elias Range. The park service rangers run an efficient and friendly service, acting basically as an information outlet,

not the anticipated bureaucratic registrar. The recent outcry of editorials claiming Alaska's National Parks are over regulated seem to have little substance. With all of this positive information though, you can be sure the Alaska Range is no secret! Large numbers of parties, all with widely varying degrees of experience, flock to these mountains, especially Denali, each year. The Alaska Range however is huge, and finding a solitary objective simply requires some prior thought and imagination. Our choices were pleasantly free of other parties and our experience was greatly enhanced.

In 1981 our same team had climbed Mt Logan. During our ascent we looked longingly across the Hubbard Glacier at a possible route on Mt McArthur for after our climb on Logan. However with the east ridge of Logan behind us and the team safely back in base camp our prime thoughts were far from attempting another big mountain. We opted for a conveniently quick flight out and all the wonderful things that come with it, like showers and beer, as opposed to ten more days on snow and ice. Therefore when planning our trip to Alaska we decided to include two mountains in our itinerary. The logic being that if you

include two summits in your plans it makes for easier motivation once you finally reach the mountains. Our objectives would be Mt Hunter and Denali.

After a few hectic last minute preparations in Vancouver, including a salmon barbecue and traditional "Coors" party, we were forced to enjoy two relaxed days in Talkeetna, Alaska. Much too early on 4 May 1983 we found ourselves immersed abruptly into the mountain environment by our pilot, Doug Geeting. That same evening our crew was set, organized, and ready to go, camped at the base of Mt Hunter's west ridge.

MT HUNTER WEST RIDGE

Underestimation. Not a good word when you are describing one of Alaska's mountain giants. Regardless our team approached Mt Hunter's west ridge with a carefree attitude. Why not? First climbed in 1954 by Fred Beckey, Henry Meybohm, and Heinrich Harrer, it should be interesting but certainly just a warm up for our future plans on Denali. So that is exactly how we prepared for one of the Alaska Range's most impregnable and highest mountains, as a warm up!

A training climb. Get fit, test equipment, work flaws out of the menu, generally make ready for the second half of our adventure, Denali. Well on our third day as we came to grips with the many difficult pitches in the rock towers we were beginning to wonder when this route would let up. The west ridge had plenty to show us yet.

Two days later we were still struggling, climbing up near vertical steps of rotten snow unnaturally angled by wind action over the ridge, and straining over lengthy sections of steep, blue ice with our traditionally heavy expedition packs. Finally after five days, five thousand vertical feet and four kilometres of sustained mixed climbing we reached moderate terrain.

We built camp 5 at 12,000 ft, leaving us in position for a summit bid. The past five days had been challenging alpine climbing in an awesome setting, the picture completed by stable, warm weather. Our luck held, along with the weather. Day six dawned clear, albeit windy, and we were off towards the summit. By the time we reached Hunter's expansive plateau at 13,000 ft clouds had settled in to 10,000 ft and the wind had stopped. Moving strongly, we reached a calm, cool summit and soaked in a half an hour of views and congratulated each other before cruising down across the plateau to the top of the west ridge. The moderate terrain facilitated a quick return to high camp, arriving there with lots of time to enjoy our position, a luxury we had not been permitted on the ascent.

The following morning we all awoke to a certain amount of apprehension. Although we had enjoyed ascending a challenging route on steep, complex terrain, none of us were too thrilled with the prospect of descending it. So it was with reservations we left our high camp on 11 May. After a full day of down climbing, hopping bergschrunds, rappelling, and guesswork we reached the top of a snow spur at the 10,000 ft level on the north side of the west ridge. Camp that night was comfortable and well protected but concern was the overriding factor. Lenticular clouds combined with a dropping barometer suggested a storm and we had just committed ourselves to a snow spur with really very little knowledge of the terrain ahead. Visual checks while ascending the west ridge had given no complete views, some sections

were still in serious doubt.

Researching Mt Hunter's west ridge and its possible variations had not been a priority in the long winter months preceding our journey to Alaska. Denali had absorbed the bulk of our reading time and our lack of prior knowledge of Mt Hunter and its variations once again increased the seriousness of our position. Our fears were fortunately groundless as the following day's descent produced no real problems and the anticipated storm remained passive. The final walk across the flat glacier to our food cache at the base of the west ridge was done in a zombie like state. However the following dive into our food supplies developed some latent energy and a party atmosphere ensued. Everything was fine, life was good, we had successfully and safely completed a classic route in Alaska's big mountains. Our only worries now being, how many pancakes could we handle for breakfast?

DENALI WEST RIB

The heat was intense. Clear blue skies and not a breath of wind as we worked with the tedious job of moving all of our gear up the east fork of the Kahiltna Glacier towards the south face of Denali. Ferrying loads offers lots of time for contemplation — like how we could possibly climb alpine style with these horrendous packs! The weather thus far could best be described as incredible -ten beautiful days on Mt Hunter only having to deal occasionally with afternoon squalls. How long could the inevitable storm hold off? With our limited bivouac food and intentions of moving quickly up Denali, a serious storm now could easily force our retreat.

In planning and researching Denali the team had decided that the Cassin Ridge on the south face should be our objective. Approaching the route was the group's first major decision — the more direct north-east fork or the objectively safer east fork? The east fork involves one additional long day of climbing to the Kahiltna notch and then down again to the head of the north-east fork at the base of the Japanese couloir. The approach via the north-east fork forces one into the shadow of some very active séracs. Observations from a safe vantage point days later would suggest that a journey up the north-east fork would simply be unsafe.

Three days of humping food and equipment saw us poised at the head of the east fork of the Kahiltna Glacier, dwarfed beneath the huge south face of Denali. Splitting the face, in a direct line to the summit, was the Cassin Ridge. All of our reading and planning came into effect now as we eyed the proposed route and noted familiar landmarks. Certainly this time we would know where we were and what we were getting into. On 17 May we left our camp at 11,000 ft on the east fork and began our ascent towards the Kahiltna notch and the base of the Cassin Ridge.

Iron hard blue ice was the nature of the climbing terrain up to the Kahiltna notch. Heavy packs on moderately steep slopes proved very tiring and the exposed, steep sided Kahiltna notch offered no respite. Continuing up from the notch brought us to appropriate rappel anchors but not before many hours of delicate climbing. Two rappels saw us over the bergschrund at the head of the north-east fork. It was in this bergschrund we pitched our tents, safe from the continuous spin-drifting snow off the south face above.

The Japanese couloir is said to be the crux of the modern version of the Cassin Ridge. Viewing the bottom of the couloir the following morning, weary from the previous day's efforts, none of us could argue the difficulties involved. Traversing way left to find a bergschrund crossing then back right again to the base of the couloir gave us all an idea of what we were up against. Moving slowly over the steep, blue ice below the rock of the south face we only managed to reach the base of the Japanese couloir by mid-afternoon.

At this point, with the sun's warmth pleasantly beaming down, we gathered at a nest of ice screws for some major decisions. It would be foolish to jump into the couloir at this point and commit ourselves to probably 15 additional hours of climbing. The decision in question was to either fix a rope down over the bergschrund and jumar back to our present position early the next morning, or to quit the Cassin Ridge and move to a new route, the west rib.

The west rib of Denali offers moderate but continuously interesting and varied climbing terrain. The route follows the western border of Denali's south face, reaching the summit plateau at 19,400 ft.

Our decision, that sunny afternoon, was to leave the Cassin Ridge and redirect our energies on the west rib. The reasons for the change were many. Suffice to say that we felt our chances for success were much greater on ground more suitably matched for our team, that being the west rib.

After a second night camped in the bergschrund we were all anxious to get moving. A new objective awaited and the camp itself acted much like an icebox, well sheltered but very cold. Although the weather dawned clear by the time breakfast was over our first storm moved in. Feeling we could move up the glacier in bad weather, we pressed on into the worsening storm. An hour later we were forced by whiteout and wind to stop and hope for a clearing. Eventually it came but not before we had constructed a full camp site in an effort to keep warm. We pushed out once again, trying to gain altitude in an effort to acclimatize. Camp was set at 13,200 ft as the storm closed off visibility permanently.

High winds and variable visibility the following morning should have kept us huddled in nice warm sleeping bags and comfortable in the shelter of our tents. However for some odd reason we packed up our semi-protected camp and set off, up into the howling wind. Eight hundred vertical feet later we reached the west rib proper, very concerned and anxious to find shelter from the relentless winds. The storm of the past day had created a dangerous windslab avalanche hazard on the slopes of the south face leading up to the west rib. Fortunately we were able to avoid any potentially serious slopes, although we propagated more than one fracture on our traverse to the west rib. Our solution to the problem of extreme exposure to the wind turned out to be the construction of a snow wall, though it more resembled a castle, completely surrounding our tents, rendering the high winds bearable.

From 14,000 to 17,700 ft the west rib follows a series of couloirs, rock steps, and mixed ground, staying close to the ridge and offering very enjoyable climbing. This section of the route was completed in three reasonable days, as we positioned ourselves at a high camp prepared for a long summit day. The weather on Denali had been much worse than on Mt Hunter. Although we had moved every day it was generally in dubious conditions, often having to wait

for a clearing to permit a view of the route ahead. Summit day was no exception as we headed out from our exposed high camp at 17,700 ft in stormy weather. The gradually moderating slopes of the upper south face seemed endless as we all struggled under the additional burden of the effects of altitude. At last we stumbled onto the summit plateau. After gaining our breath we very suddenly realized that we were not alone. Only a stone's throw away (at sea level!) was a stream of climbers, slowly making their way up the "cattle track" of the west buttress.

The final 900 ft plod to the summit was uneventful, best described by saying it was slow. The summit itself was spectacular, as the evening sun provided soft lighting and the clouds parted giving a stunning view of the Alaska Range, a sea of rock and ice, a range still brimming with potential. At that point however future plans and dreams were not a priority and we headed off down Denali, thankful of the track pounded out by scores of climbers slogging their way up the west buttress.

The descent was uneventful and we wandered down the Kahiltna Glacier, largely wrapped in our own thoughts. Food and drink were the major conversation topics and once we landed back in Talkeetna those thoughts quickly became reality. So it was back in civilization, after a safe, challenging adventure all in the company of good people. I guess that is why we decided to go back to the big mountains.

Jim Haberl

Participants: Jim Haberl, Kevin Haberl, Pat Haberl, Matt MacEachern. A \$300 grant was received from the ACC expedition fund.

Norway ACC Ski Camp, 12 to 26 March 1983

Arrival at Oslo reminded me of northern BC except the city was larger. It's a comfortable place where the residents evidently love their homes, be they single family dwellings or high rises. No one seems to be on the street at night and if you want to buy a meal or a drink, do it early.

Night one was at the Haroldsheim Youth Hostel, a comfortable if austere facility but at \$16 including breakfast,

far below Oslo's hotel tariffs. Most of the information at the organization meeting was unintelligible due to a mass of unfamiliar and hard to pronounce place names. But it was clear that we were to meet Bjorn at the railway station at 9 am next morning. A long argument about how to reach the station ensued, sending me to bed with a pessimistic feeling about how we would find our way to the ski slopes, let alone our way around them once we got there.

"Not to worry," was Bjorn's attitude the next morning. We got to Otto in about four hours on an incredibly fast and smooth electric train. A modern bus took us up the valley side through the trees to Hovringen tourist centre. There we were met by Roan Skaugen, the proprietor of Smuksjoseter and a good friend of Bjorn's. We spent the first four nights at Smuksjoseter in perfect luxury. Two to a room, showers, sauna, and our first experience with the excellent Norwegian meals — especially the breakfasts.

After four days getting 'in condition' we moved on to a series of hostels owned and operated by Den Norske Turistforening - the Norwegian Ski Touring Association. Great places, comfortable beds with warm quilts, good food, and friendly atmosphere. Some have complete meal service while others, so called 'unserviced' hostels, have stocks of groceries which you cook yourself on propane or wood burning stoves. These latter places are unattended and the food used is paid for on the honour system by leaving money in a piggy bank. Much discussion about how such a system would be "ripped off" in Canada - or would it?

A lot about the facilities for providing bodily comforts. What about the skiing? While the hostels are an order of magnitude better than anything I have seen in Canada, the skiing was not superior. At least not to what one finds in the Rockies. The snow was sparse and often crusty. The mountains were smaller and not as scenic as ours, but then that is a high standard. All the skiing was above tree-line (which seemed to be about 1100 m) and the wide open spaces and rolling hills were impressive. Always, well not quite because there were whiteouts, you could see for vast distances. White snow, patches of dark rock, and little specks moving in unison. As you got closer these specks turned out to be Norwegian or Danish skiers moving stolidly along

behind their leaders, all in red ski parkas with Bergen packs on their backs.

During the first week we visited Smuksjoser, Peer Gynt Hytta, Rondvasbu, Bjornhelia, and Endebu —all in Rondane National Park. The distance between these hostels ranged from 10 to 20 kms. The trails were all well marked and we frequently met other parties. Actually the area was criss-crossed with trails leading to various hostels, mountains, valleys, and other points of interest. While there was plenty of up and down there were very few steep spots making the skiing fairly easy.

Then on to bigger things! By bus down to Otta in the valley, with Bjorn paying our fares — about \$12.00 in total — with a personal cheque. Try that on Edmonton Transit! In Otta we were met by the manager of the Gjendesheim DNT Hostel. He drove us 60 kms to his hostel where we spent our first night in the Jotunheimen - billed in the ACC prospectus for this trip as "Northern Europe's most impressive range". As the week progressed we began to appreciate and agree with their words. Starting out for Glitterheim Hostel snow was scarce and we carried our skis but as we climbed this problem disappeared and our eyes turned to examine Norway's big ones. In late afternoon our little party came to the top of a long hill leading to the most impressive hostel we visited. Great skiing, down, down into a giant valley below Glittertind, the country's highest peak in winter at about 2500 m (in summer its neighbour Goldhopiggen is higher because Glittertind loses some of its snowy mantle).

During the five days we spent at Glitterheim we experienced a number of famous Norwegian 'whiteouts'. The wind starts to blow from the northwest off the North Sea, whipping the snow up to form a new medium in which the human being was obviously not designed to operate. The Norwegians try to help by placing wands about every 50 m along the main trails. Even at that you are flying blind for a few seconds (which seem like minutes) every time you pass a wand and your eyes strain to pick out the next one. Below your skis the snow reveals no hint of which way to go. The local custom is for each party to carry a shovel so a wind break can be built if conditions make a bivouac necessary. But one day the wind dropped and the sun shone on us as we conquered the highest

peak in northern Europe. A veritable one day Everest, it rewarded us with a super ski down and the right to part with KR 90 for a Glittertind T-shirt 'PaToppen Av Norge'. And certainly a peak in our just excellent Norwegian experience.

We carried out a number of day trips from Glitterheim, climbing many of the nearby ridges and testing our downhill skills on the return. Everyone in the party agreed that a couple of pleasant weeks could be spent skiing in this particular area, either in a group or on your own. The Norwegians and their other visitors, mainly Danes, are friendly and for the most part able to speak English. Bjorn Norheim was a congenial leader, expert at skiing and route finding, and very, very knowledgeable about the area and the people. In fact everywhere we went he seemed to know and be friends with the hostel managers and guides. His friends were all very hospitable. A social high point of the trip was an overnight party at the farm home of Bjarne Aalling and his family, a short distance north of Oslo. They invited their friends and gave us a wonderful opportunity to learn more about Norway and Norwegians.

If you want a new ski experience, go to Norway. Write the Den Norske Turistforening, Vida, Oslo 1, or ask the ACC office to set up another trip.

Charles Lockwood

Participants: Pat Bell, Jennifer Fletcher, Charles Lockwood, Bjorn Norheim (leader), Andrea Rankin, Ruth Robinson.

Kilimanjaro - A Traverse

One might wonder why we had chosen to go to Africa to climb Kilimanjaro when there were plenty of big mountains in North America that could be gotten to with much less effort. Perhaps it was the lure of the route description in Iain Allan's Guide to Mount Kenya and Kilimanjaro Kilimanjaro: detail of the Rebmann Glacier at 18,000 ft. Jim Fischer



(Mountain Club of Kenya, Nairobi, 1981) that read "An ascent of Kibo by the Umbwe Route is one of the finest non-technical mountaineering expeditions in East Africa. It is a serious route, unsuitable for the solitary or inexperienced." Whatever the reason, fellow Canadian Gary Katzko and myself found ourselves at the end of January 1983 on the way to Tanzania for a traverse of Kilimanjaro. Our proposal was to ascend via the Umbwe Route and Western Breach and descend by the Barafu and Mweka Route.

A strong black nationalist and socialist state, Tanzania under President Julius Nyerere maintains a high military profile following the 1979 war with Uganda, but has been unable to generate economic growth and progress since independence in the early 1960s. After four days in the capital city of Dar Es Salaam, it was no disappointment to be out of the slums and on our way to Moshi in the Northern Highlands despite the 12 hour marathon bus ride.

Once in Moshi we based ourselves at the Uhuru Hostel and immediately began making arrangements for our ascent. Under the auspices of National Parks of Tanzania, the state has commercialized the mountain to the extent that every climbing party requires porters and guides. Methods for obtaining these essential people vary. All arrangements can be made by one of the hotels but a more economical and satisfactory method is to go the National Park gate on the lower slopes of Kilimanjaro and engage porters and guides on the spot. Approaches away from the normal route on the eastern side cost twice the normal rate. Our porters were paid the equivalent of five American dollars a day. We were lucky enough to acquire as our mandatory guide Hubert Damian, a rescue ranger interested in attempting a traverse of the routes he had previously done on two

Kilimanjaro: the Breach Wall
With late morning mists moving in; western Breach route begins at far left of picture. Jim Fischer



different occasions.

The real adventure began on 10 February when a bus dropped Gary, Hubert, three porters, and myself off at Umbwe village. We trekked through the red dusty sand of the cultivated area and past the woodcutter's tracks in the rain forest. By midday we had left behind the last of the people who hack out an existence on these slopes and had only our own group for conversation for another six days. After four hours and 1000 m elevation gain the first bivouac was reached, a cave in the rain forest. Our promised water source was stagnant but another was available within ten minutes. The porters feasted on corn meal porridge and curled up together under a single blanket, leaving Gary and me to our vacuum sealed foods and synthetic and down sleeping bags. Even the jungle sounds emitted during the night were not enough to keep our tired bodies awake and sleep came easily.

An early start the next morning got us above treeline before the heat of the day took its toll and in the early afternoon we reached our second bivouac, the Barranco Hut, at 4000 m. Progress had been deliberately slow to allow for acclimatization. Changing weather brought a hail-storm in the late afternoon and the six of us set up for the night in the tin shelter that measures no more than four metres by four.

Day three led us to the Arrow Glacier Hut at 4900 m. Despite the slow, controlled pace the altitude took its toll and headaches make the going a little tougher. One of the porters was feeling particularly poor, though he could take consolation in the fact that he would be going no higher than the Arrow Glacier camp. Gary Hubert, and I watched the weather carefully, knowing a summit bid was the next day's plan. The mists that usually converge on Kilimanjaro in late morning and disappear by late afternoon still remained by evening. We crawled into our sleeping bags to catch some winks before the next day which we hoped would see us go over the top and traverse the mountain.

Morning (4 am) brings bad news. Three or four inches of new snow on the ground and nausea on the part of some members makes the day's plans suddenly appear less desirable. We decide to have a go at it anyway, knowing our time on the mountain

is restricted. What should take six hours takes eight but we are on the crater rim by noon, still amidst thick clouds which occasionally dump more snow. Tight scrambling on the slick lava outcrops takes us to the Furtwangler Glacier and a heart-breaking traverse across the ash cone to put us on the eastern summit ridge.

Less than 200 m below Uhuru Peak the storm increases in intensity to whiteout conditions. A tough decision was made not to go on and we moved down the Barafu route to where our porters had traversed around the mountain to establish a camp for us at 4650 m. The storm showed no signs of letting up and, quite depressed from our all too close encounter with success, we crashed out as soon as possible.

The tentative plan for the next day was for Hubert and I to venture back up the Barafu route, bag the peak, and come back down to exit with the rest of the crew. These hopes were dashed in the wee hours of the morning when Hubert awoke in much pain suffering from snow-blindness. Cracks in the side panels of his goggles were found to be the cause. In the end we moved down and Hubert was traversed across to the Horombo Hut on the normal route where there were more comfortable surroundings and his exit from the mountain would be less arduous. The rest of us proceeded out through thick jungle in wet conditions to complete the Mweka Route in two days.

It snowed for another five days on the mountain and fears were created that possibly the rainy season had come early. We fared better than others. A party on the normal route lost a member during the snowstorm, at the time we were crossing the ash cone. Nevertheless, in an attempt to maintain a positive note, plans were made for a re-ascent in order to get to Uhuru Peak. Gary decided not to go up again so another Tanzanian climber, Kastori Salwen, was brought into the plans. It was decided to move up the normal route to 4700 m and from there climb the Ratzel or Rebmann Glacier to the summit.

After three days Hubert, Kastori, and I were at the high camp, feeling terrific following four days of sunshine to melt the snow which had fallen during the storm. We had met Irishman Dave Gallagher and another Tanzanian climber and decided that Hubert and I would try to get to the

top with these two characters the next day. Despite feeling great sleep came poorly due to anticipation of the next day's adventure.

We awoke at midnight, feasted on copious quantities of food and fluids, and were on the way by 1 am using head lamps. Still feeling surprisingly well, we reached the crater rim just as dawn broke and watched the world come alive at 5700 m on a cloudless day. Needless to say, views were spectacular. Having gained the crater rim, we sat on the ridge and snapped off a succession of pictures until the sun finally showed itself, silhouetting Mawenzi, Kibo's sister peak, in the distance. Steady gale force winds on the ridge were the only serious obstacle in otherwise ideal conditions as we moved towards the summit. At 7.15 am we were on Uhuru Peak, waving a Canadian flag amidst the tattered remains of an assortment of banners, some distinguishable as Australian, Swiss, and Tanzanian. After 23 minutes in -10°C conditions we began to move down. After months of planning and days of actual time on the mountain it seemed a short time to sit on top - a few moments that quickly became past tense as we descended rapidly over the frozen, wind packed snow and ice.

We were back at the high camp by noon with splitting headaches, easily controlled by ASA, and carried on to make it to 2700 m that evening, after which we crashed in our sleeping bags for eleven hours. The next day everyone was able to move off the mountain without incident.

While commercialization of the mountain has assisted the local economy it can restrict the climber who often depends on flexibility of time and movement on big mountains. This factor, combined with knowledge that one is travelling in a country where scarcities are the norm and political stability is slipping fast, should be foremost in the mind of any climber wishing to go there. Being aware of and prepared for these hardships can allow one to undertake the trip of a lifetime. Kilimanjaro is a mountain which still has something to offer any breed of mountaineer.

Jim Fischer

Canadian Pamir Expedition

A casual review of some old Journals brought me across the article written by Rob Kelly on his trip to the International Mountaineering Camp organized by the USSR Sports Committee (CAJ 1979:12-13). Reviewing this article and remembering reading the book *Storm and Sorrow*, an account of the 1974 American trip to the Pamirs, led me to contact the Club office and obtain information from Ron Matthews on the possibility of attending the 1983 International Mountaineering Camp. A series of letters and telexes with the USSR Sports Committee and numerous bull sessions held down at The Duke led to a group of seven men and two women forming the 1983 Canadian Pamir Expedition.

Our preparation was guided principally by Speedy Smith's recollection of his experiences during the 1974 camp and Rob Kelly's article from the 1979 CAJ. Between Rob's article and Speedy's recollection we were armed with highly useful information in regard to the type of situations we would encounter in the Pamirs the next summer. Group travel and equipment arrangements were made over the early spring and eventually the nine team members drifted into an Earl's Court Hotel in London in mid-July and flew into Moscow on 14 July.

The USSR Sports Committee provided an interpreter/guide who gave us a cursory tour of Moscow and later accompanied us on that evening's epic flight from Moscow to Osh on Aeroflot, the world's worst airline. This was followed by a marathon trip on four-wheel drive buses over the hills of Kurgizia from Osh into the Achik-Tash valley which was to be our home for the next four weeks.

Once all the climbers were assembled in the Achik-Tash valley it became obvious that the International Climbing Camp was a virtual United Nations of the climbing world with only a few countries from the South Pacific being unrepresented. The opening ceremonies and the festivities that followed were truly a good representation of the International climbing fraternity.

A snow storm on 18 and 19 July delayed our initial climbing plans and produced some hazardous snow conditions on the

peaks. By the end of the first week two Czech climbers had been victims of high altitude pulmonary oedema and extreme avalanche conditions. Our group used the week to acclimatize ourselves as fully as possible, operating out of the main camp and using Peak Petrovski for our initial acclimatization climb.

We had hoped to next make an ascent of the north-west ridge of Peak 19 to acclimatize ourselves up to the 20,000 ft mark however the Russians discouraged this due to the avalanche conditions. Accordingly eight of us decided to make a group ascent at least as far as camp 1 of the technically more difficult and exposed route of Peak Lenin on the Skurlatov Ridge.

On 21 July we established the first camp on the Skurlatov Ridge where all eight of us spent two nights in order to acclimatize. Due to the questionable weather that was coming in and the acclimatization plan we had prepared at the request of the Soviets (be sure to follow your sports plan Comrade!) five of us returned to base to re-equip and finish our acclimatization period while Trevor, Bill, and Dwayne elected to continue up the ridge without returning to the base. Subsequently Bill Stark decided to return to base camp due to stomach troubles and rejoined us there.

Trevor and Dwayne were able to continue up the Skurlatov Ridge, across the spectacular rock traverses, and along the heavily corniced ridge to where it met up with the Lupkin Spur of Peak Lenin and were eventually able to establish their fourth, and highest camp, on 28 July. On 29 July they made an attempt on the summit and Dwayne unfortunately developed some stomach troubles 300 ft below the summit. Trevor was able to solo the last 300 ft of the route and thus became the first Canadian to climb Lenin, at least that we know of.

While this was going on I fell victim to the Russian food at base camp and Al, Peter, Martha, and Choc returned to the base of Skurlatov Ridge to start again. They later passed across the rather tricky traverse between camps 2 and 3 where they met Trevor and Dwayne as they were descending. Roxborough's Gang of Four reached the high camp on Peak Lenin when they were hit by a storm on 2 August which, combined with the problems some of the members were experiencing due to

the altitude, prompted them to descend.

Prior to recrossing the traverse on the descent Martha and Choc decided that it would be better for Al and Peter to continue with their descent while Martha and Choc returned back up the mountain. Unfortunately this left them very high on the mountain in a storm that hit its full force on 6 August. This paved the way for an epic ascent over the next three days, at one point leaving Martha and Choc camped above 23,000 ft, while Soviet climbers had to come from the other side of the mountain, over the summit and down, to bring them back up and over the summit to safety.

I found myself in Bill's company recovering from the food problems at base camp and eventually decided that the only way to really avoid the consequences of base camp food was to completely remove oneself. Accordingly on 30 July Bill and I left base in the Achik-Tash valley to return to the base of the Skurlatov Ridge to collect excess gear and ascend the mountain by way of the Razdelny pass route. This route seemed more reasonable to us considering our temperamental gastronomic condition and the warnings that we had received from the Russians of bad weather approaching.

At the meadow at the base of Skurlatov Ridge we met Trevor and Dwayne returning from their summit attempt and collected all extra food and gear from them. From there we continued on the route up Razdelny pass which is principally a question of glacier navigation with the terrain being of moderate steepness, the only steep climbing being between 17,000 and 19,000 ft (camps 2 and 3).

The night of 2 August saw us safely ensconced in the leeward side of a snow ridge at the summit of Razdelny pass while Peter's Gang of Four fell victim to the high winds blowing on the wide open part of the Skurlatov Ridge. Bill and I found the winds still blowing heavily the morning of 3 August and decided to forego our summit attempt that day and see how the weather developed. On the radio we could hear that our group over on Skurlatov Ridge had elected to descend (we thought all the way!) and so waited until the winds died down around noon when we decided to move up to the 6400 m mark to provide a quicker ascent the next morning.

From this fourth camp we had a spectacular view of all the mountains in this tip of the Himalaya. We dug into the wind blasted snow on the upper part of Peak Lenin and spent a moderately uncomfortable night, likely due to the combination of altitude and the excitement of being within striking distance of the highest summit either of us had ever attained. We were up quite early on the morning of 4 August and had a spectacular view of the sunrise as it came across the Pamirs. Through absolutely crystalline air, but again during a high wind, we had views of Peak Communism and Peak Korjenevskaja to the south and Kongur and Muztagata in China to the east of us. After three hours of unroped climbing we reached the summit of Peak Lenin at 23,407 ft. The summit of Lenin is rather unique in Himalayan climbing in that it is heavily strewn with medals and busts of Comrade Lenin that have been hauled up this mountain by obviously committed party members.

Bill and I were able to make a rapid descent from the summit of Peak Lenin and were in base camp in time to follow the ongoing epic of Martha and Choc on Skurlatov Ridge by radio. A few days later after their safe return we were able to relax and enjoy some day tours into the rolling countryside below the Achik-Tash valley. On 13 August we returned to Moscow and home.

In all the Canadian Pamir Expedition proved to be a highly enjoyable high altitude experience for all members and is to be highly recommended as a good mountaineering holiday for all those interested in getting into high altitude mountaineering and enjoying the friendship of climbers from around the world.

Jay Straith

Participants: Dwayne Congdon, Al Derbyshire, Trevor Jones, Cathy Langhill, Martha McCallum, Choc Quinn, Peter Roxborough (expedition shrink), Bill Stark, Jay Straith.

A \$1000 grant was received from the ACC expedition fund.

The cost of the trip was approximately \$2600 Canadian per person, the major savings being made by use of charter air tickets which require early booking. If you are interested in getting permission to climb

in the Pamirs you must contact the USSR Sports Committee prior to 31 December the year before you go.

Based on information Gordon Smith had provided and on reading the Storm and Sorrow we anticipated some problems with the Soviets in regard to the routes we preferred to climb. This was not so. The Soviets did strongly advise us as to which routes they preferred us to take, however they will not veto any route that you have proposed. Considering some of the ludicrous situations that developed, resulting in a total of four deaths during the course of the camp, the Soviet "advisors" cannot be blamed for this attitude. There seems to be no quality control and an incredible range of abilities among climbers going to the Pamirs.

As pointed out in Rob Kelly's article gas in the Pamirs remains a major problem. White gas is unobtainable and the only fuel available is principally gasoline from the Soviet trucks. The only solution might be to make arrangements to have white gas or gas canisters brought to the camp. However this would involve smuggling illegal materials on airlines, which of course we cannot do, can we.

The food the Russians supplied continued to be in bulk and quite dismal and in particular the food at base camp caused major gastronomic troubles for Dwayne and Bill. None of us really thrived on the base camp food and it was tolerable at best. Bill and Dwayne would strongly suggest that any persons planning to attend this camp bring a large quantity of boil'n bag type meals from Canada in order to stay healthy around base camp.

Canadian Dhaulagiri VI Expedition

At last base camp, after a 12 day journey through the centuries into medieval Nepal. Our trek in had been hampered only by a one day layover in Gurjakhanni (which we renamed Ganjakhanni after the local cash crop). On this particularly dismal monsoon morning the porters shouldered their loads and disappeared into the mist leaving the tardy sahibs to follow. Despite hiking shoes at full throttle and that until now the porters had meticulously taken advantage of every possible resting spot on the trail we were unable to overtake them. Had we

taken the wrong trail? Not according to our sketchy map. A shepherd huddled in his dry thatched bamboo shelter confirmed our route. "Sherpas bolée," he repeated, pointing up the ridge. He accompanied us some distance up the sodden trail - "Sherpas bolée" -and it was only when our shoes, clothes, and packs reached saturation point, too wet even for the leeches, that Dan was prompted to pull out his phrase book to discover that bolée meant tomorrow. We returned to the village to find our porters hidden within the dark, smoky houses, and hot dudh chia and chapatis waiting for us in the schoolhouse where we would spend another night. But at last after months of planning, countless trips into Calgary, reams of bureaucratic bullshit, and endless spending, spending, spending, we were finally within the heart of these mythical mountains that we had journeyed so long and far to reach.

Our team of four accompanied by a base camp staff that Nepalese climbing bureaucrats have decided are indispensable to any expedition, no matter how small; Dawa Tenzing our sirdar, Ang Pema our cook, a liaison officer to sit around and eat our canned pineapple, a mail runner, and a wood cutter. Five staff to look after five climbers, not a bad ratio. The eleventh member of the team was a big, lazy, black dog of indistinct Tibetan ancestry that adopted us in Beni and followed us all the way in. We had christened him Arco, the Nepali word for more, as in one more useless mouth to feed. The Sherpas were delighted to have him along because having a dog latch onto an expedition is reputed to be the ultimate good luck omen. We had no choice but to welcome him into the family.

The next two weeks were spent patiently, and sometimes not so patiently, awaiting the end of the monsoon that Dawa kept promising was imminent. The official closing date of 21 September came and went and still the weather was unsettled at best. We spent the time playing backgammon and venturing up onto the Ghustung Glacier in attempts of varying degrees of success to mediate an understanding in the brewing conflict between our lungs and the thin air. Although a full on peace treaty was never signed a detente of sorts was attained and we decided that it was time to get on with the climb. This decision was hastened by the arrival in our valley of the German Churen Himal Training Expedition and

liaison officer, a police officer in real life, who noticed us making tracks some five kilometres distant from the peak for which we had paid our peak fee and questioned our questionable route finding abilities.

The skies had now cleared sufficiently to convince us that there was indeed a post monsoon climbing season. We were climbing as two independent teams —Albi and Peter on one rope and Dan, Mike, and I on the other — in an attempt to keep this expedition of ours as logistically simple as a weekend in the Rockies. We set off with rather vague plans up the dry, rock covered glacier flowing from the head of the Churen Himal/Dhaulagiri VI cirque, armed theoretically with enough provisions to get us to the summit and back. Theory was bluntly shot down by the reality of Himalayan scale though and two days later we arrived at the base of the ice tongue linking the lower glacier to the basin at the foot of the south-west face of Dhaulagiri VI, a day behind schedule. Luckily another storm moved in allowing us an excuse to return to our collapsing base camp tent for more food.

On the morning of the day we were to set off once again Mike approached me with the startling news that he was calling it quits. It seems that on our previous excursion up to the ice tongue, while climbing some fairly steep ice steps with heavy packs, he had inflamed an old internal chest injury suffered in a near fatal car accident some years previous. It was obvious that he had agonized over the situation during the past two days. The decision to heed the warning signs, albeit a wise one, was made all the more difficult by the fact that he had been acclimatizing so well and performing strongly up until now. Ironically Albi and Peter had later found a way to avoid the steep ice, virtually with their hands in their pockets.

So Dan and I set off, somewhat disheartened but determined to bag our peak this time and determined to cram our two six foot three inch plus frames into his three pound Goretex bivi tent. We met Albi and Peter at the base of the ice tongue on their way back down to grab some more food, fuel, and tapes for their Walkman. In the interim they had found a route to the top of the ice tongue and onto the rim of the upper basin, establishing two more camps in the process.



Nepalese regulations require climbing expeditions to report to their liaison officer the establishment of each camp and he in turn relays this vital information to Kathmandu by mail runner. Although we were climbing alpine style and not really setting up any permanent camps we got into the spirit of the thing and decided we were honour bound to comply with these sacred regulations. To date we had established eight camps and prospects looked good for many more. Unfortunately our LO lacked the dogmatic zeal of his Kathmandu counterparts and declined to aid our plot to sabotage the system by overloading the circuits and we hoped blow a fuse. The weather was perfect now. By the end of the second day we were camped at the top of the ice tongue, barely 100 m above the tent that Albi and Peter had left behind - camp 9. Thus far the climbing had been largely non-technical snow slogging requiring nothing more than a ski pole each. The double set of Friends, pitons, nuts, jumars, etc were still safely packed away and ready to be carried

all the way out again. Dan and I decided that the face we had originally planned to attempt looked decidedly unpleasant — slabby rock with patches of snow and no ledges. Albi and Peter were still determined to give it a go and had constructed rather suspect looking hammocks out of parachute cord for the inevitable night on the face. I've developed an aversion to hammocks, even in the benign climate of Yosemite, and had forgotten to bring a portaledge, so we set our sights on the elegant snow and ice buttress bordering the south-west edge of the face.

The next day entailed more trench plowing across the basin to the base of the face for a net elevation loss often metres. The knowledge that tomorrow Albi and Peter would be able to scamper across on our broken trail in about an hour was compensated for only by the fact that we'd now be able to jettison some of the food and fuel that we obviously weren't going to be needing.

Our food had all been picked up in Kathmandu; granola (we'd ditched the porridge when on previous excursions we discovered that someone had filled the oatmeal tins with wallpaper paste), biscuits, chocolate bars with worms nesting inside them, chapatis that were quickly reduced to dried out crumbs, and ramen noodles. We decided in Kathmandu that in order to climb alpine style we would require very light, simple, carbohydrate based bivi food. After all, food is just fuel for the body and all. Sounds great in the bar at Rum Doodles. But the ramen noodles in Kathmandu are available only in chicken and masala flavours. The chicken tastes like dying poultry's been walking through your soup and the spicy masala is fit only for stripping paint off rusty '56 Buicks — we found that half a flavour packet per four packets of noodles was all that our wimpy western palates could handle. Dan and I sunbathed the next morning while Albi and Peter ran across to meet us. After a brief strategy meeting the two of us headed up to a broad platform 500 m above to establish camp 11, leaving them to work on the tanning at camp 10. Next day the ice face above featured lots of interesting unroped climbing, eight belayed pitches, and a short vertical step that we again later discovered could have been walked around. It was like a giant version of Skyladder on Mt Andromeda.

As night fell the elusive upper plateau that we'd had our sights on since dawn materialised as a 20 degree snow slope. We mucked about in the snow for a while and stomped out a platform of sorts between blank interludes of vegetating. Having stared at my pack for some indefinite length of time and determined that it wasn't going to unpack itself, I gradually got my act together and we crawled into the tent to a supper of chocolate biscuits, lukewarm water, and Tylenol. Masala noodles were unthinkable.

Meanwhile Albi and Peter had decided that the face was out of condition and traversed some 700 m across 40 degree snow slopes to gain the shoulder. They established camp 13 some 200 m below our camp 12.

Summit day. The morning after a night at almost 7000 m found us pretty bleary eyed and sluggish. The monumental tasks of getting dressed and melting water

accomplished, pockets stuffed with biscuits and water bottles and cameras, ski poles in hand, we headed off at an escargots pace. The numb blankness of my mind was punctuated only by bouts of mumbled cursing when I would look back and discover that I'd managed a mere 50 m in the last eternity. Dan had motored on ahead — I didn't even attempt to keep up — and Albi and Peter had appeared below. We'd be on the summit together.

A plush carpet of clouds at 5500 m and the silent gleaming monoliths to either side and the gentle roar of the summit wind; I battled to assimilate this sensory barrage, to feel something more than simple relief that I didn't have to go up any more. The west face of Dhaulagiri I dominated the panorama, looming seemingly so close on the opposite shore of a white fiord. Summit photos and embraces then down, down. Packed up camp and then more down climbing and rappels and the final stumble through the darkness to our camp site at the base of the face. Peter made noodles and added three packets of deadly masala. I took one spoonful and threw up.

We awoke next morning to the high cirrus that foretold of an approaching storm. By noon the first snowflakes were falling and by the time we dropped our bodies in base camp, again in the dark, a blizzard was raging. We celebrated that night, smug in the knowledge that we'd pulled it off in the nick of time, that things couldn't have worked out better.

For the German Churen Himal Training Expedition things did not work out. The snow continued unabated for three days, dropping a metre of snow in base camp and two and a half metres at their camp 3 where eight of their members had decided to sit out the storm, perched beneath a 3000 ft 40 degree slope. The radio transmission on the third day from one of the climbers who lay buried in his tent seemed almost tragically inevitable. The six survivors of the avalanche were saved only because one of the team was outside digging out the tents when they were hit. He was carried 200 m down the slope and scrambled back up to dig the others out.

The next morning thankfully dawned cloudless. The sight of the six remaining young Germans staggering down towards the trail we had broken up from their camp

I underscored the strictness with which these mountains enforce the rules and conditions under which we are permitted to venture into their kingdom. No allowances are made for inexperience or error in judgement.

Fourteen climbers in total died in the Nepal Himalaya during that devastating storm. I left base camp the next day keenly aware of how fine the veil is between joy and horror, not feeling victorious or a conqueror but grateful that I had been allowed to trespass within the realm of the gods.

Rob Rohn

Albi Sole, Dan Griffith, Mike Down, Peter Carter, Rob Rohn. First alpine style ascent of the south-west buttress of Dhaulagiri VI (7268 m).

We would like to thank the Alpine Club of Canada (endorsement and \$1000 expedition fund grant), Canadian Mountaineering Equipment Ltd, Coast Mountain Sports, Coleman, Howe & Bainbridge, Timex, Sport Check, Japan Airlines, Norm's Ski Hut, Bill Pah, Design Group, Forzanis, University of Calgary, and Manulux for their support. Also special thanks to Laurie Skreslet, Al Burgess, and Dave Edwards for their assistance.

The Way to Chulu and Postscript in Solo Khumbu

The search for Chulu began September 1981 in Kathmandu. Our small party of five, was led by Don Hamilton, and few of us had actually climbed together before, although we had probably all met in the mountains at one time or other. The rendezvous in Kathmandu was probably the first time the entire group had been in one place at one time. Our objective was the mysterious mountain called Chulu which lay just to the south of Naurchuli, which on some maps appears with an elevation of 7450 m. A photograph of Naurchuli, taken from Thorong La, appeared in the 1981 CAJ. Chulu, although a mere 6625 m on the same map, should have appeared in the foreground of the photograph. For a previous account of our search see CAJ 1982:100-102.

The approach to our chosen objective



Sherpani at Lobuche teahouse. Kevin O'Connell



Children of Chame. Kevin O'Connell



was a fascinating lesson in culture, religion, and biology. Starting from rice paddies at an elevation of 500 m and moving up to high valleys behind the Annapurnas provided startling contrasts. Ten days of travel found us in a high side valley just under Chulu's south-west face, at an elevation of 4400m.

On 11 October we packed supplies up a great scree slope to the west of our base camp to a col at 4900 m. We continued up the snow slopes to the north of this col to a rock band at 5100 m. An Austrian party had already negotiated the rock band and conveniently left a fixed line. On 12 October four of our party reached the northwest shoulder of Chulu and established a cache at 5450 m.

On 14 October we established our high

camp at 5530 m. From this vantage point we could see only one peak which we assumed was the only summit. It was a cold if not comfortable night with the temperatures dropping down to -30°C .

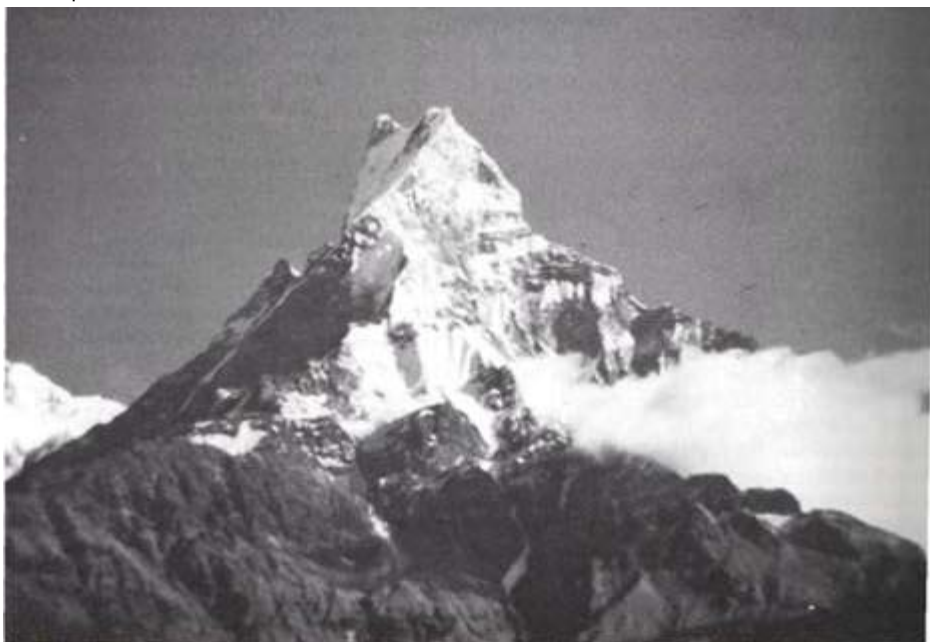
The Austrians with their Sherpa guides beat us out of camp next morning, as usual. Our ascent on the 15th was noteworthy in that first Mike, then Bill and Roel dropped out as a result of the altitude. I decided to continue on and soon picked up the Austrian party's tracks and continued along the well defined ridge. A higher peak now appeared somewhat to the east and a good distance away. I assumed that this must be Naurchuli but it was certainly not a 7500 m peak. I was puzzled. There was no higher peak in the area. I continued on and met some of the Austrian party returning from the summit. They were somewhat upset. Their guides had assured them that this was Chulu but clearly there was a higher peak to the south-east. While their guides professed not to know the name of the other peak it now became clear that what everyone referred to as Chulu was actually Chulu's west peak. The other and clearly higher peak was the main summit. Another mystery was now cleared up when another map edition revealed that Naurchuli was 17,450 ft not the 7450 m appearing on some maps. Naurchuli was actually a much lower peak towards the Tibetan border from which we were now only a little over 10 kms away.

The ridge dropped away precipitously

on both sides now and I moved along alone and cautiously. A slip at this point would mean either a drop to Manang below the south-east face or a plunge down the icy glacial slopes on the northwest. I reached the west peak at 1350 hours and later calculated its height as being in excess of 6250 m, a value later confirmed by the Austrians.

On the 16th I got up and started after the Austrians who by this time were reduced to Rudi and the two strongest Sherpa guides. Bill followed me but soon dropped out about an hour from our camp probably due to altitude effects once again. Mindful of the hazards of soloing such mountains, I followed the tracks ahead carefully and discovered that I was going well enough to catch up with the Austro-Nepali party. We lunched at 1200 at an elevation of about 6000 m. We were now clearly in a western amphitheatre of Chulu and could see clearly the route of the previous day up to the western summit. We continued on unroped until we arrived below the steep summit pyramid. The others roped up and I ascended the steep slopes on my own to the crest of the summit ridge. Rudi was belayed from this ridge and was negotiating the final summit cornice. A fall at this point would have been most serious and realizing this, he placed an ice screw before making the crux move over the cornice lip. Sherpa Sona Gyao soon followed. The second Sherpa, Sonam Chottar, declined the summit. I was permitted to clip into the line to the top and received a belay. We three

Machupuchare. Kevin O'Connell





The way to Chulu. Kevin O'Connell/M Irvine



stood on the summit at 1515 hours. It was a thrilling moment for all. Sona asked for paper and the three of us left our names written on it, tied to a ski pole which Rudi left firmly planted on this tiny summit. Rudi asked us to join hands and proceeded with a small prayer. This simple ceremony with an Asian, European, and North American atop this beautiful Himalayan peak was profoundly moving. Its simplicity could not have been matched under any other circumstances nor could its sincerity have been equalled in any great cathedral. We later calculated the height of the summit to be in excess of 6425 m, but reasonably close to the map value of 6625. It was abundantly clear from the summit that there were no higher peaks around. We could also see the east summit (6200 m) and a north summit (est 6400 m).

We continued on our travels, crossing over Thorong La, and from this unique vantage point enjoyed a spectacular view of the mountain we had climbed. In the days ahead we progressed to the oasis of Muktinath and thence down the Kali Gandaki. As we neared the end of our great circuit of the Annapurna Himal, we were treated to tantalizing views of Dhaulagiri, Nilgiris, Annapurna South, Hiunchuli and Machapuchare. Pokhara was our penultimate destination before returning to Kathmandu whose pie shops never looked so good. At this point the expedition was over and it was time for each of us to head off on his own way. On my part there was a great deal of satisfaction in having travelled

such a spectacular route and in having ascended a fine mountain. In the process we had really found the way to Chulu and perhaps metaphorically the way to other peaks along the 'Roof of the World'.

While resting up in Kathmandu I found I had an irresistible urge to spend some time in the Solo Khumbu. Fortunately a friend of mine from Montreal had arranged to meet me in Nepal at this time. On 7 November Bob Nagy and I found ourselves at Lukla by some incredible luck with Royal Nepal Airlines. We enlisted the services of Kagi Sherpa and Putiman Rai and spent our first tea house night at Jorsale at the entrance to Sagarmatha National Park. The following day we pushed on to Namche Bazar and continued further up the valley to the village of Phortse. Here we found lodging in a private home, a very enjoyable experience. Our plan was to continue up the Ngozumpa Glacier drainage then cross the Chola Pass to reach Lobuche and Everest. On 9 November we set off early in the morning and were rewarded with the sight of some beautiful pheasants across our trail. As the day wore on we soon discovered that we were out of tea houses and any open shelters.

Afternoon found us in some attractive meadows. We pushed on and reached the shelter of some large boulders at a spot called Chhugyuma (4820 m). We settled down to a reasonably comfortable evening, with supper simmered over a glowing yak dung fire. I was awakened during the night by the sound of Cheyne-Stokes breathing from Kagi, our Sherpa! November 10 was a really long day as we crossed the glaciated Chola (5420 m) and reached Lobuche (4930 m) very late in the afternoon. We were able to find a suitable tea house and settled in for a good rest. On the 11th we hiked up to Gorak Shep (5100 m) and then up to Kala Pattar (5545 m) for a better view. The weather continued to be excellent and we spent many hours admiring Everest, Nuptse, Changtse, Pumo Ri, and what we could see of Lhotse. Not far below we could view the Khumbu Icefall and the entrance to the Western Cym, not to mention the 'human ants' ascending this fine ant hill.

The following day we began our descent of the Dudh Kosi and reached Tengboche by late afternoon. We had arrived at the Mani Rimdu festival which made our stay all the more enjoyable. It snowed the next

day as we prepared to leave. On the return to Namche one could almost have wished for cross country skis. We spent a pleasant night in Namche Bazar at a private home and learned a little more of the Sherpa customs. On the morning of the 14th it was time to return to Lukla, but before leaving I returned to the ridge above Namche for a final look at Ama Dablam and Everest. I was suitably rewarded as the storm had passed and the sun came out to complement the now clear sky.

That evening saw us well settled at the Lukla Hotel for a good shower, meal, and restful evening. Our good fortune continued, as we were able to leave by plane the following morning after having said goodbye to our trip companions, Kagi and Putiman. The flight back to Kathmandu offered additional spectacular views of the great peaks of the Himalaya. I was able to catch my flight back to North America later that same day. Bob and I had a short trip together in the Everest region but an enjoyable one none the less.

Rudi was right. Nepal is like a drug. Once you start experiencing it it's difficult to stop.

Kevin O'Connell

South America 1983

During the winter of 1983 I spent over four months sampling some of the major mountain ranges of the Andes in northern South America. The trip began in Quito, Ecuador and finished in Santiago, Chile. By country I will reflect on my climbing experiences and bring out useful points for future parties travelling there.

My climbing partner for most of the trip was John Jakuboski. He deserves praise for his patience and will-power to be able to travel and climb with me so long.

The primary reference for the trip was Michael Kelsey's *Climbers and Hikers Guide to the World's Mountains* (679 pages!). During the trip it was referred to as the bible or the word according to Kelsey. Considering the scope of the book, it does an incredible job of covering South America. Users of the book must be forewarned; this man is an animal. The hiking and climbing times quoted in the book are often grossly understated for the average human. When he states a fit climber could do a particular route in a day what he really

means is a person able to run four minute miles and jump tall buildings before breakfast. Other reference books used are listed at the end of this article. Refer to Kelsey's maps when reading this; they are adequate (just barely) to travel by.

ECUADOR

A small country by South American standards but well endowed with beautiful icy volcanoes and numerous huts. The major peaks remind me of the volcanoes of the US Pacific north-west but are about 2000 m higher.

The two highest peaks, Chimborazo and Cotopaxi, are well described in last year's Journal (see CAJ 1983:105-107). The two were climbed as three day trips from major population centres. In both cases a taxi was hired to drive us as close as possible to the hut. The going price for a bargained ride was \$15 US for two. It is possible to hitch-hike and walk a lot. After trying that once we unanimously agreed the taxi ride was a more sane solution. Hitch-hiking from the mountain back to town was always easy, especially at the weekend.

Hire a taxi in the town of Machachi for Cotopaxi and in Riobamba for Chimborazo. A new hut was being built while we were on Chimborazo. It is located at the end of the road below the Whymper Hut. I imagine it will cater to the local weekend crowds who want a mountain holiday experience without walking any further.

An attempt was made to climb Nevado

Nevado Cayambe from the slopes of Pichincha, west of Quito. Greg Horne



Nevado Cayambe from the slopes of Pichincha, west of Quito. Greg Horne



Cayambe (5790 m), the third highest mountain in Ecuador. From the town of Cayambe it is possible to hire a truck ride to the new hut for \$15. We decided to save a few dollars and only take a ride to Hacienda Piemonte. This was a serious error. We thought it was only 3 or 4 hours to the hut from there but it turned out to be an all day ordeal slogging up a cobblestone road being passed by vehicles too full to take on extra bodies. The hut is called Refugio "Ruales-Oleas-Berge" and is located exactly on the equator at an altitude of about 4600 m. One end is three stories high, sleeps 42 people, has two kitchens, two fireplaces, and running water. Finished in March 1981, the hut unfortunately is already thrashed. Some time before we arrived the hut custodian had died and no replacement had taken over. The toilets were plugged, windows broken, garbage piled high, electric generator removed and furniture burnt. A lot of the problems are a result of being able to drive right to the door of the hut.

From the dining/living room big picture windows look out on the Hermosa Glacier and up to the summit slopes. Icefalls can be seen crashing down while enjoying your meal at the table.

A Swiss party was leaving the hut as we arrived. They were also unsuccessful on their summit bid due to extremely high winds. In fact the wind never stopped during the three days we spent there. The following day a reconnaissance trip was made up and over the rocky shoulder above the hut. Day three began with a 1 am start. We climbed over the shoulder and on to the bare ice of the glacier and soon moved on to snow. Up to this point the weather had been clear and very windy. A lenticular storm cloud formed over the peak and freezing rain coated us in ice. We followed the tracks of the Swiss by head lamp and marked the route using our own wands and all those found at the hut. Ice formed on our eyelashes but vision was acceptable. After sunrise the terrain became thickly whited out and extremely bright, so sun-glasses were necessary. The rain quickly glazed over the lenses making them useless. Our pace had slowed to a crawl so we turned back about 300 m below the summit. On the way down John fell into a couple of crevasses as we waded through knee deep slushy snow in oven hot weather. In retrospect three factors contributed to our defeat on

Cayambe; a late start, bad weather, and poor acclimatization.

Straightforward ascents were made of Pichincha (4787 m) and Tungurahua (5016 m). Both are excellent training climbs for altitude purposes.

PERU

Two regions were visited, the Cordillera Blanca and Cordillera Chila. The Blanca has been fully documented in many other publications. The only info I can add are a few comments regarding weather patterns. Generally May to September is considered the best climbing weather. With that in mind I went to the Blanca in February not expecting to do much hiking or climbing. To my surprise I found out that it had not rained significantly in Huaraz for 20 to 30 days. I completed the Llanganuco/Santa Cruz loop hike only encountering very brief showers. I judged climbing conditions were quite acceptable, good freezes at night and a high firm line on the glaciers, but couldn't find any partners.

I returned in late April, planning to climb with anyone I could meet or hire a guide if no one else was around. While I had been absent for two months the State of Ancash (including Huaraz) had experienced record rainfall. In fact Huaraz had been cut off from ground access for nearly two months, all roads washed out. This and other weather anomalies during 1983 have been related to the warm current off the Pacific coast called El Nino.

At first when I returned no foreign climbers could be found and all guides said climbing was impossible due to deep soft snow. I asked who had climbed high on the mountains to determine this. They said no one but assured me it was so. Four Germans arrived wanting to climb Nevado Pisco, a popular warm up climb. They didn't speak very much Spanish and didn't know the Llanganuco valley, so I assisted. Several days later we cramponned up Pisco in near perfect conditions, still in late April. This illustrates the need for climbers to check things out for themselves and not always believe the local gossip.

One other climb was completed in Peru, Nevado Coropuna, 6425 m. Located in southern Peru in the Cordillera Chila, Coropuna is a large isolated volcano of huge proportions. It is also one of the

South face of Illimani south
Standard route is on opposite side of mountain
to left of summit. Greg Horne



Nevado Sajama from village of Lagunas. Greg Horne



higher peaks in the country. I counted 17 major glaciers flowing off just one side of the mountain. I think it could easily be twice the size of Chimborazo, maybe three times. The climb generally begins in the pleasant city of Arequipa, situated at about 2300 m. A 12 hour bus ride bounced us to the drop off point at Laguna Pallacocha. This is a very interesting ride. Starting at 2300 m in high desert, we descended to 400 m low coastal desert, then back up to 4700 m, and finally left the bus at 4550 m. In 48 hours we moved from 400 m to 6400 m and still felt good.

Afternoon fog in early March turned out to be the most serious problem. As we neared the mountain in the bus our eyes strained for a glimpse of the volcano but no luck. Several times we wondered if we were even on the right bus. Locals assured us there was no problem. The driver soon stopped, asked us to unload and pointed into the fog. The lake and mountain were somewhere out in that direction. This was an interesting venture to climb a 6400 m peak one can't see and had never seen before on a topo map or photo.

We decided to follow a stream flowing

from the east. In that dry country it must be fed from snow and ice. After a couple of hours the water ended. It flowed out of the porous volcanic slopes from an unknown source above. A little higher (at 4900 m), as darkness and snow began to fall, camp was established. The following morning I excitedly unzipped the tent door and saw an icy dome on the uphill horizon. The first view of our objective. To the north-west the sharper form of Nevado Solimani (6093 m) rose above the altiplano.

A half day hike brought us to our high camp at 5350 m on a medial moraine between two of Coropuna's many glaciers. The obvious easy route up the higher south summit was checked with John's binoculars before the afternoon fog enveloped us. During the night freezing rain and snow glazed the tent while strong winds worked at cracking it off.

A 2 am start by moonlight made for a dream like atmosphere. First across moraine debris, then steep boulders and broken cliffs, and finally up the snow and ice slopes of the volcano. Crampons and ice axe were used but no rope. The route looked crevasse free and we didn't have a rope anyway. By the time we reached the summit plateau clouds obscured the views and at times limited visibility to several hundred metres.

John was well ahead of me and waited on the edge of the plateau. I was slow on account of dropping my pants half a dozen times to relieve myself of supper's deadly corned beef. From the edge of the plateau an hour's walk situated us on the featureless summit.

A quick return found us in camp before noon. After lunch we decided to pack up and move down to the lake. The fog soon engulfed us but gravity drew us down with speed. Later, after wandering around on flat featureless ash fields, we disagreed on the direction to head. So John went off one way and I the opposite, a very foolish move. At the time we simply said we'd meet at the lake. Each of us though he knew the easiest way. Luckily for me the fog lifted momentarily after we separated and I recognized my general bearings. None the less I made serious use of my compass and altimeter, neither of which John had. I finally reached the road after many doubting moments and following my

West and south-west faces of Nevado Sajama
From village of Sajama; tower on right skyline
where glacier ends borders south-west face.
Greg Horne



Vincente Laura Alcony from village of Sajama
Packing gear for the trip to base camp at Nevado Sajama. Greg Horne



own tracks around in a circle. Now to find the lake where I assumed John would be with the tent, my tent, our only tent.

Dark approached quickly. Sure I was close to the lake - I shouted and blew my whistle hoping John would hear me. No reply. Before total blackness I found a llama herder's stone wall shelter which I used as protection from the damp blowing mist. With supper cooked and eaten I settled down for the night using my jacket to cover my sleeping bag. Some time later flashes of light woke me up. A passing thunderstorm threatened to sweep through the area. After watching it for a while it appeared to pass away so I fell asleep again. Next nasty rain drops plopped onto my face and I scurried to cover my sleeping bag. The only thing I could figure out was to get out of the bag, stuff it into the vapour barrier liner, crawl in myself, and use the bag as a mattress. The storm soon ended and I returned to my previous arrangement.

The morning dawned with a spectacular sunrise on neighbouring Nevado Solimani,

purples, pinks, and reds of all possible shades. To my amazement Lagunana Pallacocha was only a 100 m away. To the east, for the first time, was a complete view of Coropuna.

John and I soon met as we each headed towards the road. I gained little consolation from the fact that John had thought about me while sleeping in my tent during the thunderstorm.

BOLIVIA

We arrived in La Paz in March not expecting to do any climbing in the Cordillera Real - it should have been the rainy season. Strange weather patterns had prevailed here also in 1983. There had not been significant snowfall in the mountains for about six months.

A rope and ice screws were rented and plans worked out for Nevado Illimani (6402 m). We spent three days looking around the market district of La Paz for the right truck heading to Mina Urania below the peak. An eight hour ride standing up in the back of a stock truck deposited our limp bodies near the mountain. For the remainder of the day we hiked to the base of the ridge we would climb. If hiring a ride or driving a vehicle be aware that the road from Mina Urania to Mina Bolsa Negra is impassable south of the standard route on Illimani. From the Bolsa Negra road to the base of the mountain the road is only suitable for high clearance vehicles.

Using the route description in the Southern Cordillera Real guidebook we had no problem finding the Nido de Condore (condore's nest). It is marked with an aluminum cross and lots of garbage. If time permits I suggest climbing another 300 m higher to a flat snow platform. This will avoid climbing the narrow snow arête above the Nido in darkness the following morning.

The snow and ice the next day was very straightforward although route finding in the dark was tedious at times. Unfortunately I was overcome by another massive diarrhoea and gas attack during this summit climb. Only 200 m vertical below and shouting distance from the top I had to give in. John unroped and climbed to the summit alone.

The following day we descended from the Nido and hiked back to Urania. A painful ride the next day in the back of a

dump truck returned us to La Paz. Using public transportation it should only cost from 50 cents to a dollar each direction for a ride.

Nevado Sajama was our next objective. At 6520 m it is generally considered the highest peak in Bolivia. Bolivian map makers would like the world to think Nevado Illampu is over 7000 m. No one in La Paz I talked to gives that idea a second thought.

After numerous inquiries about transportation we thought the only way of reaching Sajama was to take the La Paz/Arica train to Churana, the Bolivian border town beside Chile. From there use public transport or hire a ride. According to the tourist office in La Paz Churana was big, had several hotels and restaurants, etc. Well, that wasn't quite the case. There was one hotel, no restaurants, one store, and a population of 100 to 200 people. There was no public transport to Sajama for several days. We hired a truck to take us to the village of Sajama for \$15, quite the bargain since it was a 250 km return trip for the driver.

John was feeling really bad; lots of stomach cramps and diarrhoea problems. I decided to give Sajama a try solo. John would continue on to Chile without me. Upon arriving in Sajama we discovered there were two buses per week, on Tuesday and Friday, from La Paz to the border crossing of Tambo Quemado. The bus goes through Sajama and passengers change buses at the border, continuing to Arica in a Chilean bus.

I found accommodation with a family and hired Vincent to pack my gear by burro to the base of the peak. Early the next morning we left town for the standard base camp. Sajama rose 2500 m above the town. It was an awe inspiring sight to see such an icy peak isolated in the arid altiplano environment. Base camp is located on the south side of the mountain beside the only running stream at that time of the year (March/April). There were several fenced sample plots constructed by a Japanese university. They go there every year to study plant communities and climb the volcano. Nevado Sajama claims to have the highest forest in the world; I saw trees up to 4750 m. I was quite amazed to see that the local people had not cut all the trees for firewood

since the altiplano supports few other large woody plants other than the Tola bush.

We had lunch together then I paid Vincent off and he headed home. I collected excessive amounts of water and staggered up to a higher camp at 4800 m. That night the stove gave me considerable problems. The jet nipple had to be cleaned three times just to boil water. Unable to find unleaded fuel in La Paz we settled for regular leaded gas. Up to 4000 m the MSB stove can handle one meal per jet cleaning. Above that altitude the stove's performance drops quickly. From camp there appeared to be two possible routes. A series of indistinct gullies on the southwest face lead up to a snow and ice slope which joins the high south shoulder. With a camp placed on the shoulder a summit climb should be possible. A second option exists to the left of the south-west face. A ridge (west-south-west) merges with the icecap and appears objectively much safer from rock fall than the south-west face. After sizing up the whole situation I decided a solo attempt was extending myself a little too much. I had a stove which did not operate properly to melt snow, my pack at that altitude was too heavy for one carry on steep unstable terrain, and the rock fall hazard looked substantial on the face. I decided instead to do a little exploring on the west-south-west ridge as an alternate route. The rock there turned out to be extremely rotten crumbly volcanic conglomerate. Other parties had also checked this ridge. I found a pair of collapsible ski poles, a hat, and one glove on or below the ridge. Without a rope I turned back on the ridge at about 5100 m. I quickly returned to Sajama village hoping to catch the bus that day to Arica but about an hour from town saw the bus bouncing along the road towards Chile. Five days later I managed to pay off a truck driver who let me ride on the roof. Upon reaching the border crossing at Tambo Quemado I was informed by the Bolivian border official I could not leave the country by that truck. It was registered to carry cargo only, not cargo and people. I would have to wait only two more days until the next bus came by. After I whined and whimpered a while he stamped me out of the country, lecturing that I would get the same hassle from Chilean officials. The subject was never mentioned in Chile.

The view north from Licancabur in the Atacama Desert of Chile
Three skyline peaks left to right are San Pedro (6154 m), San Pablo (6118m), and Paniri (5960 m). Greg Horne



CHILE

I had hoped to climb several high mountains in the Atacama Desert of Chile. Due to time factors and lack of favourable road reports I only climbed one minor peak, Licancabur (5921 m). In San Pedro de Atacama a Spaniard I met on the bus and I hired driver Sehor Sanchez. He is the local guide to Tatio Geysers, Indian ruins, and other remote places. We wanted a ride to the pass north of Licancabur. Senor Sanchez hadn't been on the road for about 20 years so he didn't know if it would be possible. We agreed on \$25 one way to the pass, less if we didn't make it all the way. We left town at 6 am and after a couple of wrong turns stopped at about 8.30. His truck was only two wheel drive so we could not make it up the toe of an old lava flow, even with the two of us pushing. We arranged to have him meet us there the following afternoon. A water cache was made and we quickly set off towards the mountain, hoping to bivi on the summit that night. As it turned out our driver had dropped us off only an hour from the base of the peak, at an altitude of 3550 m. Licancabur is a near perfect Fuji style volcanic cone. Between us we carried 12 litres of water since no running water is present in the region. The Atacama is billed as the driest desert in the world. In some towns rainfall has never been recorded.

At 5100 m my partner who had been in front all day suddenly slowed and came to a grinding halt. He complained of severe headaches and stomach cramps. He had very little acclimatization whereas I had spent nearly a month above 4000 m. We discussed the situation and decided he should quickly descend. I would continue on alone. At sunset I found a flat ledge and settled in for the night at 5350m.

The morning began with an overwhelming desert sunrise. Above me lay the only serious climbing of the route, some

very loose shattered class 4 scrambling on sulphur crusted rock. Absolutely no snow was present on the peak, only some ice in deep shadows. In this region the snow line begins at about 6000 m.

Two pictures I had previously seen in a National Geographic Time/Life book about the Andes had inspired me to make this climb. They both showed the mountain rising above two incredible green lakes in a vast desolate landscape. I was rewarded with the pleasure of staring down on those lakes from the summit rim. The lakes are shallow salty flamingo lagoons which lie in Bolivia. The international border runs over the summit of Licancabur. I was very surprised to discover a frozen lake in the crater. An article in AAJ 1983 states that this is the highest dividable body of water in the world. Licancabur has Inca ruins on the summit. Unfortunately there were so many rock walls and shelters around the rim I couldn't tell which was new or ancient. Many pits were dug by people looking for Incan treasures. Also several piles of firewood indicated someone was particularly energetic. Previous expeditions have dived in the crater lake when it wasn't frozen looking for sacrificial objects but instead discovered several new species of algae found nowhere else.

Visibility was to the horizon in every direction. The normal cloudless weather continued all day. Major peaks from Nevados San Pedro and San Pablo in the north to Llullallaco in the south were identifiable. Basically everything visible for 360 degrees was volcanic in origin.

A very quick descent was made down a scree and ash gully south of the ridge I had climbed up. The 12 hour ascent was reduced to 4 hours and one pair of smouldering feet. I used the pair of collapsible ski poles found on Sajama for both the climb and descent. They worked perfectly for linked turns in steep ash.

Greg Horne

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A Summer in the Cordillera Blanca

Reclining in the soft woven seat of a large DC-10 carrying us to Lima I take my first real break for days. Soon the events that started all this come to mind. "Climbing in the Cordillera Blanca in Peru? I'm going!" "Me too!"

It was late November — two persons, two beers. The discussion went frantic. Faster than we could write it the strategy was established. Form a group of climbers, gather the gear, scrape the money together, get the required papers, the inoculations, and so on. The enthusiasm was high during that night; we were going to need it! With the help of hundreds of phone calls and letters, many sleepless nights, and tons of coffee, we made it. On 16 May 1983 at 5 pm it's the kick-off for Lima, Peru. Remembering the last six months I can't help giving a slight smile. All the work has been done; the fun is starting. Or so I thought.

DIFFICULT BEGINNINGS

On the plane everything works fine. People and luggage are transported to another side of the earth without any problems. But on arriving in Lima the song is different. The air is heavy, humid, and stinking. We recover our mountain of gear -22 bags for a three month trip. The riding then starts. Every taxi driver at the airport offers us his services. They are forming a tight circle around the eight gringos. Everybody wants to 'help' us carry the bags to the cars for some soles. We finally make it to the city downtown using two overloaded taxis. The first of a long succession of heart beating rides along the Peruvian roads. Many of the vehicles look just out of a demolition derby. At home they would be towed to the junk yard, not allowed to drive even there. The drivers, otherwise quite calm people, seem possessed by a devil when sitting behind the wheel. No one wants to lose a second to allow another one to pass on its green light. I do not dare to mention cyclists and pedestrians.

Finally an eight hour bus ride to Huaraz, the town from where every hiker and climber leaves for the Cordillera Blanca and Huayhuash. Here again the contrast

is great. An hour before dawn, the sky is clear, stars shine, the air is crisp and dry. At 10,000 ft we feel the first symptoms of the lowered atmospheric pressure. We take three or four days for acclimatization.

We plan to climb all summer here as follows. We set a 15 day base camp in one of the many quebradas (valleys) of the Cordillera. To reach it we travel as a group. From base camp, en route to the mountain and on the climbs themselves, we work as independent parties of two or three. The decisions concerning climbing and route selection are the responsibility of each party according to its technical experience and acclimatization to altitude. The period of time elapsed, we come back to town to rest, replenish our supplies, then start all over in another quebrada. So is the theory, let's now try to do it.

FIRST TRIALS, FIRST ERRORS

Our first objective is the south face of Oqshapallka (5888 m). We plan to set base camp at 4200 m by Laguna (lake) Llaca. From the beginning things are all wrong. To reach base camp we have to drive 28 kms. We hire a driver and his four cylinder pick-up truck. Being eight and having too much gear, he refuses to carry us all on one trip. He takes more than four hours to make the journey. The four of us waiting in Huaraz are boiling inside when he is back saying his truck is broken by so hard a trip. We hire one of his friends with another not much better truck. We are stopped just before sunset 3 or 4 kms short of base camp by a locked cattle gate. Half of the group has left for base to carry some of the gear. The altitude and the heavy load carrying begin to take their toll. Monique and Serge are alone at base camp without a stove to cook dinner. They will be sick all night. Jean-François bivied in a small cabin without a sleeping bag 1 km from base camp. He has a stove but no food. The rest of us at the gate are in a better condition but miss part of the food. The next day the valids of the group make up to three carries to get all the gear to base camp. At night on 22 May we are all seated at base camp, each of us more or less tired. We are facing the mountain and psyching up for the climbing. Parties are forming. Mike and I will go together, being better acclimatized or less exhausted than the rest of the group. Jocelyn, Gerard and Jean-François will form the other party while Serge will not be able to leave base camp and the toilet!

The following days we follow the principle climb high sleep low, until we reach the bivy site at the very base of the south face. All of us but one being on our first trip to Peru, we are gringos in the mountains — difficult route finding on glaciers, misjudging distances, difficulties and water intake. On the day of the climb we of course make a late start. The other party turns back after 4 or 5 pitches. Mike and I have to stop some 200 ft below the summit of the face, late, tired, and not carrying any bivy gear or enough food and water. We crawl to base camp and then to Huaraz to take a rest and think it all over.

A TEAM GETTING SMALLER

After half a year of planning, money making, equipment designing, and team selecting, things seem not to go as expected. The mountains are big, faces are long, and the climbing is difficult. But after the first foul up, the lessons have to be understood, everything must go fine. Well, I'm maybe over optimistic!

Our next objectives are in the quebrada Santa Cruz: first Taulliraju (5830 m) south face, and then Allpamayo (5947 m) southwest face. Staying in Huaraz gave most of us the usual stomach ailment, the turista del gringo. We're quite weak when we start the two day hike to reach the Taulliraju base camp. The presence of our two arrieros Arturo and Porfirio and their five burros is very interesting. First their animals carry most of our gear and food. Staying, eating, and walking with those fine guys gives us a closer look at the Indian culture squeezed between their inhospitable mountains and the lower lands populated with the conquering Spaniards. At base camp everything seems to work better. Parties are forming differently and everyone is rapidly moving to the bivy site. The reality is different than the look. The curtain will soon fall off.

Jean-François and Serge were going for the standard route of Taulliraju, the north face, Jocelyn and I for the south face. Mike and Gerard are staying at base camp, still suffering from the last town raid. A faulty stove compelled us to get down to base camp to find out Mike has decided to go back to the States. He seems to have better to do on the warm rocks at home than getting sick and cold here. Jocelyn then tells us that he wants to go back too. What a smack on the

face. After so much hard work I was ready for some better news. A week later, having had trouble on their routes, Jean-François and Serge decide to return to Montreal. From the original party of eight we are now four, including two camp caretakers. The trip looks like it's all falling apart.

SUCCESSFUL RESULTS

The day Mike and Jocelyn depart I team up with Gerard to climb back to the bivy site where all our gear has been left for the attempt. The following day a providential whiteout and light snowfall pin us down at the bivouac. We use this rest time to collect our wits. We are here in Peru with plenty of time, food, gear, and enough money to stay around for a while. The acclimatization process has been well done; we don't feel any problems climbing or bivouacking over 5000 m. The weather clears up during the afternoon and we get a good look at the face. It looks long, steep, hard - but possible. Tomorrow we'll make it.

On 11 June we wake up at 2 am to start the cook/dress/eat/snow melting ritual. At 4 we are ready, both with two litres of warm orange juice, chocolate bars, and candies. We have little climbing gear, two 9 mm ropes, a few ice screws, and pins. We want to go fast to make it in the day. I lead the first two pitches by head lamp on very steep and thin ice. Everything is going fine as our bodies are well tuned. Gerard then climbs a difficult section of rock covered with verglas for the third pitch. By then I've seen a nice sunrise on the quebrada Santa Cruz. We share the lead of two other mixed snow and ice pitches. But this has taken time, too much time. We have to hurry things up. I'm burning inside to get our first success in the Cordillera. I take the lead for the last 400 m and reach the top of the face. The following pitch is a worthy horror show - a horizontal traverse over a deep snow arête. The snow is so fluffy that I am in up to my armpits while my crampons scratch the rock underneath. Finally I reach a good section of ice. We'll make it! There's only 300 m to go on a 75 to 85 degree slope - it's in the bag. The very last section is again fluffy snow. I swim to the top of the face and sit on the heavily corniced arête, one foot on the south, the other on the north side. Soon Gerard and I are facing each other on the summit ridge. It looks very dangerous and we don't really want to go to the summit at any price, the south face is enough. We rap and down climb the face

to get back at bivy by dark. We run down the glacier. Gerard decides to stay for the night on the very first piece of rock we see. I keep on going but a dead head lamp stops me a hundred feet short of base camp and I experience another wet bivouac, this time a stone's throw from base camp tents. The following day we move base westward to reach Allpamayo.

The story repeats itself and two days later we stand on the very summit of Allpamayo (5947 m) after having ploughed through 100 m of deep snow and climbed 500 m of ice at 70 to 75 degrees. We reach our bivouac at night with a dying lamp. In no more than four days we have made two difficult ascents - Taulliraju south face and Allpamayo south-west face. I feel we have learned the game's rules and are ready to keep on.

ALONE?

The summer was slowly passing by; so was our group motivation. Prompted by our success in the quebrada Santa Cruz and mostly because I thought I could do it, I started seriously to think of solo ascents.

Our next objective was Caras at Laguna Paron. We had studied the maps in Huaraz before leaving but were not prepared for what we saw upon arrival at Paron. To reach the glacier and the base of the cliff itself one must climb a 100 m rock cliff or go a long way round it. We were not at all prepared for either solution, having not enough supplies. But on the other side of the lake the nice Piramide de Garcilaso (5885 m) catches the eye. The approach walk seems easy, the cliff itself a serious but possible undertake. Let's go for it.

We are able to borrow a large inflatable raft to cross the lake and install our tents on a fine sandy beach. Obviously we have been preceded by a lot of people. A large amount of trash and remnants of a plastic shelter reveal the passage of careless 'explorers'. At sunset we witness an imposing spectacle. The summits of Piramide, Chakraraju Oeste, and Artesonraju are painted in yellow, orange, and pink. We are in paradise.

The next day we are soon back on earth eating freeze-dried breakfast. We slowly pack up gear for the climb and leave for bivy. François and Gerard will climb together while I delay my decision of soloing it until we reach the very base of the climb. On 27

June at 5 am we start the tiring walk up the glacier. At 7 we are at the base of the south-west face of Piramide. I decide to give it a try while the others prepare their gear. We share some chocolate and juice and I leave quickly. I soon pass the bergschrund and lose sight of the others. I'm now alone on the 800 m face. I run up the first 150 m 60 degree slope. Then a 20 m rock band blocks the way. I find a passage on the right using good foot holds and jamming tool picks in cracks for balance. The slope steepens to 70 to 75 degrees for the next 600 m. The ice is hard, sometimes brittle. Checking watch and altimeter I figure out a steady pace of 300 m an hour. Each half hour or so I chop a little one foot stance and take a one minute break for water and chocolate. The gully becomes tighter and steeper for the last 50 m. To reach the summit I have to dig through a snow mushroom. By 13.15 it's done — I'm seated on the summit surrounded by heavy clouds. Looking out the hole I just came through I feel dizzy. How the hell am I going to get down that? I take the usual pictures of the summit whiteout and get ready for the descent. I carefully start to walk on the ridge between north and south faces. After a few steps I fall five metres into an invisible trap. It's a crevasse going deep into the mountain. I down climb the ice chimney till it ends. A 25 m rappel then leads to the base of the vertical pitch. The rest is mechanical and calf tiring down climbing. I lose one hour to set up a useless rappel to pass the rock band. I finally down climb it far to the left. I jump the bergschrund, run and slide down the glacier to reach the bivouac at sunset. Gerard and François are already lying down trying to sleep. Having had too late a start they decided to get back to bivy, take a rest, and start anew tomorrow. They're heading for a 11 o'clock wake up. I cook myself a small lunch, willing to stretch our diminishing supplies. I let off steam drinking a litre of tea and chewing my last chocolate bar. My only feelings are vague stomach aches owing to an abuse of chocolate and freeze-dried food.

I'm too burned out to fully realize anything. The thinking will come later. I later re read lines of my diary of the following days.

Solo climbing is definitely an ultimate experience, specially on a long and hard face in Peru. And nothing compares to the satisfaction following it. But as you can't

share the climbing, you can't share this satisfaction...How many people have died soloing? Wouldn't a perfect partner be as effective? Is it all worth it? I'd say yes, being ready to do it again, given the same mental preparation.

The next day, while slowly descending to base camp, I watch the two tiny dots on the face. They don't go over the rock band after many attempts. Three days later everybody is at base. During that spare time Monique and I went to try Artesonraju but strong headaches stop Monique at 5200 m.

We gladly go back to Huaraz. We feel so at home in this fine little town after more than two months in Peru. We had kept Huascaran Sur for dessert. It's the highest at 6768 m but the easiest climb of the summer as we are heading for the west buttress. The packs are quickly ready; we're getting used to it. After a few days of inching up Monique says she won't go over 6000 m as she still suffers splitting headaches. I then leave the bivouac at La Garganta while Gerard and François are going together. By one o'clock I'm seated on the highest hump around for as far as I can see in the cloud. This must be it! I quickly take pictures of another whiteout and run down the normal route. Back at bivy at 5 pm to see Gerard and François topping off the ridge. They will be back by night, tired but happy. We then return to the valley, the town, civilization.

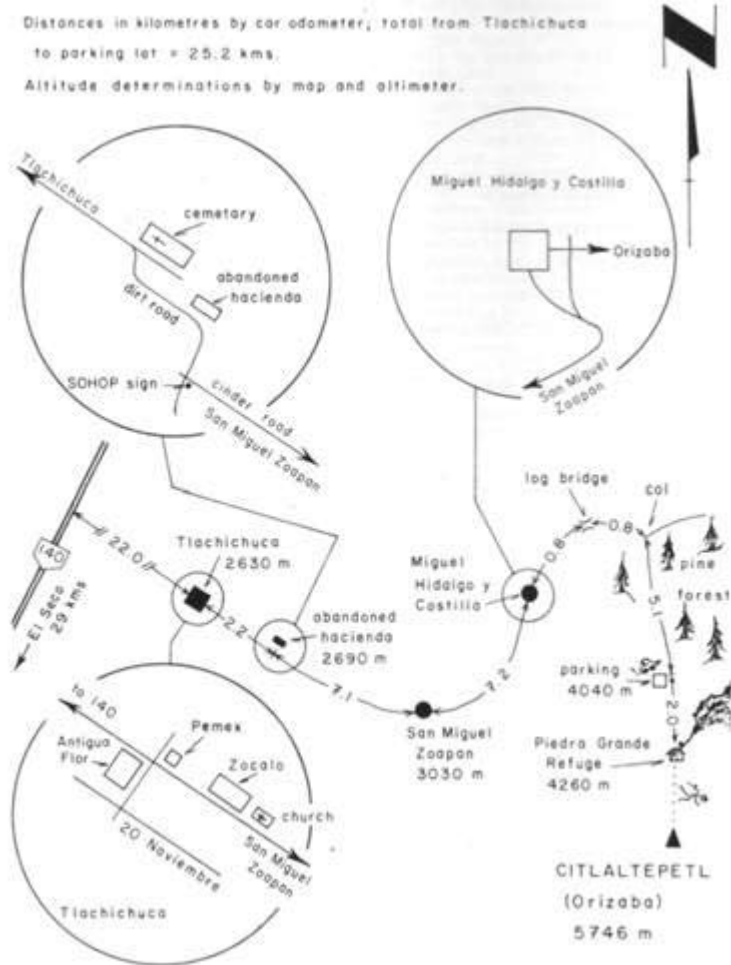
Well as I recall it, it has been a nice summer in the Cordillera Blanca. Weather and people were fine. But it's only the beginning. I found a perfect playground with easy access. Small parties or solo climbers can find here a great deal of long and challenging climbing.

Yves Laforest

We were six climbers: five from Quebec province - Jocelyn Ouellet, Jean-Francois Denis, Gerard Bourbonnais, Serge Dufour, and Yves Laforest; one from Nevada, Mike Tupper. Two other Quebecers were on the trip as camp caretakers: Francois Mercier and Monique Marseille.

Mexico Revista

One of the most enjoyable climbing experiences over the Christmas holiday is ascents of the Mexican volcanoes. These deservedly popular climbs, often



written up and talked about, have served as a useful training ground for higher and harder climbs for many decades. For many years a not too well kept secret, perhaps part of their attraction lay in the scarcity of accurate information on their access and routes. A determined and venturesome party, however could always climb their fill in a short time and still leave room for sampling the culture and hospitality of Mexico. The total climbing experience, here as in other parts of the world, lies with our ability to interact not only with the mountains but also with the people. The publication of a detailed guidebook to the Mexican Volcanoes has not really altered that fact. Each climbing party will find its own unique Mexican climbing experience if it only takes the time to explore the culture as well as the mountains.

On my last visit to Mexico, exactly two winters previous in 1980/81 I was certain that in all likelihood this was to be my last trip to the Alto Piano. Inflation had driven living costs to the point where it was no longer an inexpensive climbing holiday. Suddenly all the economics changed as the peso started a rapid plunge under

international pressure as Mexico defaulted under loan agreements. In September '82 it became clear that there were once again going to be some great values south of the US border. By early autumn it was also apparent that we were in position to organize another climbing trip and before too long we had a party of nine, seven of whom had never been to this part of the world and who also had not experienced any high altitude climbs.

On 25 December with the rain pouring down heavily at Mirabel eight of us departed for the ancient capital of Mexico. A day later in the Zocalo the ninth member joined us from Vancouver. Our arrival in Mexico City was greeted by the pleasant news that the peso was 150 to the US dollar (six months earlier it had been 20 to the dollar). The bad news was that there were no cars or vans for rent anywhere, reservations or no. A few days of acclimatization and orientation were spent in the capital with the customary Anthropological Museum and Chapultepec Castle visits thrown in for good measure. Not everyone in the party enjoyed the cultural scene however and a

fair amount of time was spent sampling the local brews. The largely frustrating experience of dealing with Hertz led us to conclude that it would be better to reserve with several car rental companies simultaneously in order to have a car waiting upon arrival on Christmas Day.

On 28 December, fed up with the delay, we finally rented a taxi van to drive us to the refuge at Popocatepetl (\$7.78 US/ person, including all our luggage and pick up at the hotel). It is possible to do this trip a little more cheaply by bus and taxi but not quite as conveniently.

We arrived at the Vicente Guerrero refuge at Tlamacas (3950 m), whose luxurious accommodations amount to 150 pesos per person per night. The following day was spent as a rest day which was just as well as while it rained during the night at the elevation of the hut it had snowed at higher elevations, blanketing the entire mountain in fresh snow. This was the first of many instances where I was reminded that I was fond of quoting the 'near perfect' weather conditions to be found here at this time of year. In spite of the fresh snowfall it was clear from the previous day's observations that the mountain was actually quite icy, a feature that I had not noticed on any of my previous ascents. On 30 December we did an acclimatization climb up to the Queretano hut (4650 m) on the Ventorillo route as the clouds closed in further obscuring the view of the upper slopes. Only two of the party made it this far on that particular day.

Early on the morning of the 31st, with the benefit of a full moon, we left the refuge at 0400 and reached our previous day's high point by dawn's first light. The Teopixcalco hut (4930 m) was reached at 0830, from where the icy extent of the upper slope was clearly evident. While the ascent angle is not steep there was little possibility for easy self-arrest on a surface which would hardly allow our crampon points to penetrate. I had never seen the conditions quite as bad on my two previous ascents of the same route. Two roped parties were formed and with only a few problems we reached the summit at 1140 (5452 m). Clouds had obscured the views in all directions but the summit was sunny and at 3°C suitable at least for the customary pictures with the red summit shelter in full view. We descended quickly via the normal Los Cruces route

and arrived back at the refuge by 1430. The descent route was subject to high velocity rockfall due to the lack of snow and ice cover this particular year. By noon melting from the sun would loosen surface rocks and scree to fall spontaneously or at the slightest touch in cartwheel descents.

Getting down this usually safe route proved to be the most dangerous and serious part of the traverse. We later learned that two "iron men" had run this route to the summit and back in a little over four hours! Iron men indeed. This seemed to be a good way to end 1982 and so we had a fine New Year's celebration with a number of Mexican and North American climbers who were staying at the refuge. Early the following morning Brian and Don made an attempt on the summit via the Los Cruces route and reached the crater rim just as the mountain socked in. They returned to the hut around lunch just as the descending cloud cover brought fresh precipitation. More of the near perfect weather I was told. In view of the now deteriorating weather and our transportation problems we decided not to climb Iztacchuatl (5286 m) but instead to concentrate our efforts on Citlaltepetl (Orizaba).

We returned to Mexico City that same day using bus and private transportation. Christine and I used mainly the bus system which was an adventure in itself. The bus from Amecameca to the San Lorenzo terminus in Mexico City cost us 66 pesos each. Truly one of the bargains of the decade. Good news greeted our return - we had managed by collective effort to secure a VW van for the rest of the trip. We celebrated the next day by visiting the ruins at Teotihuacan for most of the afternoon and generally enjoying the sights and sounds of Mexico City at night, especially in the vicinity of the Alameda.

January 3rd saw us up early and off to Puebla with our newly rented van. The views of Popo and Ixtly along the way were rewarding, as were those of the countryside, the exception perhaps being a large garbage dump. We stopped in Puebla for lunch and some supplies, easily obtained at the Conosupo super mercado. This convenient outlet is reached by taking the third turnoff along the toll road which passes by Puebla. This is also the last exit into town if you're travelling the expressway.

We reached the turnoff to Tlachichuca (2630 m) around 1530 hours, a little later than I would have liked as we intended to reach the Pedra Grande refuge before dark. We were soon forced to abandon the guidebook and ask local directions to El Volcan. The accompanying map should obviate the problems we ran into in trying to apply the glyphs of the Secor guide to this part of the journey. 'Wild Jim' did an admirable job of pushing the van to its limits although in reality we often ended up doing the pushing! None the less 4 1/2 hours later found us at 4040 m, above tree-line, and in the dark. All agreed it was a suitable time for a bivouac. The clear dawn revealed that we were a mere 2 kms from the refuge. Additional pushing and road repair brought us to the hut by early morning. Although there were a number of groups at the hut, conditions were not terribly crowded. We encountered a number of people we had met on Popo, including our iron men. These runners had not been able to keep up the same performance on Citlaltepetl although they revealed that they had run Iztaccihuatl twice in good time with no use of crampons. For my part it was good to see that at least not all of the volcanoes succumbed to super light alpine tactics. We lesser mortals settled in for some food and rest as we planned to make our ascent on 5 January. Hardly had we arrived however than there occurred a series of semi-rescue events which kept us all alert but emphasized the need to be well acclimatized, properly equipped, and in touch with all members of your climbing party. A solo climber disappeared into a crevasse on this mountain just a few years ago but fortunately there were no similar problems this time and we were happy to be of assistance. Our plans for an early bedtime were somewhat frustrated but we were still able to rise early and greet the rising sun from high up on the glacier. This time the snow and ice conditions were nearly ideal as we selected a very direct and steep line to the summit up the north side of the mountain on the Jamapa Glacier. Steve, Jim Purvis, and I reached the summit (5746 m) at 1018, having left the hut at 1420. Along the way Scott was forced to turn back due to cold feet. We returned by roughly the same route and on our descent met Jim, Jackie, Brian, and Don who were ascending on a line a little bit to the east of us. Our party returned to the Piedra Grande hut (4260 m), which might now be called the Octavio Alvarez R hut, by 1230. Once again the weather

started to deteriorate and by 1530 hrs, as we were preparing to leave. The mountain was completely socked in and it had started to snow. Retracing our route in the van took a mere 60 minutes to Tlachichuca. We paid an all too brief a visit to Sr Reyes and to Sr Joaquin before returning to Puebla. On the way to Puebla it started to rain quite heavily and the mountain completely disappeared from view. I could be heard muttering the mantra 'nearly perfect climbing conditions' all the way back to Puebla. An evening's celebration was now in order at el gran Autel and Restaurant, Mole Poblano. Steve had to return home a few days early so we stopped off at the Puebla bus station and put him on an express to Mexico City. We have heard from reliable sources that he returned to Vancouver with no problems along the way, although we had fully expected to hear from him later that night.

On 6 January we spent a very pleasant and sunny morning and early afternoon shopping in Puebla and then returned to Mexico City. Along the way we once again passed the large garbage dump on the outskirts of the city and noted that the dead dogs were neatly stacked in one corner of the dump. Soon after the skies darkened, the lightning flashed, and we found ourselves in the middle of a torrential downpour. Well at least it never rained while we were on the mountains. The following day we all had a pleasant shopping spree in the city and once again took in the marvellous sights, sounds, and smells of possibly the world's most populated city. Today's Tenochtitlan is a far cry from the height of the Aztec empire, but none the less, I believe those México would still be impressed by what has remained. Today, just off the Zocalo, the Templo Mayor has been unearthed and even in its wretched ruins it still stands as an impressive monument to earlier times and empires. Today a clear view of Popo and Ixtly is difficult from the heart of the Aztec empire but it is easy to imagine how impressive those two fine volcanoes once appeared from here. And who knows, perhaps some ambitious Aztec decided to reach those snowy summits long before the Spaniards arrived, and succeeded. We may never know who made the real first ascents but we at least today have the nauhuatl legends of the 'smoking prince' and the 'sleeping princess' to remind us that mountains have always stirred man's imagination. And not far beyond, lies the peak of the 'early morning star', the

highest in Mexico and the third highest in North America. Closely connected with the Quetzalcoatl legend, it too must have attracted some early, unrecorded explorers, and perhaps an ascent.

The reverie of the trip was quickly broken as we landed in the -10°C blackness of winter in Quebec. Welcome home, Gringo!

Kevin O'Connell

Participants: Don Anderson, Scott Ceriko, Jackie Dubé, Steve MacDonald, Christine McNamara, Kevin O'Connell, Jim Ogena, Jim Purvis, Brian Takasake.