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By R.W. Sandford

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THE HIGHEST CALLING

During the United Nations International Year of Mountains in 2002, hundreds of events were held all over Canada to celebrate the importance of alpine regions to our ecological and cultural heritage. Celebrations were held in the Long Range Mountains of Newfoundland, in the heavily glaciated ranges of the high arctic, at Mount Logan in the St. Elias, in the Coast Ranges, the Columbia Mountains and in the Rockies. One of the culminating events of the International Year was the Mountain Guides' Ball held at the end of October at Lake Louise.

Sponsored by the Alpine Club of Canada and the Association of Canadian Mountain Guides, this annual celebration has historically honoured individual achievements and contributions that have strengthened the understanding and appreciation of Canada's unique mountain heritage. Past Patrons of the Ball have included some of this country's greatest mountaineers and alpine conservationists. Given the global nature of the International Year of Mountains celebration, it was important to choose a patron for the 2002 Ball that exemplified the widest ranging appreciation of mountains and highest demonstrated competence in travelling respectfully among them.

No one person could be said to embody everything that mountains mean to us. There is, however, one collective body that, above all others, has shaped what mountains mean to Canadians. No organization in this country has done more for the inter-generational profile, protection and celebration of mountains than Parks Canada. By creating and maintaining our mountain national parks, by establishing the aesthetic through which these parks can be experienced and by perfecting techniques that allow us to travel safely within them, Parks Canada has defined our nation's mountain focus for one hundred and seventeen years.

Within Parks Canada, no organization is a more appropriate symbol of the evolving importance of mountains to our culture than the elite Warden Service mountain rescue program. It is to the skilled and committed men and women in this high profile public safety unit, and to their colleagues in related programs throughout Canada, that the 2002 Mountain Guides' Ball and this book are dedicated.

Given the tight timeframe for completion of this history, special thanks are owed to many people. I would like to thank President David Toole and the Executive of the Alpine Club of Canada for unflagging support of this committee's publications efforts. I would like to thank journalist Lynn Martel who carefully interviewed many of the most important figures in the development of the mountain rescue in Canada for this publication. Without her diligence and care this book would not have been possible. I would also like to thank Brad White for allowing unconditional access to his collection of largely unpublished historic images for this book and for graciously allowing the free use of his own fine photographs for inclusion in this brief history. I would like to thank Tim Auger and Gord Irwin of Banff National Park for their patience and kindness. A great debt is also owed to the editor of the Canadian Alpine Journal, Geoff Powter, who conceived the design and to Linda Petras of Canmore who cheerfully overcame a broad range of design challenges under very tight deadlines to complete the book in time for printing. Huge thanks are also owed to Laurie Venance and the staff of McAra Printing for their Herculean efforts in seeing this publication through printing and delivery in time for the Guides' Ball.

It is sincerely hoped that this small publication will lead to a greater awareness of the role Parks Canada has played in developing mountain rescue capability commensurate with the world renowned reputation of our mountains.

R.W. Sandford Vice-President, Mountain Culture The Alpine Club of Canada



Ollie Hermanrude and Walter Perren. At first some of the wardens were reluctant to advance their mountaineering skills. Walter Perren trained dozens of wardens like Ollie Hermanrude. Most became competent climbers. Some, like Ollie, went on to distinguish themselves as Chief Wardens. Photograph by Bruno Engler courtesy of Parks Canada.

It All Began By Accident

Though the first mountain national park in Canada had already been in existence for eleven years, no one anticipated a need for a formal mountain rescue system in 1896. If anything, what was really required was a more thorough topographical survey of the region. As it was, few people knew what existed more than eight kilometres on either side of the main line of the Canadian Pacific Railway. In advancement of that knowledge, James Joseph McArthur and a small team of Dominion Land Surveyors were mapping the mountains that radiated outward wave upon wave from the tracks. Their work, which ultimately demanded the ascent of more than two hundred peaks, had barely begun when a brash and somewhat careless young Bostonian named Philip Stanley Abbot fell off Mount Lefroy above Lake Louise.

Though Abbot was still alive when his body came to rest near the summit of the pass that now bears his name, his companions were at a loss as to how to rescue him. Abbot died before his helpless friends could figure out how to assist him. After Abbot departed this world for the next, his companions promptly descended to the chalet on the shore of the lake to seek help in recovering his body. It fell to the manager of the chalet, Willoughby Astley, and packer and guide Tom Wilson to organize the party that rescued poor Abbot so that his family could mourn his loss with a proper funeral back in Boston.

Chalet manager Astley was appalled by what had happened. The bad press the accident had brought in its wake also troubled the railway. The matter might have been forgotten, however, were it not for the persistence of a San Francisco doctor named Joshua Stollard who lobbied the CPR to introduce Swiss mountain guides to its alpine resorts at Rogers Pass, Lake Louise and Banff. The arrival of the first of these guides in 1899 had the desired effect both on mountaineering and on a growing tourist trade. Guided climbing became a relatively safe way to experience Canada's mountain national parks just as more and more people were being attracted from abroad to visit them.

It is a great credit to the railway mountain guides that for the next fifty years there were no fatalities among professionally guided climbing parties in Canada. During this period, Swiss guides led parties up thousands of Canadian peaks including more than 250 first ascents without the need of any formal rescue system. Guides made sure their clients didn't get into trouble. If someone on their own got lost or stranded on a mountain, Park Wardens would seek the assistance of a guide to affect a rescue. The guides offered help without hesitation.

After World War II, however, things changed. The grand Canadian Pacific hotels were in decline and the cash-strapped railway was thinking of getting out of the guiding business. Though guiding appeared to be in decline, the popularity of mountaineering continued to grow particularly in Banff National Park. It was only a matter of time before exploding numbers of inexperienced and highly independent climbers would create situations that would tax the ability of the Warden Service to address life-threatening problems these upwardly mobile visitors created for themselves on the high peaks.

Canada's elite national park rescue program came into being by accident. There were two accidents actually, one in 1954 and one in 1955. The events surrounding these two terrible tragedies put the need for a new approach to mountain rescue into bold public relief.

On July 26th, 1954, a party of eight young Mexican climbers, seven women and their guide, Eduardo San Vicente, climbed from Lake Louise through the Death Trap to Abbot Pass. At the Plain of Six Glaciers they met Swiss guide Walter Feuz who patiently overcame language barriers to the extent that he could advise them of possible routes to the summit of Mount Victoria. After spending a night at Abbot Pass Hut, the party set out on two ropes, three women on one, three women and the guide on the other, for the South Peak of Victoria. The snow on the east face route they chose remained firm during their triumphant ascent, but as the summer day advanced softened. On the descent, one of the women on the first rope apparently slipped and



Noel Gardner. The son of the famous Alberta rancher and Calgary Stampede icon, Clem Gardner, Noel Gardner was an unsung early advocate of mountain rescue training in Canada. Gardner worked as a snow researcher at Rogers Pass. Photograph by Bruno Engler courtesy of Parks Canada.

pulled the other two women with her. Unable to stop the trio to which he was tied, the guide fell after them. They fell some 600 metres down the snow face and over some cliffs before coming to rest on the upper part of the Death Trap. All four were dead.

The second rope of three women, who were above the four when they fell, watched the accident in horror. Frightened beyond words, they found themselves unable to move more than a few hundred metres down-slope. Though he did not see the accident happen, Walter Feuz had been observing the progress of the party through binoculars. Noting that suddenly there were only three climbers when moments before there were seven, he contacted the hotel manager, Pat Fitt, who quickly helped him organize a rescue team composed mostly of Chateau Lake Louise staff. Even though Feuz was sixty-five at the time, it took the rescue party only two hours to climb up the Death Trap to Abbot Pass. En route they passed the bodies of the four who had fallen. At Abbot Hut they met a gaily-clad, smiling young Mexican girl who had stayed behind and was preparing dinner for four friends that Feuz knew to be lying dead on the glacier.

A half an hour later, Feuz and his rescue party reached the nearly frozen women who were paralyzed with fear on the ridge. After warming them up and feeding them, Feuz decided to take them down the Death Trap so that he could get them past the bodies of their dead friends in the dark. It was 1:00 AM the next morning before the rescue team arrived at Plain of Six Teahouse with the girls. It is interesting to note that Walter Feuz never thought to contact the national park service or encourage their assistance in the rescue. In 1954, the Warden Service simply didn't have the training to undertake rescues of this nature. Within a year, however, that would begin to change. The man who would bring about that change was Walter Perren.

Walter Perren

Walter Perren was born in Zermatt, Switzerland on January 13, 1914, into a famous family of Swiss mountain guides. Under the watchful eye of his father, he made his first ascent of the Matterhorn as a young teenager, a climb he repeated by various routes 146 times during his guiding career.

In 1950, at the age of 36, Perren came to Canada at the invitation of the CPR to work with Edmund Petrig as a guide at Chateau Lake Louise. When, at the end of the 1954 summer season, the CPR phased out the Swiss guides, Perren planned to return to Zermatt with his Canadian wife and three young sons. It is perhaps ironic that the departure of this valuable climbing resource from Canada was prevented by the accident that took place that summer on Mount Victoria. Recognizing that the termination of the mountain guiding program at Chateau Lake



Cuthead College, 1955. Walter Perren's first formal rescue training school took place at the Cuthead Warden Station in Banff in 1955. Left to right, seated: Ollie Hermanrude, Bill Robinson, Bert Pittaway, Wallace McPhee, Ross Baker, Frank Lightbound, Glen Fagan. Second Row: Jim Deegan, Malcolm McNabb, Gerry Lister, unknown, Walter Perren, Jack Walker, Edward Sypes, Percy Woodworth, Glen Brook. Third Row: Neil Wolege, Joe Allen, Bob Hand. Photograph by Bruno Engler courtesy of Parks Canada.

Louise left it with limited resources to deal with mountain rescue, the National Parks Service invited Perren to stay in Canada to organize mountain travel and rescue training for park wardens. Another major accident in the Lake Louise area in the summer of 1955, underscored the importance of the decision to hire Perren and put into relief the work that had to be done if the Parks Service was to be able to meet its evolving public safety responsibilities.

Perren had only been working for a few months when a group of eleven teenage boys from Philadelphia attempted an ascent of Mount Temple. As their adult supervisors had decided to spend the day shopping in Lake Louise, the party was on its own. It was a hot day in July and the

boys were at 2750 metres on the mountain when they became frightened by the amount of avalanche activity that was taking place around them. In the late afternoon, the most experienced of the teenagers, Tony Woodfield, urged the party to turn back, which they did. A few minutes later, however, they heard a roar and looked back to find a huge wet snow avalanche bearing directly down upon them. Ten of the boys, aged between twelve and sixteen, were swept away. By the end of the day, seven of them were dead.

When two of the survivors stumbled into Moraine Lake Lodge later in the evening, the park warden service was summoned to affect a rescue. Wardens Jack Schulte and Wes Gilstorf accompanied a doctor to the accident site. Soon after

warden Bert Pittaway arrived at Moraine Lake with the newly hired Walter Perren. En route to the accident they came upon Gilstorf stumbling down the mountain with one of the injured boys on his back. The tragedy attracted international attention and pointed Perren down the long road toward the creation of two major Canadian institutions: Canada's elite national park mountain rescue program and the Association of Canadian Mountain Guides.

The first step in the development of Parks Service mountain rescue capability involved the establishment of a new training program for park wardens that would give them the skills they needed to climb at a standard that would allow them to help other mountaineers when they got into trouble. Diversely trained to fulfill a huge range of responsibilities, the park wardens of the 1950s were effectively cowboys. Their duties most often centred around backcountry district management. District wardens undertook prolonged backcountry patrols on horseback and were responsible for trail maintenance, telephone line repair, fire fighting and wildlife management in their area of the park. Search and rescue at that time was largely confined to visitors lost in the valley floor. In 1955, there were only a few park wardens who had the time or the inclination to climb mountains. These, ultimately, would become the core of a new warden service public safety unit. It was Walter Perren's responsibility to make wardens into mountaineers. While most of the wardens preferred horse travel to mountaineering, some of the cowboys proved to be fearless climbers. A few later become expert mountaineers. A whole new world was about to open up in the warden service.

As early as 1950, the Parks Service was beginning to track developing trends that suggested visitor use patterns had begun to change. When skiers began to travel in increasing numbers in the backcountry, the Parks Service invited a snow researcher from Rogers Pass named Noel Gardner to offer backcountry ski instruction to wardens in the mountain national parks. The first instruction was offered to five wardens in 1951. The ten-day course included basic training in

alpine ski techniques and an introduction to recognizing changing snow conditions and avalanche hazard. A second course was offered to eight park wardens in the spring of 1952. In 1953, an advanced school was held for those who had distinguished themselves at the two previous courses and included an introduction to glacier travel and the proper use of ropes, ice axes and crampons. At the conclusion of the course, Gardner offered that the training should have been expanded to include rock-climbing instruction. There was, however, no one available with the skills to teach such a course.

Cuthead College

In the early spring of 1954, Gardner offered an avalanche safety and rescue course for fourteen volunteer members of an informal Banff mountain rescue group composed mostly of local ski patrollers. The course was held at Cuthead Warden Cabin. Located forty kilometres up the Cascade Fire Road, Cuthead was no ordinary warden station. It was also the site of a National Foresty Program camp built in the 1930s and used later to house wartime conscientious objectors. The course was so successful and the site so perfect for training that the Parks Service chose Cuthead for a major one-week warden service refresher course in June. Twenty-four wardens attended the 1954 course that included preliminary instruction on mountain rescue.

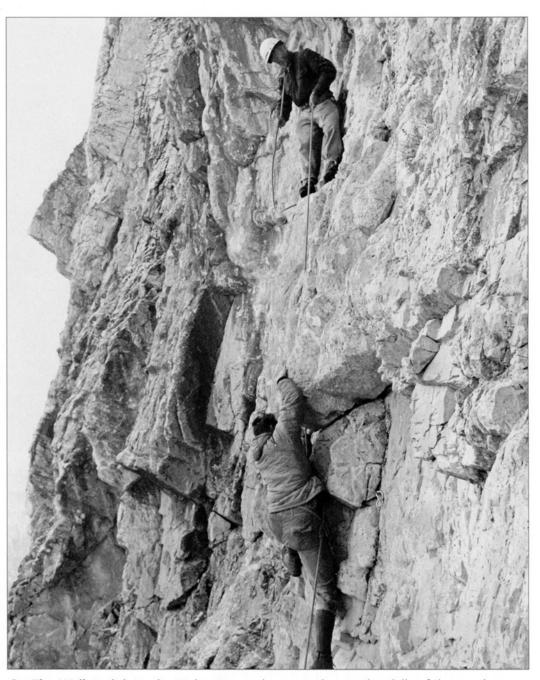
Walter Perren held his first course at "Cuthead College" in February of 1955. It included instruction in cross-country skiing, snowshoeing, ski patrol first aid, ski mountaineering, avalanche awareness and control, winter survival and mountain rescue. Perren had a lot of help with the course. Among those assisting him were warden Jack Pugh from Jasper, ski patroller Jim Innes and a newly arrived young Austrian climber named Hans Gmoser.

Perren and the park wardens were not acting in isolation. Soon after the winter course in 1955, park superintendents in Banff, Jasper and Yoho National Parks endorsed a joint mountain rescue

program to be created by Walter Perren. Perren offered the first summer climbing and rescue course in May of 1955, just in time for the terrible accident on Mount Temple. Though the coroner who presided over the inquest that followed accident found fault with the backcountry registration system, he held the parks service free of any blame in the accident. Though the park was found to be very efficient in its rescue efforts, Perren recognized the urgency of expanding warden service mountain rescue capability. Widespread media coverage of the accidents of 1954 and 1955 did not discourage people from coming to the Rockies to climb. The door to the high peaks was open. Park wardens needed training and equipment, and they needed them now.

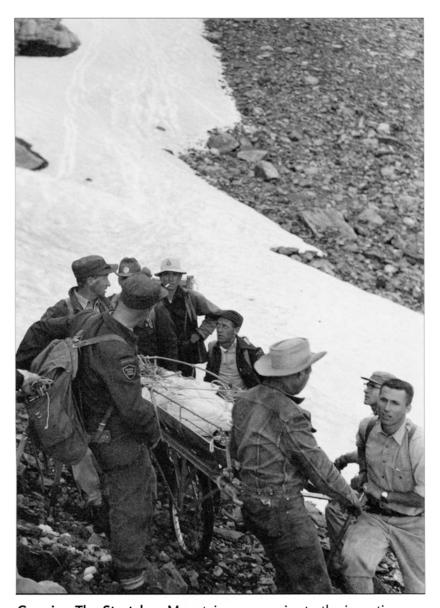
In the fall of 1955, Perren organized two six-day courses at

Cuthead College. In total, these courses were attended by forty-eight park wardens and Mounties, which at the time was the bulk of the warden service in the mountain national parks. A foundation for a new rescue capability was being laid down. Soon other courses were being offered in the field settings in which future rescues would be conducted.



On The Wall. It didn't take Walter Perren long to advance the skills of the warden service. Here we see him confidently belaying a somewhat less confident student at Cuthead College. *Photograph courtesy of Parks Canada*.

One story from this era is well remembered in mountaineering circles. When Perren began training park wardens in mountaineering, many of his students preferred the solid ground of the valley floor to the high and windy ridges Perren loved. Charged with giving these men the confidence and skills they needed to rescue experienced climbers when they got into trouble on the



Carrying The Stretcher. Mountain rescue prior to the invention and perfection of the helicopter was a labour intensive process. As this photograph of a rescue above Lake Louise implies, it took hours to reach accident sites and victims often died in the arms of wardens before they were able to reach medical help. Photograph courtesy of Parks Canada.

high peaks, Perren did his best to make what he was doing look easy. During training sessions, Perren inspired confidence and great respect with his own fearlessness. Walking with his hands in his pockets along the knife-edged ridge known as "the sickle" on Mount Victoria, he would encourage the reluctant cowboy climbers by yelling, "Stand up boys, you won't bump your heads, this place is so wide you could lead a cow across here." If you know this place, you will know that this is not quite so.

While principally responsible for the development of warden service mountaineering training, Perren also took it upon himself to test aspiring mountain guides. The very first parks service full mountain guide licenses Perren granted were to Bruno Engler and Hans Gmoser. Perren later encouraged Gmoser and other graduates of his training course to consider the creation of a mountain guide association responsible for its own guide training. The Association of Canadian Mountain Guides was formally created on May 23rd, 1963. This highly respected association now trains guides to the same standard that Walter Perren was trained. It now has 500 members, many of whom qualified as members of the International Federation of Mountain Guides Associations to work as professional mountain guides anywhere in the world.

The testing of mountain guides aside, Walter Perren and his rapidly maturing rescue team were kept very busy during the early years of the program's development. Between 1955 and 1960, there were twenty-one climbing related fatalities in the mountain national parks, including a dozen avalanche deaths. During this period, Perren explored the use of evolving mountain rescue technology including new cable equipment and the potential use of helicopters for certain rescue and recovery applications. The extent of the progress

Perren was making with his warden service rescue team became obvious during a daring and very dangerous rescue on the north-east face of Mount Babel in August of 1966. In that it marks the birth of modern mountain rescue in Canada, the story is worth telling in full. The following details were supplied by the official accident report filed by Wally McPhee immediately after the rescue.



The Famous Mount Babel Rescue. In August of 1966, Brian Greenwood and Charlie Locke got themselves into trouble on a very difficult route on Mount Babel. Walter Perren called for Jim Davies who ferried rescuers and equipment to a saddle above the climbers. *Photograph courtesy of Moe Vroom.*

The Mount Babel Rescue

On the morning of August 22nd, 1966, Wally McPhee was at the Lake Louise Warden Office checking climbing registrations. Two well-known climbers from Calgary, Brian Greenwood and Charlie Locke, had set out the previous day to attempt the unclimbed east face of Mount Babel, one of the most difficult remaining mountaineering challenges in the Canadian Rockies. As they were overdue, McPhee wondered if they might not be in trouble.

McPhee dispatched his assistant, Jay Morton, to determine if he could spot them with binoculars and then alerted the Banff Warden Office of a pending rescue. Morton reported by radio that he had spotted the climbing party about 500 feet below a saddle, about one half a mile to the north of the main peak, progressing slowly upward. As

the pair were still moving toward their objective, McPhee concluded that the climbers were simply behind schedule.

At 2:00 PM, McPhee got a phone call from the Texaco service station at Lake Louise explaining that they had just received a radio message from Moraine Lake Lodge claiming that a party hiking out of Consolation Lakes had heard faint cries for help from Mount Babel. Jay Morton was summoned again to determine the location of the climbers. He found them on a ledge about fifty feet below the spot he had last seen them. Though the distance was too great to communicate, it was clear they were calling for help.

Walter Perren arrived almost immediately from Banff and, quickly assessing the situation, instructed Jay Morton to take rolls of toilet paper to Moraine Lake with which to spell out a message to the stranded climbers. The message read:



Rescuing Charlie Locke. In one of the most famous rescues in the history of the mountain national parks, Bill Vroom plucked an injured Charlie Locke off a ledge and wardens reeled the pair up to the saddle where the helicopter waited to take him to the valley and safety. Photograph courtesy of Moe Vroom.

WAIT **HELP COMING TOP** A M

McPhee and Perren then canoed to the south end of Moraine Lake so they could examine the west face of Mount Babel to determine the best access route for the rescue team. Perren then sought authorization from the Park Superintendent to use a helicopter to affect the rescue. After returning to the Lake Louise Warden Office they were informed that a helicopter based in Jasper would arrive at 9:00 PM. A rescue party of ten and the helicopter were scheduled to begin the rescue operation at 5:00 AM the following morning.

The next morning men and a huge amount of equipment arrived at the parking lot at Moraine Lake in advance of the helicopter. Pilot Jim Davies flew Perren and warden Bill Vroom over the climbers to assess the situation. A landing site was chosen on the main peak and Perren and Vroom were dropped there to establish an anchor point. The next lift, consisting of Ed Carlton and John Wackerle, soon arrived with cables and drums. Perren and Vroom then proceeded to another anchor point where they marked the route for the follow-up parties. Fred Bamber and Wally McPhee then arrived with a second radio and more hardware. Two more lifts brought Keith Brady and Paul Peyto and then Andy Anderson and Bernie Schiesser and the balance of the equipment into position.

Walter Perren then supervised the establishment of the anchors so that Bill Vroom could be let

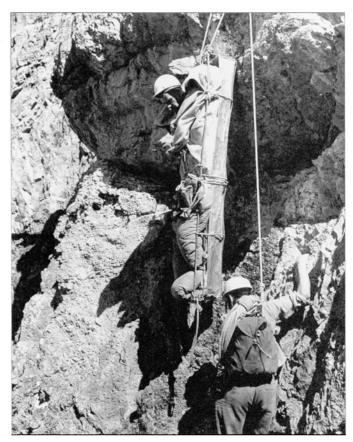
down by cable to determine the condition of the climbers and to establish the type of carrier best suited to bring them up to the anchor point on the saddle. Vroom disappeared over the overhanging cliff at 9:00 AM. At one point in the descent, Vroom called for much more speed in his descent. He was spinning wildly and needed to make contact with the wall in order to prevent blacking out. He soon made contact and a few minutes later was able to assess the situation. Vroom found himself about forty feet below the stranded climbers and about thirty feet north. He learned that Charlie Locke had suffered a broken wrist in a fall and was therefore unable to assist in the tension climbing required to either ascend or descend from the narrow ledge upon which they had spent the night. Vroom was concerned, however, about the rescue hardware. "We'd dropped guys with the cable system," he remembered later, "but we'd never lifted anyone." The pulley tripod, upon which Vroom was lowered, was manufactured in the early hours of the morning by Stan Peyto in Banff. Fortunately for Vroom, and for Locke and Greenwood, it worked perfectly.

It was determined that a Gramminger seat would be the best device for affecting a rescue and that the cable should be relocated so that Vroom could descend directly to the injured climber. After Vroom returned to the saddle, it was determined that the cable could not be relocated. Vroom was lowered again with the Gramminger seat and with food and water for the climbers. He was better able to control spin on the descent and soon had Locke firmly placed in the Gramminger seat. The cable was pulled up by hand using clamps called frogs. The two were soon on the saddle and Vroom returned for Greenwood. Both climbers were rescued by 2:00 PM.

After assisting Greenwood to the saddle, Vroom was nauseous from exhaustion and from all the spinning he had done in the morning. Eleven men had taken huge risks to save the two climbers. They, however, were at a loss to express their gratitude. Vroom stood up and, suddenly completely depleted, prepared to walk away. Perren materialized at his side, and said the only thing that could have mattered at the time as it came from someone for whom Vroom had limitless respect. "A fine chob, Billy—a fine chob."

Everyone was back in the parking lot of Moraine Lake by 4:00 PM. Perren considered the day an important one in the development of warden service rescue capability. History is a little more expansive in its praise for that day in that it recognizes that what happened on Mount Babel was the first helicopter assisted cable rescue ever undertaken in North America.

Walter Perren, sadly, would not live to see the benefits his hard work would bestow on the warden service or enjoy the heartfelt thanks of the thousands of people who lives would be saved through the competence of those he trained and inspired. A little more than a year after the famous Babel rescue, Perren died, unexpectedly, of leukemia. Though Peak Four in the Valley of Ten Peaks at Moraine Lake would later be named in his honour, he did not live to receive the recognition he deserved as the father of mountain rescue in the national parks. His legacy, however, lives on.



Mount Blain. Under Walter Perren's skilled instruction, the warden service moved toward greater technical competence in mountain rescue. He we see climber Gordon Crocker being lowered by improvised rescue method down a cliff face in a mine basket. Crocker broke his leg on Mount Blain in 1960. Photograph by Bruno Engler courtesy of Parks Canada.

At the time of the Babel rescue, Walter Perren held the position of Chief Warden of Mountaineering Services. The expanding popularity of mountaineering, combined with huge increases in mountain national park visitation made it clear that the parks service had to continue to develop its mountain rescue capability, not just in Banff but throughout the mountain parks. Following the death of Walter Perren, his position evolved into the roles of regional national park alpine specialists. Two of these positions were created and filled by two highly motivated but very different people. It could be said that Peter Fuhrmann and Willi Pfisterer had opposing styles. Though they didn't always agree on how to best advance the development of mountain rescue techniques, in



An Improvised Helipad. Gordon Crocker's accident on Mount Blain tested the ingenuity of the rescue party. The attempt to evacuate the injured climber by helicopter required that rescuers build a place for the machine to land. Reliable sling technology was still a decade away. Photograph by Bruno Engler courtesy of Parks Canada.

the end they managed through friendship and tolerance to create the most important thing they could have in common. Both contributed enormously to the development of Canada's elite national park mountain rescue program.

Willi Pfisterer

Like Walter Perren, Willi Pfisterer grew up in a family of climbers and mountain guides. Born in Mühlbach, a village near Salzburg, Austria during the Depression, he began his own climbing career by accident. A group of well-known Munich mountaineers climbing in his area left behind a piton that Willi decided to use to establish a belay station on the chimney of his family's house. When Willi leaned back to start the rappel,

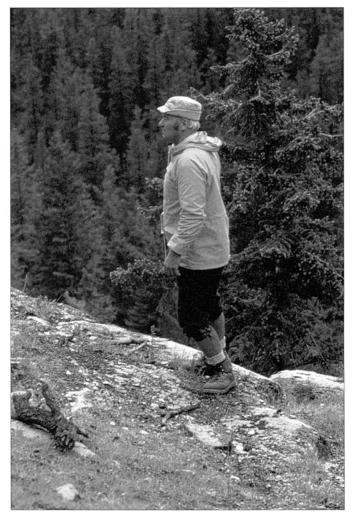
the piton popped out. He fell off the three-story house and landed backwards in telephone wires before bouncing off his grandmother's second floor flower pots and crashing into a shingle pile in the yard. Just like in the movies, a flower pot followed him to the ground and knocked him out. At eight, Willi knew he was a born mountaineer.

The tireless Willi climbed his first 3000 metre peak when he was only eleven. He also took up skiing in a serious way. Raised to compete in Nordik, cross-country and jumping, Willi soon became a champion. A member of the National Ski Team, he was ranked fourth in all of Austria when he decided to take a job teaching skiing in the Laurentian Mountains of Canada.

Willi and his partner Frank Stark arrived in Canada in the winter of 1955. They taught skiing until the spring of 1956, as was their plan, then drove west to see the Rockies where they got jobs working in the bush near Invermere, B.C. Later in the summer, Willi got a job wrangling and guiding with the legendary outfitter Bill Harrison, who was operating camps for American hiking groups out of Glacier National Park. That summer, Willi soloed Mount Sir Donald at Rogers Pass, his first Canadian mountain. One of Harrison's Glacier National Park trips later took Pfisterer up the Beaver Valley and over Duncan Pass where there was no trail. It was a large party and Willi was helping to wrangle twenty-eight horses. He remembers when the lead horses crossed the creek and charged up over a ridge before him. The wind was in their manes and tails. Behind them amidst the huge peaks that tower over Rogers Pass was the Great Glacier. The scene took Willi's breath away and he knew Canada would be his home.

Later that year, Willi decided that he would like to open a ski shop. On the advice of friends in Kimberley, Willi took a drive in his old station wagon to Jasper. There he chanced immediately on the president of the local ski club who suggested he open a shop in his father-in-laws former dental office on Connaught Street. Things moved quickly. Within a few days, Willi's Ski Shop opened in Jasper. As Willi says, "I couldn't speak English, I didn't have any money and I had never run a business like this." To the irrepressible Pfisterer, that meant he had everything going for him.

During the summers, Willi began guiding in the Jasper area. Focusing principally on Mount Edith Cavell and Mount Robson (Willi climbed Mount Robson seven times. One of the mountain's ledge systems is named for him.), Willi's guiding business quickly flourished. By the late 1950s, Willi was booked solidly from the spring right through to the fall. That Willi was clearly in the right place at the right time became more evident when, in 1959, Hans Gmoser invited him on the successful first Canadian ascent of the difficult East Ridge of Mount Logan, Canada's highest mountain. After returning to Jasper in the late spring of 1959, Willi celebrated the achievement with sixty ascents of mountains in the Jasper



Willi Pfisterer. A well respected skier and climber before he became an alpine specialist for Parks Canada in 1968, Willi was responsible for avalanche and mountain rescue training in Jasper, Mount Revelstoke and Glacier, Kluane and Nahanni national parks and Waterton-Glacier International Peace Park which straddles Alberta and Montana. Photograph by Gord Irwin.

area. Many of these were done in the company of Tony Messner, a local climbing legend from Munich who taught Willi a great deal about technical advances in mountaineering.

Willi then grew restless in Jasper. He sold his shop to guide Hans Schwarz and moved briefly to Kelowna where he helped established a ski school at Big White. He then moved to Penticton for a year where he operated a trucking business until a job he had been waiting for in Glacier National Park finally materialized. The job was



In High Places. Willi Pfisterer became famous for the training programs he offered on remote icefields throughout the mountain national parks. On these expeditions wardens would learn survival and rescue techniques while improving their skiing and climbing skills. Photograph courtesy of Parks Canada.

with the avalanche research and control team that had come into existence with the completion of the Trans-Canada Highway through Rogers Pass in 1961. He moved his family to Revelstoke and began to learn everything he could about snow.

It was while working at Rogers Pass that Willi Pfisterer began working with Walter Perren providing training at warden rescue schools for the region. Perren was particularly impressed with Pfisterer's skills in avalanche condition assessment and his ability to use explosives to trigger slides in controlled situations. When it became apparent to Perren that he wasn't going to recover from his illness he told Willi that he should apply for his job as the co-ordinator of mountain rescue and rescue training in the mountain national parks. Willi moved with his family to Banff to assume the role of acting assistant chief park warden in charge of the program while the parks service undertook a formal competition to fill Perren's vacant position. To his lasting surprise he came in third in the competition behind Fred Schleiss and Peter Fuhrmann.

It was immediately recognized, however, that more work needed to be undertaken in the region in the area of public safety than could be done by one person. A second position was quickly created, with an emphasis on snow and avalanche research and rescue training. The job was back in Jasper.

Pfisterer was able to move quickly in advancing warden service understanding of the dynamics of moving snow and how to rescue people trapped within. Much of what needed to be introduced in terms of preliminary technique and technology was already in use in Austria before he left in 1955. But then downhill skiing took off and the Icefields Parkway

and the Yellowhead Highway were opened in winter. Suddenly Willi found himself very busy. The training courses he offered were not confined to park wardens. Ski areas were interested in avalanche forecasting and control and so were provincial highway administrations. It was out of this expanded mutual interest in avalanche control that the Canadian Avalanche Association was ultimately born.

Pfisterer had to start at the beginning. One of the biggest problems he faced was that wardens did not have the equipment they needed to undertake even the most elementary mountain rescue challenges. Willi created a basic rescue equipment list and made sure every warden that received rescue training was personally issued exactly what was needed to respond quickly in an emergency. It was Pfisterer's philosophy that there were no heroes in a rescue situation. If it was deemed that the rescue leader had all the power to make decisions, then mistakes could be made. Willi felt it important that those risking their lives in a rescue situation feel comfortable questioning every action. Everyone had to work



Mount Logan. In 1973, Willi Pfisterer organized a high altitude mountain rescue school on Mount Logan. On the expedition were Art Cochrane, Abe Loewen, John Wackerle, Max Winkler, Bob Haney, Hans Fuhrer, Clair Israelson and Peter Fuhrmann. Though the team didn't reach the summit, it spent three weeks on the mountain mastering high altitude rescue techniques. Many of these climbers went on to make important contributions to public safety. In 2000, the Alpine Club of Canada presented park warden Hans Fuhrer with a special award honouring his lifetime contribution to mountain rescue in Canada. *Photograph courtesy of Parks Canada*.

together to make sure that the rescue attempt worked the first time.

Willi also used his sense of humour in the same way a skilled climber might use an ice axe. Once, climbing with Pierre Elliot Trudeau in Jasper, the Prime Minister asked him what he would do if the rope broke. "It's all right," Willi answered, "I've got another one at home." In teaching situations, Willi used dry wit to make important points memorable. On climbing trips, he kept everyone alert and focused by keeping them laughing. In rescue situations he used humour to reduce tension. Many of the wardens he taught still do the same.

There were also many others outside the warden service who were profoundly influenced by the mere chance contact with a man whose experience in the mountains demonstrated the kind of grace mountain travel could grant one over time.

By placing growing responsibility on those he trained, Willi was able to free himself to focus more strategically on the further development of warden service rescue capability. He was able to take wardens' training schools on bigger and bigger trips. He took training schools across the Columbia Icefield and up Mount Columbia. He developed an "eight pass route" in Jasper as part

of an intermediate winter travel course. On it he tested the endurance of wardens and the reliability of the equipment he issued to them. In 1973, Willi took a park warden expedition to Mount Logan to attempt the West Ridge. The team spent three weeks on the west side of the King Trench. During the entire period they only had two-and-ahalf days of good weather. Storm followed storm and it grew bitterly cold. Despite horrendous conditions, the party was able to reach 17,000 feet. It was a grueling test of men and equipment. Even though they were unable to make the summit, Willi was elated. He was proud beyond measure of his team and his fellow wardens. In his mind, they were the best team to have ever hit the mountain. Members of Willi's expeditions remembered and talked about these adventures for the rest of their lives. And not a one of them will ever forget Willi Pfisterer. His love of mountains, his public presentations, teaching skills, humour and pride in his colleagues made him a legend in mountain rescue circles all over Canada and throughout the world.

Willi Pfisterer was a man of action. During his career he estimates he climbed 1600 mountains and was involved in some 700 rescues. He did not like sitting in the office writing memos. He liked to be outside in real situations learning first-hand and teaching through experience and example. Willi claims that he was usually the guy in the field while Peter Fuhrmann did the paperwork and the selling of new ideas. This rather unique relationship was exemplified during the introduction of the helicopter to the park service mountain rescue program. Peter Fuhrmann had seen the concept applied successfully in Europe and wanted to try it in Canada. Fuhrmann sold the idea to national park managers and superintendents, and tested and perfected its applications. When it was discovered that some helicopter pilots were reluctant to sling people below their machines, Willi introduced a pilot program that continues to develop to this day.

Like Peter Fuhrmann, Willi Pfisterer also saw great advantage in the Canadian system of mountain rescue as practiced in the national parks. Willi felt that nationalism often stood in the way of technological and procedural progress in mountain rescue in Europe. If, for example, the Austrians developed a piece of hardware superior to what the Swiss were using, the Swiss would refuse to adopt it and vice versa. Membership in the International Commission of Alpine Rescue demanded, however, that no patents should exist for innovations in rescue technology. As a member of ICAR, Canada was free to examine the best technology developed in the world and find immediate application for it in the mountain parks. Willi Pfisterer examined everything that Europe developed and found ways to modify it to make it work in unique Canadian circumstances. These Canadian modifications, such as a special ice chisel Willi created to help free people trapped in the tight confines of a narrow crevasse, were often recognized by ICAR and adopted abroad. While Willi was very interested in equipment and technique, he never lost sight of the objective. Through his insight and vision, park wardens gradually became better equipped and better trained. Rescue times compressed from days to hours. Hundreds of people owe their lives to Willi Pfisterer and the men and women he trained.

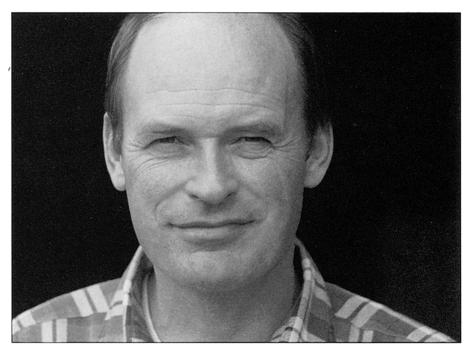
Peter Fuhrmann

In many ways, Willi Pfisterer's achievements parallel and mirror those of the man who he sometimes saw as a rival, Peter Fuhrmann. Not unlike Willi Pfisterer, Peter Fuhmann has lived through very interesting times. Born in Breslau in what was at the time East Germany in the tumultuous years of Nazi power leading up to World War II, Peter saw the worst of what war can be and was very nearly destroyed by it. Separated from his parents when the tide turned against Germany, Peter fled with his grandparents to Dresden where they experienced the most intensive fire bombing of the entire war. After the Russian invasion, Peter spent two and a half years behind the Iron Curtain in a refugee camp. It was here that the Russians killed one of his uncles. Shortly after his aunt took her own life.

Conditions were so desperate that Peter nearly lost a leg to infection. He was so malnourished and sick by the time he was re-united with his parents in Nuremburg in 1947, he was immediately hospitalized.

After recovering, resumed his education. After finishing grade school, he studied commerce for two years before taking a job with Shell Oil in Germany. Though Fuhrmann liked the work, he found the organizational culture in which he worked depressing. Many of the senior managers in the company were former Nazi army officers who were embittered because Germany had lost the war. In the meantime, Fuhrmann had met a very accomplished young climber named Heinz Kahl in a jazz bar Peter had helped establish in Munich. In the spring of 1955, they decided it was time to leave Germany and to sail to Canada.

After arriving in Quebec City, Fuhrmann convinced Kahl that their future might be brightest in Edmonton, at the time the centre of oil company activity in the West. Fuhrmann and Kahl took the train to Edmonton, but the promise of oil company employment did not immediately materialize. After working for several weeks at a berry farm outside the city, Heinz Kahl declared he had had enough of life without mountains and announced his plan to go to Banff. The pair hitchhiked to Canada's first national park and spent their first night in the mountains sleeping on a bench at Bow Falls. Desirous of climbing, Fuhrmann and Kahl stopped at Monod's on Banff Avenue to buy the hardware they needed to attempt a direct ascent of Cascade Mountain. Walking down Banff Avenue toward the peak they aimed to climb that day, they were picked up by the personnel manager for the Department of Public Works who suggested that if they wanted to work in Banff, they should report to his office on Monday morn-



Peter Fuhrmann. After working nearly a decade with the Department of Public Works in the mountain national parks, Peter Fuhrmann became an alpine specialist with Parks Canada in 1968. He was responsible for avalanche and mountain rescue training in Banff, Yoho, Kootenay, Cape Breton Highlands, Gros Morne, Auyuittuq, Ellesmere, Pacific Rim and Gwaii Haanas national parks. Peter is best known for introducing the helicopter sling rescue technique in Canada. *Photograph by R.W. Sandford.*

ing. Though they were unsuccessful in their attempt on Cascade, Fuhrmann and Kahl suddenly had prospects that would change their lives.

The following week, Fuhrmann began work as a surveyor at a camp below Castle Mountain. By the end of the summer, he had become the Regional Draughtsman for the Department of Public Works and moved his operation to a tent in a camp on the Banff-Windemere Highway. Things were suddenly looking up for Peter Fuhrmann.

A couple of years later, Heinz Kahl appeared at Fuhrmann's door with exciting news. He had just received his national park guide's license from Walter Perren. Peter and Heinz climbed a great deal together. Peter concluded that if Heinz could get a national parks guiding license then perhaps he could, too. Fuhrmann began climbing seriously. He climbed every chance he could get, even at lunchtime, with the goal of becoming tire-



Jim Davies. One of the most respected helicopter pilots in Canada, Jim Davies worked very closely with Peter Fuhrmann and the warden service to perfect helicopter rescue in the mountain national parks. Hundreds of people owe their lives to his skill and calm courage. Photograph by Bruno Engler courtesy of Parks Canada.

lessly smooth in his movements. At last, he felt ready to challenge the difficult test Walter Perren set for applicants seeking national park licensing.

In the summer of 1961, Fuhrmann made an appointment with Perren to take the test but when he arrived at his house he discovered that Perren was dealing with two rescues at once near Banff. Fuhrmann drove first to the trailhead to Mount Louis only to find that the rescue there had already been affected. He then drove to Castle Mountain where he found Perren in the midst of trying to bring a stranded climbing party down from what is now called the Eisenhower Tower. Perren, already two-thirds of the way up the tower, told Fuhrman to take the pack he had left behind and to haul it and himself to the top of the tower. When Peter arrived on the summit, Perren told him that this would indeed be an excellent opportunity to take his guide's test. If he could get one of the stranded climbers to the bottom of the route he had just climbed, he would be deemed worthy of wearing a guide's pin.

So it fell out that Peter Fuhrmann's national

parks guiding test was conducted on an actual rescue on Castle Mountain. He was successful in bringing his stranded client down to safety and a week later took a final test with Walter Perren on ice and snow at Lake Louise. During the test Perren asked one of his favourite guide questions. "What do you do when you are on the summit and you have a lady on the rope and she needs to pee?" he asked. "Do you let her off the rope?" Perren asked. "Naturally," answered, "You keep her on the rope and

turn the other way." Perren was satisfied and Fuhrmann got his guide's pin.

Some of Fuhrmann's first guiding jobs were with the Alpine Club of Canada which he joined in 1961. At one of the club's Annual General Mountaineering Camps, Fuhrmann met Jasper guide Hans Schwarz with whom Fuhrmann later guided as part of the Yukon Alpine Centennial Expedition in 1967. The following year, Fuhrmann invited Schwarz to join him and client Hugh Considine on an attempt of six and a half thousand metre Huascaran in Peru. Though they made the summit, there were problems on the descent and the climbers failed to return to base camp when scheduled. Bad weather followed and the climbers were reported as missing and then as dead. After finally making their way down, Fuhrmann called the Canadian Embassy in Lima. The Canadian Ambassador explained that he had two fully equipped helicopters being readied to affect a rescue. When Fuhrmann asked who was paying for the machines, the Ambassador answered that he had in his hands a blank



So Here We Go. After seeing how the system worked in Europe, Peter Fuhrmann returned to Canada to sell the idea to the parks service. At first wardens were very skeptical. It didn't take much imagination to know what could happen to a man flying under a helicopter in the mountains. Photograph courtesy of Parks Canada.

cheque from a woman named Catharine Whyte in Banff who promised to pay whatever it took to find the missing Canadian climbers.

Fuhrmann arrived back in Canada just in time to apply for the alpine specialist position that came into existence in the vacuum created by Walter Perren's death. In July of 1968, Fuhrmann was appointed Regional Alpine Specialist with responsibilities in Banff, Yoho and Kootenay National Parks. Willi Pfisterer of Jasper assumed similar duties in Jasper, Mount Revelstoke and Glacier and Waterton National Parks. Later Fuhrmann would also become responsible for rescue training in Cape Breton Highlands in Nova Scotia, Gros Morne in Newfoundland and Auyuittuq and Ellesmere Island in Nunavut and Pacific Rim and Gwaii Haanas in British Columbia. Meanwhile Willi Pfisterer became responsible for the development of similar programming in Kluane and Nahanni in the north.

Fuhrmann had been correct in predicting a rapid increase in the number of mountain rescues that would be taking place in the Rockies. While there were only three to date that year at the time he was hired in 1968, things quickly began to heat up. There were some fifty rescues in 1969 and more than 150 in 1970. By this time, Bill Vroom, John Wackerle, Jay Morton and other wardens already trained by Walter Perren were



Up and Away. In order to demonstrate the utility of the sling method to park wardens, Fuhrmann hooked up to the underside of Jim Davies' Bell 47 and flew around the Banff airport. He then had Jim deposit him on Cascade Mountain and then return to collect him. Suddenly all the wardens wanted to try it. Photograph courtesy of Parks Canada.

becoming very good at their jobs. The problem, however, was that there still weren't enough well trained wardens and mountain rescue still remained a demanding, dangerous and time-consuming proposition.

It was during this period of intense activity that Bruno Engler showed Fuhrmann a picture in a magazine published by the German mountain rescue organization of a man hanging underneath a helicopter. Fuhrmann was excited by the idea of this new rescue technique. While Parks Canada had lots of experience delivering rescue teams and equipment to accident sites, it had

never attempted to deliver rescuers directly to accident sites by a long line slung underneath a helicopter.

Helicopter Sling Rescue

In 1971, Fuhrmann visited Germany where he personally met the genius behind mountain rescue innovation in Europe, Ludwig Gramminger. Gramminger and Fuhrmann became fast friends. Later that year, Gramminger spent six weeks in Canada examining everything Canadians were doing in terms of mountain rescue. After Gramminger left, Fuhrmann called mountain rescue pilot Jim Davies, to share what he had learned. They met to examine the rescue seat, diagrams and photographs Peter had brought back from the Europe. They talked about what Gramminger had observed in Canada. Slinging a man underneath a helicopter was risky business but Davies was confident he could do it. Banff wardens, however, were justifiably skeptical. It didn't take them long to visualize the kinds of things that could go wrong while you were roaring down a mountain valley hanging from a hundred foot line underneath a helicopter.

In order to convince them of the utility of this new concept, Fuhrmann had Davies lift him three metres off the ground and put him down again. He then flew Peter around the Banff airport. Davies then put Fuhrmann down on a narrow ledge on Cascade Mountain. Peter unhooked and the helicopter flew away to return a few minutes later to pick Fuhrmann up and drop him back at the airport. The wardens were impressed. Suddenly everybody wanted to fly.

Jay Morton hooked up under the helicopter and they took off toward Banff. Morton asked Davies to fly him down Banff Avenue. And he did. The story goes that Park Superintendent Steve Kun was in his office with a group of senior officials when one looked up and exclaimed to the others, "Look, there's one of your wardens flying through the air, coming toward us." Kun was not amused.

Shortly after, Fuhrmann and Willi Pfisterer



Traffic Stopper. One of the first practical tests of the helicopter sling rescue technique occurred after a soldier in training was injured on Mount Edith near Banff. Bruno Engler was at the hospital when Jim Davies flew the victim in and set him down on a stretcher on the front lawn. It was suddenly clear that this system could save lives. *Photograph courtesy of Parks Canada.*

demonstrated the technique to the wardens in Jasper. The entire mountain parks rescue organization was suddenly supportive of the potential of this new technology to shorten the time it took to reach and evacuate stranded or injured climbers.

On the way back from Jasper, Fuhrmann found himself at the site of a difficult rescue that was taking place above Pinto Lake. A hiker had fallen nearly 200 metres down a chute and was badly injured. A rescue team was trying to keep him alive while a helipad was being constructed so that the man could be pulled off the mountain. The warden in charge, Wally McPhee, was doubtful there was enough daylight to affect a rescue and was fearful that the climber would die if forced to spend the night on the mountain. Fuhrmann had all the helicopter sling equipment

he needed with him and was able to convince a reluctant helicopter pilot that a new kind of rescue might be in order if the life of the injured climber was to be saved. Though far from perfected, Fuhrmann affected the first ever survival rescue with the helicopter sling technique in Canada.

Three weeks later, Fuhrmann and Jim Davies used the sling technique to rescue a soldier badly injured during climbing training on Mount Edith near Banff. But it was not without risk. Here is how Peter Fuhrmann described the details of this thrilling rescue:

So, Jim and I hook up and we fly in. He landed me, very nicely, at the spot where they're all surrounding this guy who's lying on the ground. So I said to Jim, bring in—we only had a mine basket



Mount Odaray. After a terrible accident near Rocky Mountain House, the parks service began including members of the Royal Canadian Mounted Police in their sling rescue training. The method is now used in mountainous regions everywhere in Canada. Photograph courtesy of Parks Canada.

then—the mine basket. Ok. so he comes back and gives me the mine basket, everything was fine. We put the guy into the mine basket, and I looked at Jim they hadn't even bandaged him, anything, he had a big hole in the head, skull fracture. And I thought, well, I'll just put a triangular over it, so the dust doesn't get in the brain, you know, to avoid brain damage. So anyway, all of this works quite well.

And then Jim comes on the radio and he says, well, you know, the bad news is I can't lift the two of you off together. And if he lifts only the stretcher off, the stretcher will start to rotate. So you have to have somebody on who sticks his feet out to act as a tail, you know, a fan. So I said, look, what we'll do is, just cruise around awhile and I'll talk to these guys here. So I told these guys, when Jim comes in, and he brings the line down, what I will do is I'll attach it to the main carabiner on the stretcher, and I'll hook myself on, but you guys all have the stretcher above your head, with the injured man in it. And then on the count of three, coordinated with Jim and the machine, you fire the stretcher out into space and I jump. That's what we did. Down the valley we go. Did we ever go down! And finally he got enough forward speed and everything, and we started to go towards Banff. So, then Jim comes on the radio and says to me, "Where do you want me to land?" I said, in the hospital yard-the old hospital-right across from the Park administration building. We land there, the machine come in, and believe it or not, they have a stretcher with white sheets-I'll never forget this—out in front. Bruno Engler took a picture of us coming in. We set our stretcher, the mine basket, right on top of theirs. The nurses took it straight in to Emergency. Steve Kun was stand-



Learning The Ropes. It took a great deal of training and practice to develop first-class mountain rescue capability in the mountain national parks. Here we see Peter Fuhrmann with Tim Auger, Trafford Taylor, Clair Israelson, Cliff White III and Jim Murphy resting on the Brewer Buttress on Castle Mountain. Photograph courtesy of Jim Davies.



The Avalancher. While helicopter sling rescue systems were making it possible to rescue climbers faster, advances were also being made in avalanche forecasting and control. He wardens under Pfisterer are experimenting with an avalancher. Left to right: Larry Harbidge, Willi Pfisterer, Hans Fuhrer, Peter Fuhrmann and Jim Davies. Photograph courtesy of the Whyte Museum of the Canadian Rockies.



Heli-bombing. Helicopters were also employed to trigger avalanches that threatened major highways. In this photograph, Peter Fuhrmann and Andy Anderson are making a 10 lb. bomb out of nitro canisters. This substance was considered a blasting agent and was therefore exempt from regulations prohibiting carrying high explosives in helicopters. Photograph courtesy of Parks Canada.



A Giant Six Gun. Parks Canada also worked with researchers to find innovative ways to remotely control major avalanche slopes. Left to right: Lance Cooper, Tim Auger, Earl Skjonsberg, Henning Sorenson, Keith Everts, two Defence Department research staff, Peter Fuhrmann. Today, such slopes are controlled by pre-planted charges exploded remotely by radio. Photograph courtesy of Parks Canada.

ing at the wrought iron gate across the street, watching. He never said a word.

Doctors later reported in letters to the park that the injurer climber would have died had he not been rescued quickly by that particular method. Helicopter sling rescue was suddenly in.

Up until the perfection of the helicopter sling method, mountain rescue could be a hit or miss proposition depending upon where the accident happened. Emergency calls usually came late in the day. It was often hard to reach remote areas in time to save victims. Wardens usually rode horses as far as they could and carried stretchers by hand. Often it was difficult to locate victims in the dark. Rescue parties would be forced to bivouac and would often not find the stranded or injured party until the following morning. Once located, the victim was put in the stretcher and hauled out. It often took a full day of pounding down hillsides to get to the trailhead and help. Wardens held the hands of many who died. It was sad, so sad. Suddenly, with the helicopter, it was possible to save people quickly and fewer victims died in the arms of helpless wardens.

In 1974, Fuhrmann and Pfisterer were able to encourage Canada to join the International Commission of Alpine Rescue. By doing so, the Canadian national parks system was able to keep up with continual advances in mountain rescue equipment, techniques and procedures. That same year, Peter Fuhrmann and Willi Pfisterer went to a major world forum on helicopter rescue techniques held in Czechoslovakia. Ludwig Gramminger also invited them to witness a helicopter sling rescue demonstration on the north face of the Eiger. Demonstrations were undertaken in dozen of helicopter models and a mindboggling range of new rescue equipment was displayed. Fuhrmann and Pfisterer discussed equipment and technique innovations with French and German helicopter pilots and rescue crews. They came back with dozens of new ideas.

It was also at this time that an ambitious new generation of park wardens began to excel in avalanche awareness and forecasting, mountaineering and mountain rescue. A few bright lights, like Trafford Taylor, Bruce McKinnon and Billy Moffat, didn't stay with the national parks service. Most, however, did. This elite group includes some of the best-known experts in mountain rescue in Canada today. Wardens of the calibre of Tim Auger, Clair Israelson, Gerry Israelson, Brad White, Gord Irwin and Marc Ledwidge became part of the rescue program in the early 1980s. They were well trained. Beside basic mountaineering, ski mountaineering, glacier travel and basic and advanced rescue training, newly hired wardens were also expected to become fully qualified in advanced wilderness medical techniques. It then became a virtual requirement for rescue leaders to become fully accredited mountain guides.

In 1982, Peter Fuhrmann hosted the first ever meeting of the International Commission of Alpine Rescue to have even been held in North America. Fuhrmann offers that until the Banff conference, most European rescue experts thought that Canadians walked around with an axe and saw and lived in the bush. Suddenly they saw that Canadians had a huge advantage over most nations in that the warden service, being uniformed and possessing law enforcement powers, could do within their own organization what it often took many agencies working together to do in other countries. In France, for example, ground rescues were undertaken by the French Alpine Club but they had to hire the Gendarmerie to fly them. In Germany, the Bergwacht conducted rescues but they had to rely on the army if they needed helicopter support. As helicopter support was contracted directly by the rescue agency, all the rescue team in Banff has to do is call Lance Cooper in Canmore, detail the rescue location and he picks the wardens up on the way to the accident site. The Canadian system means quicker response time and more lives saved.

When Peter Fuhmann retired in 1991he had been involved in more than 700 rescues. In retrospect, he felt his greatest achievement was to have followed in Walter Perren's footsteps in advancing the best equipment, most appropriate technology and the highest possible level of rescue expertise in the national park warden service. Those who followed in his footsteps would stay this same path.



Tim Auger. Tim Auger developed a reputation as a rock climber even before he joined the warden service part way through the summer of 1968. He would later become widely regarded as one of the most competent and experienced mountain rescue experts in Canada. Photograph by R.W. Sandford.

Tim Auger

Born in Vancouver, Tim Auger was already an accomplished rock climber by the time he was hired to work on the trail crew in Yoho in 1967. That summer he met park warden Sid Marty at Lake O'Hara and climbed with him for a week at the end of the season. After he graduated from university, Tim wrote a note to the park asking for a job. He appended a note to the application offering that if the park needed someone to do the kind of work Marty was doing at O'Hara, he'd be happy to do it. The park service examined Tim's resume carefully. They noted he was a volunteer member of the Mountain Rescue Association in Vancouver and had had search and rescue training and experience in the Lower Mainland. He returned the following year to work briefly on the trail crew before being seconded to work with the warden service for the rest of the summer at Lake O'Hara. Tim became a seasonal park warden in Yoho in 1969. Climbing when he could in Yosemite and at Squamish, he worked as a seasonal until the fall of 1974 when he was offered a full time job with the Warden Service in Banff.

The Warden Service into which Auger had been inducted was in a state of rapid transformation. Parks Canada had recently completed a full review of the Warden Service and had decided to centralize warden service functions in the mountain parks in established operational centres. The long-established tradition of omni-competent wardens working independently in assigned districts was about to come to an end. Instead of living in the backcountry, wardens would live in town and be assigned duties from cen-

tral office. The assignments would include new roles in scientific research and the development of functional specialization. Many wardens who had spent their lives under the old regime were angry and disillusioned. Many of the older ones were ready to retire. Many of the younger ones wondered if they could master the training they needed to function within new specializations. It was a time of change and opportunity.

Tim Auger recognized immediately that he was on the leading edge of the development of a new kind of warden service. Instead of being hired as a district warden, his duties were specifically related to what had been known during the Perren years as mountain rescue. This function now, however, was to be called public safety.

From his experience as a seasonal warden, Tim already recognized that more and more people were climbing and that the need for effective rescue was driving new approaches to solving rescue problems. Peter Fuhrmann and Willi Pfisterer made it clear to him that in the future alpine specialists like themselves would be doing fewer and fewer rescues. An elite corps of park



A Higher Calling. As helicopters became more powerful and reliable, and park wardens better trained, responsibility for mountain rescue passed from the hands of alpine specialists into the hands of public safety leaders in each of the mountain national park field units. Photograph courtesy of Jim Davies.



A New Role For Women. By the late-1970s more women were beginning park wardens. Many of them were excellent climbers who became competent mountain rescue leaders. Left to right: Peter Fuhrmann, Bill Vroom and Kathy Calvert. Photograph courtesy of Parks Canada.

wardens was to be trained to take over the search and rescue function in each of the mountain national parks. Tim Auger was ready to make a major contribution to the evolution of search and rescue expertise in Banff.

The most significant innovation in mountain rescue to come along in Tim's time was the helicopter sling technique introduced in Canada by Peter Fuhrmann. Tim had himself observed that climbers tend to find themselves on narrow ledges where helicopters, because of the diameter of their prop rotation, could not land. The advantage of the sling technique was that it allowed the helicopter to deposit a load-which could be equipment, a rescuer or a rescuer and a stretcher-at a place where the helicopter itself would never be able to go.

There were limits, however, to this early system. As initially applied, the technique required knowledge of how to operate winches that could allow a rescuer to step out of the moving machine and descend far and fast enough to be able to

reach an accident site compromising without the safety of the helicopter above. A great deal of experience was required to best determine the appropriate rope length and to calculate the swing of the rescuer as the machine approached the accident site. Winch techniques also had to be perfected to bring rescuers and victims back into the helicopter once the rescue was affected.

In the earliest years of experimentation with this technique, helicopters were not as powerful as they are today and pilots often had difficulty adjusting to the twisting action of a heavy load hanging from a winch out

of the side of the machine. There was also a problem with the winches. They were horrendously expensive.

Perfecting The Sling

Tim Auger remembers that Peter Fuhrmann and Jim Davies had come up with a more effective and far less expensive concept known as the fixed rope application. Their idea was to attach a hook to the gravitational centre of the helicopter to make controlling the helicopter easier. The load—a rescue party on a rope could then be attached to the hook. While this did not permit rescuers to fly in the helicopter until it reached the accident site, it did allow for rapid, effective drop-off and pick-up. The time that it took to affect a rescue dropped dramatically. In order to perfect the technique and to pinpoint potential problems, public safety wardens practiced slinging on a regular basis. As



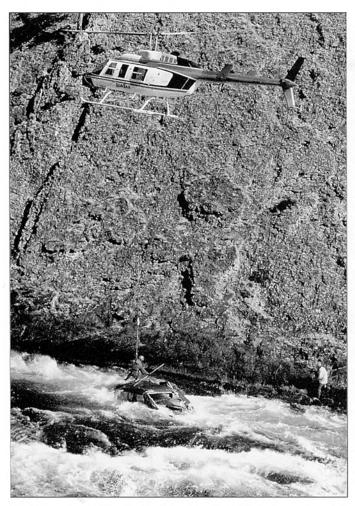
The Helicopter As Anchor. As everyone involved gained more experience and confidence, rescue teams were able to successfully improvise in difficult situations. In this 1976 rescue on Mount Yamnuska, Jim Davies used his helicopter as an anchor so that Peter Fuhrmann and his team could rescue an injured climber stranded all night on the Grillmair Chimney route. Photograph courtesy of Jim Davies.

Tim Auger explains, practice does ultimately make perfect:

So we were flying a fair bit and testing in practice situations. Initially, the system had the rope coming down from the helicopter. On the end was a big carabiner. You were wearing a climbing harness and when the helicopter flew over and brought the rope to you, the pilot didn't have to land for you to attach. He brought the rope to you until it was hanging above you. Your job was to take a hold of the rope and attach your harness to the end of it. Then you clipped the carabiner on your harness to the big carabiner on the end of the rope.

One day, the inevitable happened. Somebody got off the rope. Instead of just taking their carabiner on their harness and detaching it from the rope, they detached the big steel one as well. That meant that the rope now didn't have the carabiner on the

end. Jim Davies was slinging wardens one at a time up to a ledge on a mountainside. He didn't know that the carabiner had been taken off. The next warden he picked up was Jay Morton. The rope came to him and there was just a couple of loops of rope, and no carabiner. As he was a trainee he didn't recognize that this might be a problem. He clipped into the loops with his carabiner and Jim flew away. The trouble was that the carabiner hadn't made it all the way over the loop in the ropes. The little tooth on the edge of the gate on the carabiner just hung up on the rope and Jay Morton found himself a thousand feet in the air with his carabiner improperly closed over the rope. The helicopter carried him a thousand feet up onto Mount Rundle where he was dropped off. The solution proved to be fairly simple and that was to integrate a solid ring into the bottom of the rope. A huge, unbreakable steel ring was attached to the



Bridge Over Troubled Waters. The helicopter sling technique was also applied to water rescue. Here two park wardens search the wreckage of a car that found its way into Bow Falls. Fortunately, there was no one in it. Photograph courtesy of Parks Canada.

bottom of the rope and that is basically what we still use today.

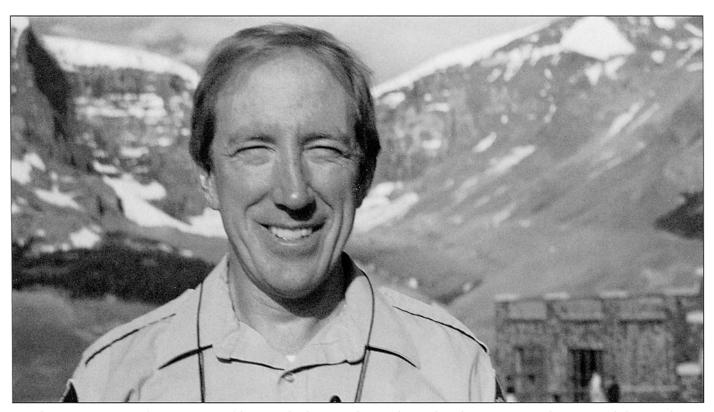
Essentially, what the warden service is using for sling rescue today is very similar to what was used twenty-five years ago. A static rope is attached to the bottom of a helicopter. It can't be raised or lowered except by moving the machine up and down. Since Tim Auger became a park warden, the technique has been used with greater and greater refinement. More and more wardens are proficient at it. Rescues have been made in places that would have been unimaginable to Walter Perren. Rescues have even been made, in ideal circumstances, at night. Thousands of lives have been saved.

Mountainous Rescue

The reliance on the helicopter demands a very close relationship between wardens and pilots. Even light helicopters such as the ones used in mountain rescue are very expensive to buy and operate. They can only pay for themselves if they are kept busy. As it was impractical and uneconomical for Parks Canada to buy a fleet of its own rescue machines, a special arrangement had to be developed with helicopter companies interested in supplying this special service to the mountain parks. The warden service was fortunate in the early years of developing helicopter rescue techniques to have a pilot of the caliber of Jim Davies operating out of the Banff area. Working in close association with Peter Fuhrmann, Davies pioneered many of the techniques that are in use today.

It was soon recognized, however, that a public tender process was going to have to be developed for the supply of helicopter services to the mountain parks. The last thing the warden service wanted was the contract to go to the lowest bidder without serious consideration given to high standards of mountain flying ability and rescue experience. The helicopter pilot test that Willi Pfisterer pioneered in Jasper became the basis for the standing offer agreement that exists today. The most experienced mountain pilots in Canada are on call around the clock. Accredited mountain rescue pilots include Lance Cooper, Cathy Moore and Paul Tigchelaar with Alpine Helicopters in Canmore, Don McTighe with Alpine Helicopters in Golden, Greg McColm and Lance Cooper's son Todd with Yellowhead Helicopters in Jasper, Clay Wilson with Bighorn Helicopters in Waterton and Matthew Callaghan in Revelstoke. In addition to fighting fires and hauling trail crews and supplies into the backcountry, these expert pilots undertake as many as 175 rescues a year in the mountain national parks.

Helicopter technology has improved dramatically since they were first employed in mountain rescue in the middle of the last century. They are still lightweight but they are more powerful and far more reliable. The efficiency of the helicopter



Gord Irwin. Born in Edmonton, Gord began climbing in the Rockies when he was 16. He later joined the warden service and in 1978 was assigned avalanche control and mountain rescue responsibilities at Lake Louise. In 1984, he became the third Canadian born park warden to earn ACMG accreditation as a full mountain guide. Photograph by R.W. Sandford.

and the expanding experience and competence of park wardens have revolutionized approaches to public safety in the mountain national parks. The old methods of search and rescue that relied heavily on horses and man-power are seldom used today. The helicopter is used for all manner of public safety related functions from evacuating backcountry hikers and horseman to rescuing stranding or injured climbers and avalanche victims. As Tim Auger says, it can hardly be called mountain rescue any more. Though less melodic, it is, in effect, mountainous rescue.

The expanding number of functions performed by public safety specialists in the mountain parks has demanded that separate units be established in areas of high visitor activity. Tim Auger heads the public safety group in the Banff field unit. Jasper has its own public safety section led by Steve Blake and Rupert Wedgwood. Eric Dafoe is responsible for mountain rescue in Mount Revelstoke and Glacier National Parks and

Brent Kozanchenko heads the public safety team in Waterton. The greatest amount of rescue activity, however, takes place in the Lake Louise area. Like Tim Auger, the head of the public safety function for the Lake Louise, Kootenay and Yoho National Park field unit is a man with a lot of experience.

Gord Irwin

Gordon Irwin grew up in Edmonton and began his national park career in Jasper in 1969 on a campground cleaning crew so he could be in the mountains. He then worked as a naturalist in Yoho before returning to Jasper to work as a naturalist at the Columbia Icefield in 1974. As his work involved taking visitors onto glacier ice, Irwin took courses in crevasse and rope rescue and in helicopter sling techniques with the Jasper warden service. Already an avid climber, Irwin



Ice Climbing. Advances in mountaineering techniques and equipment and the growing popularity of activities like ice climbing have demanded that park wardens constantly upgrade their skills. Photograph by Brad White courtesy of Parks Canada.

took a great interest in mountain rescue and took advantage of every opportunity to learn more. Two years later he joined the warden service. After working for a year in Jasper and a year in Pacific Rim, Irwin was transferred to Lake Louise to work in avalanche control and search and rescue.

During the early years of Irwin's career, alpine specialists Peter Fuhrmann and Willi Pfisterer were still coordinating all the public safety training in the mountain national parks. As part of this training they were encouraging and supporting park wardens who wanted to become full mountain guides. In a very real sense, Peter and Willi were trying to do themselves out of a job. They held the view that the superior training offered by the Association of Canadian Mountain Guides would qualify wardens to ultimately coordinate rescue activities on their own without the help of alpine specialists.

Tim Auger was the first park warden to become a full guide. The next to achieve full guide status was Clair Israelson. Gord Irwin became a full guide in 1984. The next warden after Gord to earn full guide status was Gerry Israelson. The core of the next generation of mountain rescue expertise was now in place. Since then, other wardens have earned full ACMG guide status. These include Marc Ledwidge, Brad White, Percy Woods, Steve Blake and Sylvia Forest. Young wardens of the next generation are already lining up to earn this prestigious accreditation.

Gord Irwin's job as public safety specialist is to offer regular training so that there is always a sufficient pool of qualified wardens to perform the wide range of duties demanded by the public in the mountain national parks. This includes everything from first aid required by injured hikers, cyclists and climbers as well as tending to people injured in motor vehicle accidents. Gord is also responsible for developing overall mountaineering skills in the warden service which includes ice climbing, rock climbing, general mountaineering and skiing. Gord does everything he can to create an environment in which those who show initiative can develop these skills to the highest possible level. Like the public safety lead-

ers in other field units, Irwin also performs a leadership role during actual rescues.

Omni-Competence

Irwin also has to find time to continually develop his own skills and to plot advances in technique and technology associated with every aspect of public safety. This is a wide-ranging responsibility. There are a lot more visitors in the Lake Louise field unit than when Gord Irwin started working there in 1978. Visitors don't just get into trouble on mountains. Though they enjoy the highest profile, mountaineering and rock and ice climbing accidents now account for fewer than 20% of all rescues. Fortunately, for Irwin and his colleagues technology is making it possible to do a great deal more in less time. The use of radios, cell phones and now satellite phones by climbers has greatly reduced response times. Walter Perren would be delighted to know that the warden service public safety units in Banff and Lake Louise now regularly conduct rescues in less than one hour. Yes, that's one hour from the time the wardens service receives the call to when the injured party is set down at the hospital. This extraordinary service costs about a nickel for each visitor that passes through the park gate.

Gord Irwin believes that one of the most important developments to have taken place in the warden service during his career relates to the wide range of upgraded skills that wardens now possess. This is how Irwin explains it:

I think the great attraction of working in the warden service is that it is a broad-spectrum group that brings together a lot of skills that are interrelated and intertwined. If you're good at public safety, for example, you've got good travel skills. You've usually got good intuitive skills. You can think on your feet and usually you're well organized. So, that in turn relates to law enforcement situations where you have to be able to observe, to think on your feet and be organized. It also relates well, I think, to resource management skills where you're working with wildlife. You want to be trained and prepared if you are going to deal with animals



MT. COLUMBIA SUMMIT 100TH ANNIVERSARY WARDEN ASCENT L-R: BEN ALDERMAN, CLINT JOHNSTON, RON LEBLANC, MIKE GRANDE, LISA PAULSON, ROSS GLENFIELD, JIM MAMMALIS, GARTH LEMKE INTERNATIONAL YEAR OF THE MOUNTAIN 2002

United Nations Celebration. As part of the United Nations International Year of Mountains celebrations in 2002, nine wardens made the centennial ascent of Mount Columbia in the Columbia Icefield. Photograph by Brad White courtesy of Parks Canada.

like bears. There is a very good mix of skills within the warden service.

When it comes right down to it, there are very few specialists in the public safety function of the warden service. We rely almost totally on the greater skill pool in the rest of the warden service to assist in searches and in rescues. It's a symbiotic relationship that works well for everyone. If we've got people that are out tracking wildlife and working with wildlife or out doing forestry related work, generally speaking they're fit. They've got a good idea about to how they have to dress and move and behave. With training they become the best people to do rescue work because they're used to working in a team and they're available.

The system we have now says a great deal

about the overall competence of park wardens. We have wardens now that can be working with horses in the morning, dealing with bear jams or some other type of problem with wildlife at lunchtime and then be called to an alpine rescue in late afternoon. And they can do all of those jobs well.

In many ways, the warden service has returned to what it was before centralization in the early 1970s. Wardens are once again generalists, but possess a much higher level of expertise than ever before. It is this overall competence manifest in public safety that has established the outstanding reputation of the warden service in Canada and abroad. Canadians should be very proud of Canada's elite national park mountain rescue program.

THE HIGHEST (ALLING

Canada's Elite National Park Mountain Rescue Program



"The Highest Calling" celebrates the role that Parks Canada has played in the shaping of Canadian culture through the development of its internationally respected mountain national park rescue program.

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For further information regarding The Summit Series of mountaineering biographies, please contact the National Office of the The Alpine Club of Canada.

