

slings. It is not known what kind of knot was used, but it came undone, causing the fall. (Source: M. Ledwidge, Banff National Park Warden Service)

## **FALLING ROCK**

### **Alberta, Rocky Mountains, Ice Caves**

On July 6, 1989, around 1600, three climbers were scrambling on easy rock at the entrance to ice caves near Bragg Creek. One of the climbers was on an exit crack to the ice caves when a rock formation collapsed on top of him. He suffered massive and fatal injuries. (Source: George Field, Alpine Specialist, Kananaskis Country)

## **Analysis**

Many people have scrambled at the same location without incident. The accident has to be considered an unfortunate act of nature. (Source: George Field, Alpine Specialist, Kananaskis Country)

## **SLIP ON ICE AND SNOW, INADEQUATE EQUIPMENT, INEXPERIENCE**

### **Alberta, Rocky Mountains, Mount Joffre**

On August 6, 1989, a party of three (early 20s) was climbing ice and snow on the north face of Mount Joffre. They were roped together, using ice screws for protection. About 1600, the leader slipped, and pulled the other two off the face. They tumbled out of control 180 meters to the Magin Glacier below. One climber suffered injuries to his left ankle and knee, and the others had only abrasions. Park rangers evacuated them by helicopter at 2000 and took one of them to hospital. (Source: George Field, Alpine Specialist, Kananaskis Country)

## **Analysis**

The climbers were using stubby ice screws for belay. Considering the condition of the ice and snow, they should have been using ice screws 20 centimeters or longer, or else a deadman anchor. The party did not have enough experience to make these decisions, and although they were using ice axes, they were unable to make a self-arrest. (Source: George Field, Alpine Specialist, Kananaskis Country)

## **FALL ON ROCK, INADEQUATE PROTECTION**

### **Alberta, Rocky Mountains, Mount Rundle**

On August 11, 1989, about 1400, Mark D., a very experienced climber, was leading the fifth pitch of a route called Dropout on the east end of Mount Rundle. He pulled out a large block, which caused him to fall about 25 meters. His belayer held the fall. However, Mark was seriously injured, with a pelvis cracked in six places and a broken heel. His belayer tied Mark off and rappelled down the face to summon help.

A rescue was required high up on difficult rock, and darkness was approaching. Beginning at 1830, rangers were slung by helicopter with rescue gear to a ledge approximately 20 meters above the climber. One ranger descended to the climber and applied first aid. Meanwhile, a long sling was assembled, attached to a cascade toboggan, and taken from the ledge down to the injured climber. At 2135 he was flown

off in the toboggan and taken to hospital. (Source: George Field, Alpine Specialist, Kananaskis Country)

### **Analysis**

The fall was a long one. Protection placed more frequently would have resulted in a shorter fall. (Source: George Field, Alpine Specialist, Kananaskis Country)

## **FALL INTO CREVASSE, CLIMBING ALONE, INADEQUATE EQUIPMENT**

### **Alberta, Rocky Mountains, Crowfoot Mountain**

On August 13, 1989, F.E. (58) was hiking up Crowfoot Mountain. At 1100, he was ascending the small, relatively snow-free glacier on the West Face of the mountain. He stepped onto a snow bridge and fell about ten meters into a crevasse. His fall was stopped by a small snow bridge, which prevented him from landing in the water pooled at the bottom. Although uninjured, he did not have crampons, ice ax, or any other tool with which to extricate himself.

F.E. was located by helicopter 55 hours later by a Parks Service rescue team after a long ground and aerial search. Shortly after he was found, a major snow storm came in which would have made any further searching impossible. (Source: Banff National Park Warden Service)

### **Analysis**

Traveling alone on any glacier, no matter how harmless in appearance, is a questionable practice. F.E. was an experienced mountain scrambler, whose practice of carrying lots of extra clothing and food undoubtedly saved his life. (Source: Banff National Park Warden Service)

## **STRANDED, CLIMBING ALONE, INEXPERIENCE**

### **Alberta, Rocky Mountains, Cascade Mountain**

On September 21, 1989, a lone scrambler started climbing up the southeast face of Cascade Mountain. The terrain is complex and is third and fourth class. He turned around before reaching the summit, but could not retrace his steps on the way down. He started down a gully, and after a short fall, became stranded on a large chockstone in the gully. He spent two nights there before being reported overdue by friends who arrived at his house for a party which he was to be hosting. The next morning (September 24), Park Wardens found him, lowered him, and slung him out by helicopter. (Source: M. Ledwidge, Banff National Park Warden Service)

### **Analysis**

The stranded climber did not leave any reliable information as to where he was going, and he did not take the standard route to the summit of Cascade. It took a lot of investigation as well as the location of the victim's bicycle at the base of the ascent route to determine his location.

Obtaining better route information could have prevented the accident. (Source: M. Ledwidge, Banff National Park Warden Service)