They ascended the tongue of the Athabasca Glacier in a storm with poor visibility, and covered only four kilometers the first day. They moved farther the next day, stayed in camp two days, moved further up the icefield to the Mount Castleguard area, and spent another two days in camp during poor weather. The party realized it was off route. On March 23, two of the members went out scouting a short distance, and found that they were too far west. About 1300, as these two were skiing back to the others, the snow gave way under the lead skier, and he disappeared into a crevasse through a newly-formed 10 by 20 meter hole. The second skier, who had fallen close to the edge, called into the hole but received no reply. He rejoined the others, but they had no rope, and had no way of attempting a crevasse rescue.

The remaining party marked the site with a shovel, waited until the weather cleared a little, then skied to the toe of the glacier, arriving at 1700. The Jasper Park Warden Service sent in a rescue helicopter, which picked up one of the skiers to help find the accident site, and dropped a rescue crew just before dark. After searching through large blocks of ice and hard snow, the rescue crew dug out the victim's dead body about 2200, and had it on the surface of the glacier an hour later. The helicopter evacuated the party the next morning. (Source: Jasper Park Warden Service)

Analysis

The skiers apparently did not understand that crevasses should be expected, and were unprepared for them. All of the party were experienced ski tourists, but only one, the victim, had traveled on glaciers before. It is not known whether he had been exposed to the techniques of safe glacier travel. (Source: Jasper Park Warden Service)

AVALANCHE

Alberta, Rocky Mountains, Mount Deltaform

On March 31, 1984, two climbers (in their 30s) planned an early-season ascent of the difficult couloir route on the north face of Mount Deltaform. They skied to Moraine Lake, bivouacked, and began the climb early on April 1. At the top of the main couloir, nearly 600 meters up the face, they were hit by an avalanche from higher on the face. Both men were swept to the foot of the mountain. Neither man was completely buried by the snow. One was killed, probably during the fall, and the other suffered a fractured arm, shoulder and nose, and a crushed spinal vertebra. He managed to struggle one kilometer back to the bivouac site and get into his sleeping bag before seizing up with pain.

The next day a passing ski party discovered him and sent for help. (Source: Banff Park Warden Service)

Analysis

The deceased climber had several years of climbing experience and was known to be ambitious and aggressive. He had some previous experience in the Canadian Rockies, mostly in the summer.

An ascent of this route is considered difficult even in good conditions. On this occasion, the area had been subjected to sporadic snowfalls during the previous week. The victim undertook the climb the day after arriving in the area against the advice offered by the Lake Louise Warden Office. The survivor was doubly lucky to

survive the fall and also to be found the next day, as there is usually very little passing traffic at that time of year. (Source: Banff Park Warden Service, Western Region)

FALL ON SNOW, SKI MOUNTAINEERING Alberta, Rocky Mountains, Peyto Glacier

On April 15, 1984, in Banff National Park, a party of six ski mountaineers traveled from the Icefield Parkway, via Peyto Lake, to the Peter and Catherine Whyte hut at 2500 meters on the Peyto Glacier. The group was equipped with light touring skis, overnight camping gear, and glacier travel equipment. At 1830, after dinner, the group decided to go for one last ski. One member of the group (53) fell just below the hut and broke her ankle. The other members of the group administered first aid and took her up to the hut where they spent the night. The following morning two of them skied out and reported the accident to the Lake Louise warden office. The rescue team evacuated the victim by helicopter. (Source: Banff Park Warden Service)

Analysis

The victim was experienced, having been ski-mountaineering and touring in the Rockies for 15 years. A last ski run after dinner after a strenuous day may not be a good idea. Prudence is required in a place where rescue is possible only over difficult terrain or by air. (Source: Banff Park Warden Service)

RAPPEL ANCHOR FAILURE, INADEQUATE EQUIPMENT Alberta, Rocky Mountains, Medicine Slabs

On June 10, 1984, two climbers (24 and 28) left Jacques Lake picnic area in Jasper National Park at 0500 intending to traverse the ridge of Medicine Slabs to its high point and then to descend the north side of the ridge to Summit Lake. They had both climbed for four or five years, sometimes together.

The descent began in mid-afternoon with a series of rope rappels. They found it difficult to find solid rock for conventional rappel anchors, and placed bolts on at least two occasions. Around 1900 they began their fourth rappel. The first man completed the rappel, set an ice screw into steep snow and ice for self-protection, and clipped in. When the second climber was half-way down, his rappel anchor failed. He fell onto the lower climber, knocking him off his stance, and pulling out the ice screw. Both climbers tumbled down 250 meters. On the way, they triggered an avalanche, but somehow did not become involved with the moving snow.

The climber whose rappel failed received head injuries, possibly a fractured cheek bone, and injuries to his left elbow, his ribs, and his left ankle. The other received bruises and scrapes and had lower back pain. Both men walked down the avalanche slope, but at 1600 meters elevation, the less injured climber continued alone to the parking lot and drove to Jasper to report the accident. (Source: Jasper Park Warden Service)

Analysis

The primary cause of the accident was rappel anchor failure. Back-up anchors were not used. The equipment and clothing carried by the climbers were adequate. (Source: Jasper Park Warden Service)