In the fall, John lost one crampon and would have lost his ice ax if he had not had a leash. Without his remaining crampon and ice ax, I am convinced I would not have pulled him out of the crevasse. (Source: T. J. English, Hopewell, NJ)

FALLING ROCK

British Columbia, Coast Mountains, Mount Waddington

On September 13, 1989, Richard Thomas (35) was ascending a steep snow gully at 1980 meters on Mount Waddington with two companions when a large falling rock struck him on the head, shattering his helmet and inflicting fatal injuries.

His two companions descended to lower on the mountain where three other members of the expedition were camped. They stamped out an "SOS" in the snow. This was spotted the same afternoon from a passing aircraft. A helicopter flew in that evening, but was unable to reach the victim. The five survivors were flown out the next day by helicopter, and Thomas' body was recovered one day later by North Shore Rescue members. (Source: Ian Kay, West Vancouver, BC, from press reports)

Analysis

This appears to be the sort of accident that could only have been avoided by staying off the mountain. Falling rock is a constant hazard on Waddington, and it is not clear from the information available whether another route might have been practical and safer. The party was fortunate that its distress signal brought such a quick response. (Source: Ian Kay, West Vancouver, BC)

SNOW BRIDGE COLLAPSE, FALL INTO BERGSCHRUND, UNROPED, NO HARD HAT

British Columbia, Coast Mountains, Mount Tantalus

On the morning of August 5, 1989, 18 members of the North Shore Rescue Team were beginning a three-day training exercise in the Mount Tantalus area. Bob McGregor (28) and Darrell Freeman (25) were approaching the bergschrund at 1980 meters at the west foot of the gully leading to the Tantalus–Dione col. They were unroped. The snow collapsed under McGregor and he fell and slid 35 meters into the bergschrund, sustaining massive head injuries.

Freeman immediately rappelled into the bergschrund for the full length of his rope, but could neither reach bottom nor locate McGregor. He jumarred out and went for help, but over two hours elapsed before another party could reach the scene. A further three and a half hours were needed to give first aid and raise McGregor to the surface, by which time hypothermia was added to his other injuries. A helicopter previously summoned by cellular phone flew him to the Squamish hospital, but he died shortly after arrival. (Source: Ian Kay, West Vancouver, BC)

Analysis

Bergschrunds, like any other crevasses, must be approached with extreme caution. A hard hat would have mitigated the victim's injuries and might have saved his life. Valuable time might have been saved if both men had been provided with two-way radios. This is perhaps a counsel of perfection, but as it was, the pair's one radio went into the bergschrund with the victim. The principal lesson from this tragedy is that it

happened despite the proximity of a large, well trained and equipped rescue team. (Source: Ian Kay, West Vancouver, BC)

FALL ON ROCK, INADEQUATE PROTECTION Ontario, Buffalo Crag

On April 30, 1989, at 1550, Larry Forsyth was leading Flying Kiwi (5.8). He placed four pieces of protection on the route, including two #6 rocks (sic) just below the crux move. Attempting the crux, he fell, and the two rocks (sic) pulled out, resulting in an eight-meter fall to the ground, with a possible mid-way ledge encounter. Larry landed on his side and buttocks, sustaining a fractured lower lumber vertebra. (Source: Larry Forsyth)

Analysis

Protection would have been better with larger rocks (sic) and perhaps with one more piece lower down. The climber was lucky to land on relatively flat ground between a sharp rock and a tree stump. Though not sustaining head injury, he should have worn his helmet. He was very fortunate to have three good climbers with first aid training in close proximity. They stabilized him to prevent further damage. (Source: Larry Forsyth)

(Editor's Note: We are not aware of "rocks" being manufactured in different sizes to be used for protection. We think the climber means "chocks.")

FALL ON ROCK, CHOCKS PULLED OUT

Quebec, Gatineau Park Escarpment

On May 14, 1989, Henry Marsden (25) was leading a 5.10b route up a thin crack in the 'Ron and John' cliff. The lead was protected by five wired chocks: R.P.s and taper locks. At the top, about 12 meters up, he fell. As the rope tightened, it pulled out the chocks starting from the bottom. Then finally when the top piece pulled out, there was no backup protection, and he fell to the ground, where he suffered a fractured sternum and strained back muscles. (Source: Henry Marsden, Ottawa)

Analysis

Zippering is caused by the inability of ordinary chocks that are placed for downward loading to withstand an outward pull. In principle, a remedy would be for the belayer to sit closer to the rock face, but in this case, he was already closer than two meters, and it would have been difficult to do better. Zippering could be prevented by placing a camming device at the bottom of the climb, one that would not pull out sideways. Another possibility is to climb on two ropes, alternately clipping into each one, so that only half the runners would be pulled outward. (Source: Henry Marsden)

FALL ON ROCK, CLIMBING SOLO, NO HARD HAT Quebec, Charlevoix Mountains, Mont du Gros Bras

On September 3, 1989, at 1645, Alain S. (29) was climbing solo on Hallunbeinbrunch,