

## **VARIOUS FALLS ON ROCK, INADEQUATE PROTECTION**

### **Wisconsin, Devil's Lake State Park**

Six rock climbing accidents were reported in 1989. Four were solo climbers, and three falls resulted in serious fractures. The other two falls were not adequately protected either, and one resulted in a fractured femur. (Source: Devil's Lake State Park, Visitor Accident Reports)

## **FALL ON SNOW, UNABLE TO SELF-ARREST**

### **Wyoming, Tetons**

On July 6, 1989, Ralph Trover (40) and Joe Kelsey (50), Exum Mountain Guides, successfully took clients Tamara Martin and Wesley Jones up the Grand Teton. At 1800, the four were descending the steep snowfield on the Lower Saddle headwall. Kelsey was going first down the snow, followed by Jones, then Martin, with Trover last. The snow was soft. The entire party was roped, with short sections of rope separating each climber.

Martin fell and was unable to self-arrest using her ice ax. The momentum of her fall jerked the other members of the rope team off their stances. Despite the experience of the guides, no members of the party were able to stop the simultaneous slide of the rope team members. All slid a hundred meters down the snowfield until the angle of the snow diminished where the snowfield intersects the Middle Teton Glacier. Kelsey sustained a fracture/dislocation of the left ankle in the fall, Trover was uninjured, and Martin and Jones received slight abrasions. Trover ran out to the trailhead to report the accident, and a helicopter evacuation was completed that evening. (Source: Peter Armington)

### **Analysis**

We are again reminded of how quickly speed, and thus force, can build up in an uncontrolled glissade. The experienced leaders, even though properly positioned, could not arrest the fall. The soft snow conditions probably contributed to this. (Source: J. Williamson)

## **FALLING ROCK, WEATHER**

### **Wyoming, Wind River Range, Mount Warren**

On July 24, 1989, National Outdoor Leadership School leader Phil Peabody set out at 0620 with three students, David Black (24), Justin Burchett (16), and Rob Hirschfield (20), to attempt Mount Warren via the Northeast Couloir—the Spider Couloir. After gaining the North Ridge at 1600, Peabody decided to descend due to approaching weather and the time of day. He descended the third class west side for about 120 meters to a ledge 90 meters above Pinnacle Couloir. Here he set anchors in order to begin lowering students about two rope-lengths over steeper rock to attain the snow couloir and then descend the snow to Dinwoody Glacier.

At 1700, Dave Black was lowered first because of his previously displayed good judgment. He was told to kick off loose rock, which he did. He stopped 35 meters down on a protected ledge six meters wide and well to the side of the fall line. Burchett was lowered next at 1705. At 1712, Hirschfield had been lowered about five meters when

a rock the size of a watermelon was dislodged by his foot. He yelled, "Rock," to warn his fellow students. The rock hit Black on the head after bouncing off and deviating from the fall line. Peabody quickly lowered Hirschfield the rest of the way, then rappelled and climbed down to the ledge. He spent the next 20 minutes stabilizing Black and preparing to descend with Burchett. His decision to leave for help was based on the facts that Burchett and Hirschfield would not be able to descend to camp safely, and that he needed to organize and facilitate efforts. Hirschfield also had knowledge of CPR and first aid.

Peabody and Burchett returned to camp about 1915, and a plan for rescue was established. One instructor and two students would be runners to go to the road to call NOLS and request help. Another instructor would return to the accident site with three students. Peabody would write an evacuation report, then, with the remaining six students, would become a support party behind the hasty team. The weather had become very violent—thunderstorms, lightning, rain, and hail.

The 40 kilometer trip to the road was made more difficult by swollen rivers which had to be crossed. Arrival at the roadhead is not until the next morning at 0845, and about 0930, a phone call became possible.

The rescue team reached Hirschfield on the ledge about 0620. He reported to them that Black had died at 0510. Evacuation for Hirschfield and Black's body to Doublet Bowl below Pinnacle Couloir was completed by 1115. By 1400, a helicopter was able to long line the body to the lower glacier, then take it by litter to Lander, WY. (Source: From a report log prepared by NOLS instructors)

### **Analysis**

An inquiry committee, consisting of Dr. David Bachman (Chair), Sheriff William Gardner, Lt. Gen. (Ret.) Jack May, Al Read and Jed Williamson reviewed the accident, including materials requested, interviews, and a site visit. The observations which pertain directly to this accident are excerpted as follows:

*Difficulty of Objective* - Mount Warren is not considered a difficult mountain. It was an appropriate objective considering the training of the students and the period of time they had been in the field.

*The Route* - The ascent route (the "Spider Couloir") is, in July, a moderate snow climb. (Later in the year it may be an ice climb.) Again, considering the training of the students, it was a reasonable ascent route. Four or five moderate snow leads end in fourth or easy fifth class climbing to the summit.

*Size of Party* - Considering the route and the mountain, the guide-to-student ratio was in keeping with prudent guiding standards.

*Timing* - Leaving camp on the Dinwoody moraine about 0615 is a sufficiently early start for this climb under conditions existing at the time.

*Descent Route* - Considering the threat of bad weather, Peabody used sound judgment in selecting the descent route. Ironically, the narrow Spider Couloir ascent route would have presented greater rockfall hazard in descent than the route selected. In addition, the descent of the Spider Couloir would have been more technically difficult, and possibly dangerous in a storm. Although Peabody had not descended the route into Les Dames Anglaises Couloir, he reconnoitered it in advance and found it to be reasonable.

*Technique of Descent* - Lowering is a routine guiding technique. Alternates are rappelling or climbing down. Peabody wished to lower his students so that he had more

control (as opposed to having them rappel—where the person rappelling has control) and because it would be safer than descending third class rock to the west of the lowering route, especially with bad weather approaching.

*Leadership* - Our site visitor observed Peabody closely during the course of an ascent and descent of the Les Dames Anglaises Couloir. He was found to be a safe, technically very able mountaineer, exhibiting conservative mountain judgment. The equipment he used during the climb to the accident site was state-of-the-art, as were his protection and anchoring techniques. Peabody appears to possess good communication skills and a personality which would make a fine climbing instructor. Certainly his decision to turn back short of the summit because of impending bad weather exhibits one facet of his conservatism. His actions after the accident were correct in the face of a most difficult and stressful situation.

*Helmet* - Considering the reported size of the rock and the distance which it traveled, if the rock had hit Black anywhere on the head, the helmet would not have saved his life or prevented massive head and/or neck injury. The helmet supplied by NOLS and used by Black was a UIAA-approved helmet designed for mountain climbing. It was quite adequate for the activity.

*Communications* - Considering the remote nature of this course operation, we recommended that NOLS investigate communication systems in order to develop and implement a means for radio contact from remote areas that will have the potential, barring equipment failure and other circumstances beyond NOLS' control, for minimizing the response time in the case of need for evacuation of individuals who have incurred critical injuries.

We believe that it should be clearly understood that communications hardware (1) can give a false sense of security when contact with the outside world is possible, and (2) can be unreliable.

We further believe that if radio communications had been possible on the day of the Black accident and that helicopter evacuation had occurred in a minimum amount of time—within three hours—the end result would not have been changed because of the mortal wound the victim suffered. (Source: J. Williamson)

## **OVERDUE, OFF ROUTE, EXCEEDING ABILITIES, POOR POSITION, WEATHER Wyoming, Tetons**

On July 27, 1989, I (Ranger Scott Berhenfield) noticed that Harry Barcalow (28) and Michael Volkov (31) were overdue from their climb of the East Ridge of the Grand Teton. Ranger Randy Harrington, who signed them out to climb, told me that they appeared inexperienced and had not climbed the mountain before. Barcalow and Volkov had signed out on July 23 and were planning on returning on the 26th. The length of time they were planning to take also gave us an indication of their inexperience. During the time they were out, several significant thunder storms passed through the area, which gave us additional cause for concern. Another confusing factor was that Ranger Lanny Johnson said that when he talked to them in the Jenny Lake Ranger Station, they told him they might look at climbing the North Face of the Grand Teton. This route was in bad condition due to the weather. The prediction was for more bad weather.

For all of these reasons, I started an extensive search of both the East Ridge and North Face of the mountain. Their camp was located at the base of the East Ridge on