

the transition from the vertical to the belay ledge when his accident occurred. Johnson had one and possibly both hand tools placed on an upward facing edge/flake of ice about 1.5 feet long by two inches thick. As he stepped high with his left foot, the weight transferred to the hand tools broke the ice flake. Johnson tumbled backward and upside down, striking the ledge with his right shoulder, which took most of the force, and then struck his head. Johnson then flew over the first step but came to rest four to five feet from hitting the ground, finally caught up by his ice screw and belayer. The total length of the fall was 60 feet. Johnson sustained a fractured scapula, collapsed lung, and minor head injuries.

Analysis

Contributing factors in this fall include poor hand tool placements, relying with too many points on a thin and water-weakened ice feature (the flake), overly aggressive climbing style and attitude, inexperience, insufficient protection (only one screw) and nothing to prevent an impact fall to the ledge. The ice flake may have been weakened by water flowing from above in greater than normal amounts due to an illegal ditching operation by a local climber.

Johnson was wearing a Petzl Rockhelmet, which may be credited with minimizing his head injuries. He was knocked unconscious, sustained a forehead laceration from hitting the sharp edge of the helmet, and went into convulsions, but he did not suffer a concussion. (Source: Jim Detterline, Longs Peak Ranger) *(Editor's Note: There were no accidents in Eldorado Canyon this year. However, I received several brief reports on incidents in Boulder Canyon, Flatirons, and Mt. Sanitas, forwarded by Bill May. These mostly involved bouldering. Attention was also called to the avalanche fatalities involving hikers. One lengthy—6,000 word—report gleaned from the internet and entitled "Death and Transfiguration" told of a serious fall due to inadequate protection (belayer and rappel anchors) on Green Mountain Pinnacle. The website is www.geocites.com)*

VARIOUS FALLS ON ROCK, PROTECTION PULLED OUT, ROCK FLAKE (HANDHOLD) CAME OUT, STRANDED

Idaho, City of Rocks National Reserve, Various Routes

There were six climbing incidents reported from this area. Five involved falls from routes, and in three of those, protection came out. In one case, the climber couldn't clip in to a bolt hanger. One climber became stranded while he was free soloing due to a sudden storm. The average age for the victims was late twenties, all experienced.

Analysis

We had no reported climbing accidents in 1997 and only one in 1998. Due to the nature of climbing at the City of Rocks—long response times by ambulance and close proximity to vehicles—there are undoubtedly many climbing accidents that go unreported.

A refreshing trend here is that folks seem to have stopped dropping each other! We haven't had a belay failure for several years. What we have seen however is an increase in protection failure on traditional climbs. My guess is that this is due, at least in part, to renewed interest in clean climbing as the pendu-

lum swings away from sport climbing. These folks are finding out the hard way that protection is only as good as one's ability to place it! Of the six incidents enclosed, three were the result of protection failure. On all of the climbs involved, it is quite straightforward for an experienced climber to protect.

Two of the other incidents were the result of the climber falling low on the climb and hitting a bad landing zone without impacting the belay at all. One had not reached the first bolt on a sport climb, the other spaced his protection too far apart.

The last was a simple pick off of a soloist who at least had the sense to stay put after a sudden squall left the rock wet and slippery. (Source: Brad Shilling, Climbing Ranger)

ROCK BROKE OFF, FALL ON ROCK, CLIMBING UNROPED, FAILURE TO TEST HOLDS, INADEQUATE PROTECTION, INEXPERIENCE

Kentucky, Red River Gorge State Park

On October 2, a climber (22) was on top of Courthouse Rock looking for an anchor placement for rappelling. He had his harness on but was unroped. He went near the edge and the rock broke off underneath him, resulting in his fall off the cliff of about 75 feet, with an additional 25 feet of tumbling at the bottom. His partner went to get help, and three hours later, a search and rescue team arrived and brought the victim out on a rolling backboard. He suffered a pneumothorax and fractured arms.

Analysis

Rappelling is a very popular activity in this park. The victim reported that he had limited experience and was unfamiliar with the area. The sandstone in this area is unstable, but there are plenty of trees to anchor to while exploring around the top of the cliff. Many of the accidents here are the result of hikers, etc., getting drunk and falling off. (Source: Jason Maddux, M.D.)

FALLS ON ROCK AND ICE

Maine, Baxter State Park, Mount Katahdin

There were three incidents reported from Mount Katahdin, all of them happening in February. Scant details were provided. Two involved ice climbers injuring their knees, the third a fall from the Cilly Barber route.

There were a total of 41 search and rescue missions in the park for the year. (Source: Irvin Caverly, Jr., Director, Baxter State Park)

FALL OR SLIP ON ROCK, INADEQUATE EQUIPMENT, INADEQUATE PROTECTION, FAILURE TO FOLLOW ROUTE, NO HARD HAT

North Carolina, Looking Glass Rock, The Nose

On June 19, Keith Ballencourt (30) and two less experienced friends were climbing The Nose (5.8), one of the most popular routes on the mountain. PW, a local guide, spoke with Keith, who described himself as an experienced lead climber at Stone Mountain, NC, an area notorious for long run outs and steep friction. According to PW, Keith was carrying a "Yosemite style rack" (a ban-