

their tight configuration as if they had been left there for some time and been weighted. The sling was not tied. In each free end of the sling was the beginning of a loose water knot (the overhand tied before it is traced back with the second piece of sling), ruling out the possibility of a poorly tied knot pulling out. Rescuers concluded that McNelly wrapped the sling around the tree, started to tie the knot, became distracted, then started to tie it again with the other end of the sling, only to become distracted a second time. He then clipped in to the wrapped webbing and visually inspected it. A total of two full water knots and four half hitches were present in the webbing, making it possible that he looked at the sling and concluded that it was tied. When he tugged on it, the friction of the sling around the tree (which is about six inches in diameter, with low branches, making visual inspection difficult), could have confirmed his conclusion that the sling was tied. (Source: Mountain Rescue Aspen, Inc., compiled by Hal Clifford)

FALL ON ROCK, CLIMBING ALONE AND UNROPED

Colorado, Black Canyon of the Gunnison, Leisure Route

On October 19, Steven Permick (37), an experienced climber, was climbing alone in the Black Canyon. When he failed to return, his father called the Park Service. The body was spotted on a ledge halfway up the Leisure Route on Cruise Gully. Permick apparently was free soloing. At a crux move about 60 feet up the pitch, he may have been trying to place protection, but his rope was still in his pack. He fell about 60 feet and probably died soon after. (Source: Arden Anderson, Western State College Mountain Rescue Team)

FALL ON ROCK, INADEQUATE PROTECTION, NO HARD HAT

Connecticut, Ragged Mountain, Valhalla

There was a fatal accident on September 16 at the "Small Cliff" at Ragged Mountain in Connecticut. Following is the account of what I believe happened. At 1910, my climbing partner and I were walking down the Brierly's driveway on our way back to our car when we came across the belayer (whose name was John), who was visibly disturbed. We quizzed him and found that an accident had occurred. The leader had fallen about 40 feet from near the top of the cliff after running it out. He was alone at the base of the right end of the cliff, unconscious but breathing. John had just phoned the police from someone's house and was waiting to lead them up. We knew that the situation demanded our help so we grabbed a blanket from my car and sprinted to the Small Cliff. My partner stayed on the driveway at the shortest trailhead to the Small Cliff to show the rescue workers where to go and I ran to the victim.

It was obvious that the victim had sustained massive blows to the head. He had a weak pulse when I got there, but by the time the rescue workers arrived at the base of the cliff (probably five to ten minutes later), he did not. They performed CPR and evacuated him by ambulance and then helicopter. He did not survive.

Analysis

When I arrived, the victim (I believe his name was Paul) was face down at the base of the cliff. As near as I can tell, he had been leading a route called Valhalla (5.7) and had run it out to somewhere near the top of the cliff (50 feet in this area) before falling. Valhalla goes up about 15 feet to a large sloping ledge, then goes over a small overhang to a face with a thin crack to the top. He had very few pieces in (either three or four), and the

highest one was about half way up in the overhang. The rope was still attached to his harness when I arrived and there was nothing attached to it between the leader and the last piece of protection, so no pieces pulled. In addition, there was no protection in the crack above the last piece so it wasn't a case of a 'biner failing either. I'm not sure whether the leader fell and was initially stopped short of the ground (in which case he would have hit the large ledge) and then lowered, or whether he grounded out, but his knot was disturbingly easy to untie, suggesting that the rope had not held a great deal of force.

There are some lessons. Whatever led to this accident, my completely uneducated opinion is that he would have lived if he had been wearing a helmet. Certainly his head wounds would have been much less. Know the rock you are climbing on. These fellows had not done much climbing (if any) at Ragged. Leading on Traprock is VERY serious business. There is no fixed protection here and many of the routes demand subtle protection. A "G" protection rating may be conditional on your knowing or finding the one place where a particular brand and size of micro-nut fits. If you don't own that brand and size, it's "R" for you. In addition, the rock is soft and very fractured giving it the tendency to break when you least expect it. This may cause you to fall on easy terrain and cause your "bomber" protection to fail. I'm not sure I've ever backed off a Gunks route due to fear, but I've backed off many a Traprock route, as has almost everyone I know who climbs here. (Source: Lanier Benkard, Yale University)

FALL ON SNOW—UNABLE TO SELF-ARREST, CLIMBING UNROPED, INADEQUATE BOOTS AND CRAMPONS, INEXPERIENCE

Montana, Glacier National Park, Mount Jackson

On January 8, Kyle Borchert (20), Shad O'Neel (22) and Taggart Schubert (25) obtained a five-day backcountry permit for a winter trip into the Lake Ellen Wilson area, via the Sperry Trail, of Glacier National Park. They completed the voluntary climber registration for climbing Mount Jackson and listed Borchert as the leader and their experience as "novice." They departed the same day and reached about 4.5 miles up the Sperry Trail where they camped.

They continued on the next day and reached Lincoln Pass where they spent the next two days pinned down by a storm, the first night in a tent and the next night in a snow cave. On the 11th they moved on to Lake Ellen Wilson where they established "base camp" for climbing in the area. The weather had improved considerably by this time.

They decided to attempt the summit of Mount Jackson (3,064 meters) and at 0630 on the 12th began their ascent, equipped with technical climbing equipment and extensive bivouac gear. Borchert and O'Neel were wearing heavy climbing boots with 12-point crampons, while Schubert was wearing heavy pack boots with 4-point instep crampons. Each had an ice ax. Their ascent generally followed the Gunsight Pass route directly up from the pass. Because of terrain and high wind encountered, they remained roped and protected the ascent using snow pickets all the way to the summit.

They reached the summit about 1445 and immediately began their descent via the Northeast Ridge route due to extreme wind conditions. They decided to unrope a short distance below the summit to move faster. The wind was pulling on the rope and continually throwing them off balance. The slope angle seemed to ease up and each believed they could self-arrest if needed.

They descended approximately 600 meters to a point above several cliff bands with Borchert and O'Neel route-finding about 50 meters ahead of Schubert. Borchert and