several National Park Service and civilian personnel in very hazardous situations. The park helicopter searched for two hours during thunderstorm and high winds conditions, and ground searchers were placed in a very hazardous rain slick canyon looking for Macias and Bridges. (Source: Mike Mayer, Ranger, Yosemite National Park)

(Editor's Note: While not an accident, this case is reported as a warning that one can be cited for "Creating a Hazardous Condition" on public lands, and as a recommendation that simple, direct communication can both solve the initial problem and avert putting SAR personnel in needless jeopardy.)

YOUTH, RAPID ASCENT, ACUTE MOUNTAIN SICKNESS

California, White Mountains

On August 2, 1988, William R. Claybaugh, II (39), Martha G. Miller (36) and William R. Claybaugh, III (2) made a six hour automobile ascent from sea level to a campsite at 2800 meters. After establishing camp an automobile ascent to 3400 meters and return to camp was made over a two hour period.

The following morning the younger Claybaugh was listless, refused to eat, and remained in his sleeping bag. He complained of headache and began vomiting about one hour after waking. Testing showed extreme ataxia. An automobile descent to 1200 meters ended all symptoms within two hours of descent. (Source, William R. Claybaugh, II)

Analysis

Rangers at the White Mountain Station and at Yosemite Valley indicated that their experience suggests that children are apparently more susceptible to Acute Mountain Sickness than adults. In this case onset of recognizable symptoms did not occur until nearly 18 hours after ascent; progress was rapid once symptoms appeared.

When taking children into the mountains, it appears advisable to plan on acclimatizing at altitudes below 2000 meters before heading higher. (Source: William R. Claybaugh, II)

(Editors' Note: While not an accident for our purposes, this example is worth including as a clear demonstration of how insidious a rapid ascent can be, even at moderate altitudes.)

FALLING ROCK, NO HARD HAT, POOR POSITION

California, Yosemite Valley

On August 12, 1988, Jeff Kasten (25) and Glenn Pinson (23) intended to begin their climb of the regular route on Half Dome, using Tom Rollins (23) to help carry gear to the base. The party was waiting to climb and sorting gear in the afternoon before climbing the next morning. The sound of rockfall was heard and rocks were sighted as the party scattered. After the rockfall ceased, it was discovered that Tom had been hit in the head and had tumbled to the ground, sustaining both a head laceration and a broken wrist.

A runner was sent from among a group of hikers to activate the SAR Team. Jeff and Glenn (an EMT) stabilized the patient and awaited the arrival of SAR members,

which occurred about 2030, four hours after the accident. After Tom was further stabilized, he was moved to the helicopter LZ where he stayed the night before being flown to medical facilities the next morning. Jeff and Glenn ascended the route over the next two days. (Source: Glenn Pinson)

Analysis

Although Jeff and Glenn had helmets and intended to use them on the climb, they were still attached to the packs while the party was preparing to bivouac at the base of the route.

It is apparent from this incident that helmets should be employed as soon as the possibility of injury from rockfall exists. It is my recommendation that climbers don helmets when they get as close as a couple hundred meters from the base of a route where rockfall danger exists. (Source: Glenn Pinson)

(Editor's Note: What's good for the climbers is good for the "gofers" too!)

FALLING ROCK

California, King's Canyon, The Hermit

A group of four experienced climbers (Doug Mantle, Randy Danta, Tina Stough, Joe Stephens) were completing an extended peak climbing trip on The Hermit (3759 meters) in the Evolution area. On August 12, 1988, they angled up a chute that feeds into the main scree chute leading to the summit.

Less than 30 meters from the summit, Doug Mantle (38) placed his hand on a large boulder which came loose. Both Doug and the boulder tumbled ten meters down the chute. He landed in a sitting position, impacting a sharp rock with his right foot trapped by the boulder. Doug suffered a large gash on his leg and back along with numerous face and arm lacerations. Randy was able to stop the bleeding and free Doug's foot. Emergency first aid was performed and Doug was able to move to a more comfortable area.

At 0900, Joe left for the McClure Ranger Station where he found Ranger Em Scattaregia about to leave on a four day trip. The first helicopter arrived at noon. A Park fireman and a paramedic were dropped nearby. A second helicopter from Yosemite brought in a litter. That helicopter returned at 1500, but aborted a cable pickup due to variable winds. Additional people were brought in from Cedar Grove, totaling six King's Canyon NPS staff. Doug was placed in a litter and efforts begun to lower the litter 240 meters to a preferred landing site. Three belay points were used with the litter arriving at 0100. The rescue was completed by noon. (Source: The climbing party)

Analysis

Experience will not necessarily prevent accidents. Mountains, by climbing standards, are in the process of moving downward. This portion of The Hermit moved with a minor impetus from a climber. The rescue was a challenging one with both professionals and climbers doing an outstanding job. (Source: The climbing party)