Analysis

Locating the cave on the lee side meant that digging would cut through wind-slab layers. The snow blows northwest, *into* Green Butte, during storms, but prevails southeast after storms; a typical pattern in most areas. Knowledge of the history of the snowpack and having the ability to analyze layers by probing and digging snow pits are valuable tools for climbers, ski mountaineers, and winter back-country users. (Source; J. Williamson)

FALL ON ROCK, INADEQUATE EQUIPMENT, PITON FAILURE California, Yosemite Valley

On May 3, 1983, John Kaput (31) fell while climbing on Commissioner's Buttress, just north of Ranger Rock.

Kaput was leading the climb and his partner, Scott Sleeper, was belaying him from below. Kaput's first piece of protection was a wired stopper, which he had placed about eight meters up from the start of the climb. He then went up another two meters and clipped into an old fixed pin. He did not have a piton hammer with him and thus could not test the pin. He then proceeded to another fixed pin about two meters above the first. When he got to the second pin, he found a threecentimeter ledge to stand on and did not clip into the pin. He then made a move to the right to try for a hand jam in a small chimney located there. This required him to put his right foot on a small ledge covered with dirt, moss, and a small bush. When he did so, the dirt gave way and he fell. He went directly down to the first pin, about three meters below. The pin pulled out, and he kept falling to his second piece of protection, the wired stopper, about two meters below. He continued past the wired stopper an additional two meters, where he hit a ledge. He bounced off the ledge and fell two more meters, where his partner caught him on belay. The total fall was approximately seven meters. (Source: Kerry Maxwell, Ranger, Yosemite National Park).

Analysis

Most of the pitons found in place now can be assumed to have been there for several seasons, or probably longer. They need at a minimum to be hammered in again. A piton hammer is recommended as a basic piece of Yosemite climbing equipment if one intends to use fixed pitons. (Source; J. Williamson)

FALL ON SNOW, INADEQUATE EQUIPMENT California, Mount Whitney

In late May 1983, Ray Ranger (29) and two other team members from Mammoth SAR had completed a month-long backpacking trip from Reds Meadow to the vicinity of Mount Whitney at Iceberg Lake. Ranger advised his team that he wanted to solo Mount Whitney via the Mountaineer's Route before walking out. He would make the climb and hitchhike home the next day. When they last saw him, he had left his backpack and had started up the route on skis. When he didn't return to Mammoth, a search was started. On May 28, his body was sighted from a helicopter

in a snowfield near the bottom of a steep wall in the Arctic Lakes area. (Source: Dennis Burge, China Lake Mountain Rescue Group)

Analysis

By retracing the Mountaineer's Route, the following scenario was reconstructed by Eric Alger of the Mammoth SAR Team. He said that Ranger ran into trouble after starting his descent without crampons or an ice ax. Alger said that Ranger had apparently slipped and slid about 45 meters prior to his second, and fatal, fall. Ranger had elected to descend an easier snow chute west of the main route. After stopping his first fall, Ranger attempted to move back to the main route. After reaching bare rock, he stepped back onto the snow, apparently descended six to eight steps, slipped and slid about 45 meters; he then fell off a 60-meter cliff and continued his slide for another 500 meters.

After examining the route of the fall, Alger said that he found evidence that Ranger had tried to stop himself after falling over the cliff. He said there appeared to be holes in the crusty snow that may have been caused by Ranger trying to arrest his slide by jamming his elbows or fists into the snow.

Alger believes that if Ranger had had an ice ax and crampons, this accident would not have occurred. (Source: Dennis Burge, China Lake Mountain Rescue Group)

SLIP ON SNOW, INADEQUATE EQUIPMENT California, Yosemite Valley

On July 4, 1983, about 1230, Kevin Brown (23) was traversing the top of a snowfield on the way to the base of the Northwest Face of Half Dome when he slipped and fell about 75 meters down the snowfield, over an approximate 6-meter vertical drop, and slid about another 30-45 meters over granite slabs. Brown received moderate injuries, which prevented him from hiking out. Brown's partner hiked to the trail above them and asked a hiker to go to Little Yosemite Valley and tell the rangers there that his friend needed rescue. This information was given to Ranger Sue Schultz-Clark, who called into park dispatch and initiated a rescue. A horse and foot ranger were started toward the victim from Little Yosemite Valley, while myself and Ranger C. Wilson flew to the scene by helicopter. There we assessed and stabilized the victim and flew with him to the Valley, where he was taken by ambulance to the Yosemite Clinic. (Source: Gary Colliver, Ranger, Yosemite National Park)

Analysis

This is one of several accidents of this type this year. Whether encountering snow on an approach to a rock climb or encountering rock on an approach to an ice climb, appropriate equipment and techniques are essential attributes for the climber. (Source: J. Williamson)

SLIP ON SNOW, INEXPERIENCE

California, Mount Johnson

At 0700 on July 10, 1983, a group of ten climbers left a camp site five kilometers from South Lake to climb Mount Johnson.