down after completing four pitches. I led the first group up three pitches with no problems. The day was warm, so I decided to remove my helmet while I belayed my partner up. As I took in rope, a loop caught the helmet sitting loose on a rock next to me, whereupon it bounced to the bottom of the route. We continued on one more pitch to where we had lunch. We cut it short when we realized the time (1500) and wanted to get home at a reasonable hour. We set up our first rap anchor by using an older (three years) piece of webbing with a water knot (no backup knots) looped through a rap ring and then around a young but agreeably sturdy pine branch. The first two climbers rapped down to the next station without incident. My partner took a light fall onto a ledge after she had trouble with the rope, but made it down to the station also. I was about halfway down the pitch when I felt slack and looked up to see the rope falling toward me as I was falling backwards. I bounced once on my backside, then turned over, free-falling head first. Since I could see only air between myself and the base, I truly believed I would die. By miraculous fortune, I hit the same two foot wide ledge my partner had and stopped there, six meters below the initial falling point. I was very shaken, but suppressed my panic to maintain the safety of the whole party. I placed an SLCD and wire nut, then rappelled down to my companions. My injuries were not life threatening and I was able to continue the three more raps to the base as well as the walk down to Humber Park. We decided to postpone medical attention until we got home. The injuries turned out to be lacerations and contusions to the chin, lip, knee, and both arms, small fractures to the feet, and a sprained ankle.

Analysis

This was my first multi-pitch experience, but I believed I was within my technical abilities, having led 5.9's and with two years experience. The direct cause of the failure was slippage of the knot due to placement of the rap ring directly on the knot as well as not having backup knots. I questioned the arrangement silently as we placed it, but in our haste, we didn't really scrutinize it. The ring was still attached to the rope after the fall.

But the real causes of the accident were inexperience, not placing redundant bombproof anchors, our haste to get down, and the desire to leave as little protection behind as necessary. In addition, the earlier loss of my helmet was just inexcusable. A light hangover most likely contributed to the lack of attentiveness overall. In retrospect, a more horrendous scenario could have unfolded if the first rappeller had fallen, since he was carrying the rope and there would have been no safe way down for those left behind. After the fall, we left behind double protection at every rap station with intense scrutiny of the systems before anyone ventured out. (Source: Grant Meisenholder)

FALL ON ROCK—FALLING ROCK, INADEQUATE PROTECTION California, Sequoia National Park, Devil's Crag #1

On September I, David Dykeman (64) and Herbert Buehler, members of the California Mountaineering Club, were descending from the summit of Devil's Crag #1 (12,400+feet) about 1400. The weather was clear, with little or no wind. Just below the summit arrete, they set up a short rappel of about 25 feet. Buehler went first while Dykeman waited, unroped, at the top of the rappel. Just when they reached the bottom of the rappel, Buehler heard the noise of a large rockfall, and ducked against the wall for cover. He heard Dykeman cry out, "Oh, no!" When the noise subsided, Buehler looked up at

the top of the pitch. Dykeman was gone. All of the falling rock, and Dykeman's body, had fallen down the northeast side of the peak, a drop of over a thousand feet. Buehler retrieved the rope and climbed down alone to their camp at Rambaud Lake, a difficult descent that required two more rappels. He then continued out for help, arriving at the LeConte backcountry ranger station about 2200, where he found Park Service Ranger George Durkee who radioed news of the accident to Park Headquarters. Park Rangers helicoptered in the next morning and located Dykeman's body, lodged on a snag about midway down the 1,200-foot northeast face. Climbing down from above, and traversing across the face, Rangers Randy Kaufman and Scott Wanek were able to reach Dykeman's body. They hooked his climbing harness to the end of a 50 foot line from a helicopter hovering next to the wall. The difficult operation took four days overall.

Analysis

Devil's Crag #1 has a bad reputation for unstable rock. All the rock on the top of the mountain is badly shattered; big unattached blocks piled one on top of another. It is probable that one or more of the slabs on which Dykeman was standing simply slid suddenly out from under him. The entire upper part of the mountain is one narrow

arrete after another, dropping directly off to the steep faces on either side.

Dykeman was a very experienced climber, having made over 500 ascents in the Sierra, as well as others around the world. He had a reputation of being a conservative, safety-conscious climber and leader. This accident probably could have been prevented if Dykeman had been tied in while waiting for his turn to rappel. However, it is possible that the rock collapse would have included his anchor. Additionally, Dykeman, having climbed this peak before, was aware that overly conservative use of ropes has resulted in many parties having to endure uncomfortable bivouacs high on the mountain. (Source: John Inskeep, Sierra Madre Search and Rescue Team)

FALL ON ROCK, INADEQUATE PROTECTION, FAILURE TO FOLLOW ACCEPTED STANDARDS

California, Redmond

On September 21, Travis Hull (28), North American Wilderness Academy school administrator and master wilderness instructor, fell to his death while teaching a beginning rescue class to the NAWA-USA Academy. The USA Academy, composed of teachers and students in grades seven through twelve, were completing the rescue course in preparation for their five week trip to Alaska when the accident occurred.

Travis had just completed a demonstration on the safety of a two point self-protecting system and had yet to hook the ropes into the system. As he extricated himself from the system, he apparently lost contact with how close he was to the edge, stepped back, lost

his balance, and fell to his death.

Analysis

Travis was an expert climber and rescue instructor. He was a volunteer coordinator for the Shasta County Search and Rescue and had spent many hours training Sheriff departments, search and rescue groups, and fire departments in vertical and swift water rescue. His contributions to the NAWA program were enormous, and he will be deeply missed by all of us.