

(I thought) in a split second. Yet, for my fall, I can see all the events happening; I see myself sliding down, conscious of the fact that my palms were pressing against the rock, my feet in front of me, my knees slightly bent, and then the landing. I would surmise that it took less than 1 second, but I visualize it as a sequence of clear events with time to ponder and think about the event. (Source: David Arthur Sampson)

STRANDED – INABILITY TO REMOVE ANATOMICAL PROTECTION

California, Yosemite Valley, Bishops Terrace

On April 12, Tim Barthel (51), Jon Becker (50), Brant Herrett (55), and I, Steve Latif (46), decided to climb Bishops Terrace, a one-pitch 5.8 at the Church Bowl. At 1600 I started leading with Brant belaying. This was my first time on the route and about 80 feet up the pitch I found myself at a wide crack headed a bit to the right. It looked like the easiest option, so, thinking it was the standard line, I placed a cam and continued up.

A short way past my protection I realized I was in the off-width variation shown on the topo, not where I wanted be. The crack wasn't particularly hard and I'm comfortable leading most 5.10, but I'm not that experienced with wide cracks. Furthermore, I was already five to ten feet over my last piece and I didn't have any large pro for the next 15–20 feet. I was definitely outside my comfort zone, so I began backing down to the main crack.

My left leg was in the off-width and my right foot on the face. I moved down two or three feet and found that my left knee was getting stuck. Below me the crack constricted slightly, and the more I tried to free myself by pushing and pulling any way I could, the more stuck I became. After about five minutes of this, I was worn out and called down to my friends for help.

While Brant kept me on belay with my lead rope, Tim belayed Jon as he led up the normal route. When Jon was sufficiently above me, he rigged an overhead directional for his lead rope, allowing Tim to hold him in place. He had brought up another rope, the end of which he dropped to me. He clipped it to my harness and he belayed me off his harness, providing the security of a top-rope while I struggled. That didn't help much, so he rigged another directional, clipped my top-rope through it, and tried to provide me some lift by pulling down on his side of the directional with his bodyweight. With the friction in the directional carabiner and the fact that I outweighed Jon, that effort was doomed as well. We even lubricated my knee with water and Jon got under me and pushed up on my foot and my knee. Nothing worked. The knee stayed jammed and it was starting to hurt, and after 20 minutes of pulling and pushing, we were both tired. It was pretty clear I wasn't going anywhere.

Being April and almost 1900, it was going to get dark and cold, so I yelled down to Tim that we should call for help. He notified the NPS by

cell phone and in a few minutes several NPS team members showed up. Jeff, one of the rangers, led up and established an independent anchor just above me. He ran a static line through a pulley at that anchor and down to me and the team on the ground set up a 3:1 mechanical advantage system with pulleys. This time, when they pulled, I moved. My leg stretched and hurt like hell. It was incredibly painful, as though they were going to rip it off and I'd yell at them to stop. But with each pull, my leg worked its way out maybe a quarter or half an inch. They did that three times and then it just popped out. Pulling up on my foot instead of from my harness would only have forced the foot against my thigh, so it was necessary to pull as they did. Tim said later, "The rescue team had three guys pulling on a 3:1 and I was staring at that going, 'Holy Smokes!' I was cringing."

The team lowered me and then Jon to the ground. Jeff finished the pitch and rappelled from the regular anchors at the top. My knee was a little sore and sported a bruise, but I was able to walk on it. It was about 2030 by then, completely dark, and I was just beginning to get a little chilly. (Source: Steve Latif)

Analysis

Steve's was the first of two stuck knees the park team dealt with in 2008. In the second case, the climber was competent for the terrain and on the correct route and the climbing was fairly easy, but she became solidly jammed. It looked quite grim, even with a haul system, until we liberally applied a bottle of liquid dish soap to her leg. (Yes, we cleaned up our mess.) Extrapolating from these cases, we can assume a few self-rescued knees every year as well.

No harm was done here. Church Bowl is only 100 meters from the parking lot, but the risk increases if you're immobilized with nasty weather moving in and/or inadequate clothing and only your partner to help, such as being high on Middle Cathedral Rock or Matterhorn Peak.

Prevention: Entrapment can happen to anyone, so keep the possibility in mind on every wide move.

Self-rescue: Steve said that having the right protection on his rack would have enabled him to set his own anchor and pull himself out, but you can't count on a perfect location and Steve could not have counter-weighted himself. Jon was smart to set up an upper belay for Steve in case he did pop free, but since Steve's belay was off Jon's harness rather than independently anchored, Tim might have found himself trying to hold two big guys at once. Being able to set up efficient haul systems is critical, whether a simple 1:1 directional applying body-weight force or more complicated mechanical-advantage arrangements. Pulleys are incredibly more effective than carabiners. A small, high-quality, rescue-grade pulley is recommended for every climber's rack (not just one per party). Two pulleys in a party will build a 4:1 system for self-rescue of more serious injuries as well as for stuck knees.

Warning: This is not an instructional text. We have skipped several important details covered by self-rescue manuals. Understand your systems and apply force cautiously. (Source: John Dill, NPS Ranger, Yosemite National Park)

STRANDED – YOGI-PHOBIA, UNFAMILIAR WITH EQUIPMENT

California, Yosemite, Half Dome

Janet (32) spent May 9 hanging out at the base of Half Dome while her friends made an ascent of the Regular NW Face route. They had camped there the night before and had suspended their food from a tree to keep it from animals. At mid-day a bear wandered into camp and began sniffing the food. Concerned about becoming lunch herself, Janet jumared up an old fixed line to the top of the first pitch.

Eventually the bear left, but when Janet tried to descend, she found that 30 feet of snow piled on the bottom of the rope over the winter had stretched the line too tight to attach her rappel device. Her friends were high on the face, not in position to help, and she was marginally dressed for a spring night on the wall at 7,000 feet. At 1730 Janet called the NPS.

Three SAR team members climbed the slab approach from Mirror Lake to the base of the wall, arriving at dusk. One ascended the fixed line, and then he and Janet rappelled on NPS ropes. They all descended the slabs to the Valley, including Janet, who had seen one bear too many.

Analysis

Janet was a climber, but she may have lacked the experience to realize that she could jumard down the fixed line as well as up. Her party also may not have understood that hanging food in a tree is no longer permitted in the park. Bear canisters are required in Wilderness areas, although they aren't necessary on a climbing route if the food is well beyond reach of Yogi. But watch out for ground squirrels (they free-solo 5.11) and ravens. Food storage requirements, other wilderness regulations, and Leave No Trace practices are all explained to climbers when they get their wilderness permit, which is required for camping at the base of Half Dome. (Source: John Dill, NPS Ranger, Yosemite National Park)

FALL ON ROCK, INADEQUATE PROTECTION, POOR COMMUNICATION, INADEQUATE MEDICAL TRAINING

California, Yosemite Valley, El Capitan

At 0330 on May 15, Matt Christensen (26) and Tony McClane (20) climbed fixed lines to Sickie Ledge on El Capitan and started up pitch 5 of the Nose (31 pitches, VI 5.9 C1 per SuperTopo). They traveled light, with one 60-m rope, hoping to summit that night. The climb went smoothly and they were happy with their progress. After completing pitch 24, Tony belayed just