

most of the force of the fall. I hit the ground as a result of rope stretch and bounced twice. I sprained my left ankle, scraped up my left leg, and hurt my wrist. It turns out I broke a bone in my wrist, but the break was on a fairly minor bone, so I actually kept climbing that weekend.

Analysis

While I am relatively new to climbing, I can comfortably lead 5.9 sport routes and can climb 5.10 routes, so it was reasonable to expect that Frogs Head, a 5.6, would go smoothly. My second, who is also my mentor, has as many years of experience as I've been alive and is a very competent and skilled teacher and climber. My rack had a full set of nuts, Black Diamond C4 cams from .3–3, a Metolius 1, a set of Tri-cams, and about seven extendable two-foot slings and five long 16-cm quickdraws.

I found Frogs Head to be a bit more difficult than expected, partly because I am 5'1", so the holds were actually not within my grasp if I used the usual footholds. I believe that I fell back at the bulge and the horizontal force I exerted on my nut pulled it up and out. I also believe my Metolius 1 was under-cammed. When deciding whether to use slings or quickdraws, I decided that draws were sufficient because the route went pretty much straight up and thus there wouldn't be an horizontal rope drag. However, I failed to consider the force that a draw would exert on a nut in the event of the fall and how the bulge of the rock would affect the rope and how it tugged on the pieces. I also failed to realize how small the range is for a small cam as the Metolius 1. As a result of these mistakes, I believe they are what caused my pieces to pull.

I learned three very valuable lessons. In the future, I will always use slings with my nuts and extend them if there is any bulge in the rock or if I am close the ground. I will also remember how small the range is on the small cams and be sure not to under-cam them. I will also really set my nuts when placing them and make sure they are sitting securely in the cracks. (Source: Edited from a report submitted by Lisa Wang)

(Editor's Note: We always appreciate it when climbers submit their own reports and self-analysis.)

FALLS ON ROCK (17), PROTECTION PULLED OUT (7), INADEQUATE PROTECTION (4), BELAY ERRORS (4), RAPPEL ERROR

New York, Mohonk Preserve, Shawangunks

Twenty reports were submitted for 2010 (including the narrative above).

There were three 40-foot falls, one 50-foot fall, and one 80-foot fall. The latter was due to a miscommunication between the belayer and the climber.

The average age of the climbers was 36 and the level of route difficulty was 5.8. The injuries included three fractures, eight sprains/strains, three lacerations, two dislocations, and one crushed finger. One of the dislocations

occurred when a 57 year old just lifted his foot while climbing on a self-belay top-rope. It re-located, but he had to be transported to his vehicle.

Ten climbers were inexperienced, eight were experienced, and the others were unknown. (Source: From reports submitted by Mohonk Preserve)

FALL ON ROCK, PLACED INADEQUATE PROTECTION

North Carolina, Stone Mountain State Park

On February 27, my two partners and I were getting ready to climb Mercury's Lead off the tree ledge. Two young women (I'll call them Jane and Joan) came walking down from the far end of the tree ledge and said they planned to lead the Great Arch (5.5). We chatted for a little bit and while Joan was racking up for her lead, our leader started off on Mercury's with me belaying. He got to the first bolt and was scoping out the rock above. Since he was in a secure spot, I felt comfortable glancing over to see how things were going on the Arch.

Joan had placed a piece of pro (a medium cam) about ten feet up and was climbing above it into the section where the crack widens before turning the first corner, approximately 20 feet up on the route. She was making a series of layback moves and when she got up to the corner, her hands came off. At this point, she was far enough above her single placement that it never came into play stopping her fall. She skidded down the face for several feet when it appeared that one or both feet caught on something causing her to flip backwards. She free fell the remaining distance to the ground (8-10 feet) and landed flat on her back.

Because I had my partner on belay, I couldn't respond immediately, but the third person in our group and Jane (Joan's belayer) went to check her condition. She remained motionless on her back. I could tell from where I was standing that she was conscious and that her eyes were moving.

My partner replaced his draw with a "bail-out 'biner" on the first bolt and I lowered him so we could assist. By that time, Joan was sitting up and moving her arms around and talking. She reported pain in her arms, hands, and legs, but didn't show any signs of broken bones. She also said she'd hit her head (she was wearing a helmet) and that she had a mild headache. This immediately sent up red flags to me for head trauma, so I asked her if she was feeling dizzy or experiencing any visual distortion. She said she wasn't.

The landing zone was fortunately free of rocks, but there were numerous tree roots surrounding the area where Joan landed. When she came to rest after the fall, it looked like her head was resting on a root, so presumably this was the point of impact for the head-blow she reported. Her arms showed obvious bruises where she rolled up her sleeves and there was redness on her hands, probably from scraping on the rock. cursory examination of her scalp showed no broken skin or bleeding. Before long, she was up and