me. The pillar was about six feet in diameter. The second bolt I wanted to clip in to was not an easy reach, so I swung my pick into the ice with intentions of reaching the bolt by leaning off a secure pick placement. But the placement caused a clean shear across the pillar, propagating instantly from the point of contact. I fell a split second behind the falling pillar due to the friction of my butt against the rock. Right above the ground, I was arrested by the rope, but I was not spared the shower of large ice chunks. I ended up with broken ribs and shoulder and a deeply bruised leg. My wife was belaying 50 feet to the side, tied to a tree. It took us about three hours to get to the car, usually a half hour jaunt.

Analysis

The warming trend had probably created a lot of tension in the ice underneath its point of attachment. The cold night had made the ice brittle, so long, running fractures were more likely. The danger was fairly obvious. The lapse was in my perception of my ability to deal with the danger. I was too focused on doing this particular route. Also, I was complacent because I had climbed many similar structures with no mishap.

In hindsight, I can see I was lucky to get away with relatively minor injuries. My choice to climb an unstable route endangered the follower, since she could have caused the entire structure to collapse near the bottom, which would be

almost certain death. (Source: Seth Shaw)

FALLING ROCK, FAILURE TO TEST HOLDS, LEADER'S LAPSE LEAD TO MISJUDGMENT

Utah, Uinta Mountains - Between Gunsight Pass and Kings Peak

On June 29, Lucy (42), a beginning climber, was climbing above the leader (71) on an ascent near Kings Peak. She tried to stand on a precarious cluster of rocks and managed to dislodge four of them, varying in weight from an estimated 50 to 1,400 pounds. This resulted in a fractured ankle, multiple abrasions and lacerations, and a sprained knee.

Her leg was pinned under one rock, which had to be levered off. The ensuing rescue was complicated by the victim's husband being in psychogenic shock

and giving the wrong location of the accident to rangers via phone.

Analysis

Being slower at age 71 and on a remarkably stable slope, I allowed a novice climber to climb above me. Always enforce discipline with inexperienced members of climbing group. Never allow novices to lead unless closely controlled for training, even if terrain is apparently ultra easy. Anticipate surprise obstacles. (Source: Stan Sattelberg)

FALL ON ROCK, INADEQUATE PROTECTION, PROTECTION PULLED, FATIGUE, WEATHER, INEXPERIENCE

Vermont, Nichol's Ledge

On October 22, Ian (22) and Ryan (23) were attempting to climb the first pitch of a two-pitch route unfamiliar to both. Ian was leading and Ryan was belaying. The weather that day was cloudy, cool (40s), and windy. The first pitch of

the climb appeared to be a short 40-foot section that ended at a small tree ledge. The terrain at the base of the climb consisted of steep talus and woods. Ian began climbing the first pitch, placing a #1 Camelot at a point 15 feet above the slope and a second piece at approximately 30 feet up the route. Immediately above the second anchor point, Ian encountered a steep friction slab with a few small edges that lead to the tree ledge above. After making two difficult moves approximately six feet above his last piece of protection (a single HB cam set in a horizontal crack), Ian came to what appeared to be a "dead end" in the route. Ian decided that he would not be able to reverse his moves back down the climb and had no choice but to continue the last few moves to the tree ledge as it was only a few feet away. While attempting a strenuous move, Ian fell. The force of the fall pulled his last piece of protection from the horizontal crack and pitched him feet first toward the ground. Realizing that Ian was going to hit the ground, Ryan stepped forward in an attempt to break his fall. Ian landed on Ryan, and both tumbled down the talus slope becoming tangled in the rope. Their tumble down the slope came to an abrupt stop when the rope pulled tight against the #1 Camelot still anchored in the rock.

Almost immediately after they stopped tumbling, Ryan told Ian not to move and began untangling them from the rope. After checking himself for any injuries (none were found), Ryan began checking Ian for injuries. Both were trained Wilderness First Responders. Ian complained of pain in his right shoulder. Closer examination found that it was dislocated. Ryan attempted to reduce the dislocation in the field, but to no avail. Ryan gathered all the gear and assisted Ian back to their truck. What had been a 15-minute approach to the base of the climb earlier in the day turned into a difficult two-hour retreat. Ryan drove Ian to the hospital in St. Johnsbury, where Ian's dislocation was

treated. He was subsequently released that evening.

Analysis

The difficulty of the first pitch was estimated by both climbers to be 5.5. While the route to the tree ledge was obvious, the end of the first pitch presented some climbing difficulties that may have been beyond the climbing ability of the leader. Often overlooked in climbing is the ability of the lead climber to reverse moves when coming to a "dead end." This was Ian's first year of lead climbing. He had done fifteen easy leads prior to this attempt. Ryan had less

leading experience.

Both climbers speculate that while climbing above the last anchor point, the cam must have "walked," affecting the orientation of the cams and ultimately the holding power of the device. In hindsight, the leader admitted that he should have placed more than one piece of gear at the last possible anchoring point before attempting to make the last few moves to the tree ledge. In addition, both climbers surmised that fatigue and the cold temperatures contributed to Ian's inability to make the last two difficult moves to the security of the tree ledge.

Finally, it is interesting to note that the first piece of protection placed on the climb ended up being the stop gap that prevented both climbers from tumbling

further down the talus slope than they did. Both climbers agreed that had this piece of protection not held the injuries sustained could have been more serious. More importantly, an effective self rescue may not have been possible in this relatively obscure climbing area. (Source: John Kascenska)

FALL ON ICE, CLIMBING ALONE AND UNROPED

Washington, Mount Rainier, Gibraltar Ledge

On March 21, E. Dawes Eddy (56) fell 1600 feet while soloing the Gibraltar Ledge route on Mount Rainier. A four-person climbing team on the same route witnessed the accident and subsequent tumble down the 40–50-degree icy Gibraltar Chute. Eddy's fall was arrested where the slope angle decreased onto the Nisqually Glacier. One member of the witnessing party used a cell phone to alert the National Park Service while another member down-climbed to Eddy.

During the fall, Eddy had sustained bone fractures to his lower right leg and possible internal injuries. That climber helped stabilize Eddy and stayed with him while the other members of his team returned to Camp Muir to retrieve a rescue liter. The Park Service dispatched a helicopter with rangers Brenchley, Turner, and Winslow. They were flown near the accident site where they climbed to Eddy with rescue gear, litter, and medical supplies. Eddy was prepared for extrication and lowered to the helicopter, then flown to a hospital.

Analysis

Eddy had extensive experience climbing Mount Rainier, both solo and in the winter, and therefore understood the risk of his undertaking. Solo climbers in the winter can expect hidden crevasses, poor weather, and, most notably, no backup. Eddy was fortunate that another team was on the same route and witnessed the fall. He stated that no particular event caused the slip to occur, only that he recalled losing his footing and quickly falling backwards, sliding out of control before he could get into a self arrest position. Note that the slope angle was steep—50-degrees, and the snow was hard and icy. There had also been a significant amount of snowfall that winter. This coated the normally rock exposed gully, and he felt the snow helped to cushion his tumbles and prevent more serious injuries. Eddy was wearing his helmet and attributed his survival to this fact. (Source: Mike Gauthier, SAR Ranger, Mount Ranier National Park)

FALL INTO CREVASSE, CLIMBING UNROPED, WEATHER Washington, Mount Rainier, Muir Snowfield Paradise Glacier

On April 1, Michael Corroone (51) and Dan Gallagher (36) set out to climb Mount Rainier. Severe weather prevented a summit attempt, and they began descending back to Paradise on April 12. High winds, low visibility and whiteout conditions continued, forcing them to follow compass bearings down the Muir Snowfield. Near 8,800 feet, the unroped pair simultaneously fell into a deceptively covered crevasse on the Paradise Glacier, the eastern edge of the Muir Snowfield. Gallagher's backpack caught on the slender entrance and he was able to extricate himself. Corroone, however, slipped through the crack and disappeared into the crevasse.