

HACE, WEATHER

California, Mount Shasta Wilderness

Two experienced 26-year-old climbers (Mr. Thomas and Mr. Tom Bennett) were spending the weekend on the north side of Mount Shasta (very rarely used at this time of the year due to snow covered road access). They climbed the Bolam Glacier on March 26th and then the Whitney on March 27. They summited late and experienced extremely high winds in the summit plateau area. While they had experienced wind while climbing, they were somewhat sheltered by the terrain above the glacier. High winds and a lenticular cloud had formed in front of an approaching storm. The storm was not forecast to have much precipitation (compared to the norm on Mt. Shasta), but strong winds are common in front of a storm and behind it. The winds made it nearly impossible to stand, so they decided to dig a snow cave and descend at first light. They had good clothing, equipment and training to bivy overnight.

The following morning they decided to descend. The strong winds had decreased and visibility had improved. As they got ready to go, Tom Bennett began to experience problems with his vision and muscular control. He had a hard time putting on his crampons. As they began the descent, he was showing signs of ataxia and was quickly unable to walk. Mr. Thomas decided to return to the snow cave and call for help, which he did at 0848. His batteries were very weak in the cold weather. Unfortunately, deteriorating weather prevented assistance from the Siskiyou County SAR. Their route and trailhead were unknown until the USFS Law Enforcement found their vehicle on the north side.

Siskiyou County Sheriff SAR and the USFS Climbing Rangers set up a search base at the stranded climbers' vehicle on the north side of the mountain. Two USFS Climbing Rangers used snowmobiles to reach the trailhead area and continued up the route on skis. The winds were 40+ mph at 8000 feet. The Climbing Rangers stashed their skis and continued on foot until at 9000 feet, 60–70 mph winds prevented further travel. Visibility was extremely low. Mr. Thomas reached the Sheriff's SAR coordinator by phone (very weak battery) and said that he had descended and was following a creek. The Climbing Rangers descended and used the snowmobiles to search for tracks and found Mr. Thomas and transported him to the search base. At that point Mr. Thomas reported that he thought Mr. Bennett had suffered from HACE and that after they returned to the snow cave, Mr. Bennett lost consciousness and later appeared to have died. Mr. Thomas had attempted CPR, and when he realized that he had done everything he could with no results, Mr. Thomas decided to descend before his own condition worsened. He left food and water with Mr. Bennett, covered the opening to the cave with Mr. Bennett's backpack to protect him from high winds and snow, and

marked the snow cave area with his avalanche probe. He descended in the latter part of the day, reaching the terminus of the Whitney Glacier in the dark and dug another snow cave for shelter (their base-camp was farther east). The following morning he continued his descent in high winds and low visibility and was eventually found by Climbing Rangers at a low elevation. High winds, snowfall, and poor visibility restricted the search for Mr. Bennett on Tuesday. On Wednesday the search base moved to the Weed Airport and California Highway Patrol and Cal Fire helicopters assisted in the search. Poor weather conditions (high winds and low visibility) limited flights and they were unsuccessful in inserting Climbing Rangers anywhere near the upper mountain. Thursday morning, April 1, a military Chinook helicopter (Cal Air Guard) was able to drop off three Climbing Rangers and two SAR members below the summit at 14,000 feet. The temperature was -10 F, winds were 20–30 mph and cloud cover began to increase. After extensive searching, they were able to find the rime-covered markers left by Mr. Thomas and eventually Mr. Bennett's body. The autopsy showed that Mr. Bennett had died of High Altitude Cerebral Edema (HACE).

Analysis

Both of the climbers involved had excellent equipment and several years of mountaineering experience. Illness was the immediate cause of this fatality. Weather the contributory cause.

Weather usually starts 6–12 hours earlier on the mountain than it does in town, with high winds and low visibility common. Although many people associate serious high altitude illness with higher elevations, both HACE and HAPE occur on Mt. Shasta, at 14,162 feet. From the description provided by Mr. Thomas, the early warning signs of altitude illness common with Acute Mountain Sickness (AMS), which can develop into HACE, were not noticed or reported, and Mr. Bennett deteriorated rapidly with HACE. (Source: Eric White, USFS Lead Climbing Ranger)

(Editor's Note: This was the only narrative from Mount Shasta, but the following is an edited summary of climbing accidents from Mount Shasta Wilderness:

Precipitation for the 2009/2010 winter was 121% of normal with the snow pack in May at 127% of normal. However, we experienced an extended winter as cool temperatures and wet weather continued into early June. These weather conditions caused late winter climbing conditions to extend into early summer, or as our neighbor Rainier National Park says, "an incubated winter." Smooth and firm snow on the routes, as well as thick rime ice on rock outcroppings, created greater risks than are normally experienced in June. As a result, a greater number of accidents than the past few years occurred. Climbing conditions remained in good shape through September.

There were 27 climbing accidents, nine of which were from rockfall and ten of which involved falling on snow or ice. Most rescues were conducted in Avalanche Gulch. Seventeen occurred on ascents, ten on descents. Thirteen climbers were

exceeding their abilities. Injuries included 15 fractures, five sprains/strains, two concussions, and two back spasms/pain. Thanks to Eric White's Mount Shasta Wilderness Climbing Ranger Report)

FALL ON ROCK, INADEQUATE PROTECTION

California, Yosemite National Park, Middle Cathedral

On May 6, I took a lead fall way bigger than I would have liked and got to have a couple fun helicopter rides because of it. Just thought I'd share what happened so that others might learn second-hand rather than first-hand.

So Thursday afternoon, the reality of the day diverged greatly from the original agenda for the day. My climbing partner and I went to climb the East Buttress of Middle Cathedral in Yosemite, which is eleven pitches. There's one pitch of 5.10a (mixed) and the rest are 5.8 or easier trad.

Things had been going pretty well and at about 3:00 p.m. we were at the top of the 8th pitch, which I was leading. I'd been feeling comfy and confident all day. Didn't feel in over my head or sketched out. I was up about 120 feet from where my partner was belaying me and had stopped to look for a place to put in a piece of pro. The area was certainly protectable, but required a little looking around rather than a perfect crack to just jam cam after cam into. My previous piece was a Black Diamond 0.3 C4 cam about 10 or 12 feet below where I was looking, which seemed reasonable given the relatively easy terrain we were on. I never felt uneasy or precarious.

I don't remember slipping, and I don't remember falling the 35-foot distance to pro, which happily held, x 2 plus a little lead slack plus rope stretch. Apparently I smacked a little 8–12-inch ledge or some other part of the rock, because it knocked me out for what my climbing partner thinks was about 30 seconds.

I don't remember climbing back up to the little ledge and I don't remember setting up an anchor and clipping in to it. I have vague recollections of resting there to try to clear my head, checking the lockedness of my 'biner several times and belaying my partner up to me.

After taking a bit of time to evaluate the situation and me asking my partner to check my anchor (apparently a few times), we decided that my obvious but unknown head injuries and back injuries made it too dangerous for us to go either up or down. Conveniently, Yosemite has a very well trained (and unfortunately often-used) Search and Rescue team very near. This is quite different from the normal alpine environment. My partner flipped through on one of our radios until she made contact with someone on the Nose who could get us help from below. We were put into direct radio contact with a guy from SAR, who checked on our whereabouts and condition and arranged for two SAR guys to climb up to us to meet us for a helicopter pick. It was great to be able to have constant contact with him.