



AAC Publications

Slab Triggered While Skinning – Perceived 'Safer' Area

Utah, Wasatch Mountains, Mill Creek Canyon

On the morning of February 6, 2021, two different groups (eight people total) went to ski the Wilson Glades, a north-facing, 500-foot run just below the 9,950-foot summit of Wilson Peak. On the day of the accident, the avalanche danger was rated as High for northeast-facing terrain above 9,500 feet.

Chris, Sarah, Louis, Thomas, and Steve (Group A) approached from Big Cottonwood Canyon. While ascending Wilson Peak, Group A noticed a very large natural avalanche in the Wilson Chutes on the east side of the peak. They posted a photo of this avalanche on Instagram and tagged the Utah Avalanche Center at 8:33 a.m. At the top, they discussed how to ski Wilson Glades but never discussed if they should ski it or not. They discussed avoiding the steeper sections and going one at a time, with everyone participating in that discussion. Once the group reached the bottom of the Wilson Glades, they started breaking a trail back to the top to ski again.

Nate, Ethan, and Steph (Group B) approached from Mill Creek Canyon, starting at 8:30 a.m. Group B saw several natural avalanches in Alexander Basin while ascending their route into the Wilson Glades. Group B was aware that the avalanche danger was rated High and that Wilson Glades could avalanche. Their general plan for the day was to avoid avalanche terrain, and their specific travel plan was to stop at some point before the steeper section, and discuss where to go and what to ski. Ethan and Steph were familiar with the area, while it was Nate's first time skiing the Wilson Glades. Neither group dug a snow pit to investigate the snowpack.

Group B reached the bottom of Wilson Glades and noted many ski tracks and a recent skin track, which they started to follow uphill. When Nate and Ethan reached a point where they could see the steeper slopes above them, they waited in a sparse opening in the trees for Steph.

Group A skied the Wilson Glades a total of three times. After their second lap, Steve opted to wait above. Following the third lap, they began ascending with the intent to finish the day by skiing back to the trailhead in Big Cottonwood Canyon. At the steepest part of their track, they regrouped at a large tree to cross the final slope one at a time. Chris went first. He reported hearing something that sounded like an earthquake. The avalanche broke approximately 30 feet above them, and Sarah, Thomas, and Louis were swept downhill. Chris lunged for a tree and hit it so hard that the "wind was knocked out of him." Both skis were ripped off his feet, and he was left hanging above the bed surface after the avalanche passed. (It is very unusual that someone can hang onto a tree in an avalanche as Chris did.)

As Group A was caught in the avalanche, Ethan and Nate (Group B) looked up and saw a wall of snow coming at them. Nate initially thought the avalanche would not reach them, but then remembers the snow overtaking him and Ethan and being buried as the debris stopped moving. He quickly lost consciousness.

Chris dropped out of the tree and screamed for Steve, on the ridge above, to come down. Chris turned his transceiver to receive and began searching downhill on foot in a zigzag pattern. Chris acquired a transceiver signal, deployed his avalanche probe, and quickly located a person. Chris and Steve dug down four to six feet and uncovered Nate—someone they didn't know—who was unconscious but breathing. Chris and Steve then located and uncovered Ethan a few feet away and at the same depth—another skier they were surprised to see. Ethan, too, was unconscious but breathing. At 11:40

a.m., Chris called 911 and provided brief details about the avalanche and location.

Chris then acquired another transceiver signal approximately 150 feet to the east. Chris, Steve, and Nate (who by then had joined the search) located and uncovered Sarah, Louis, and Thomas in succession; they were buried approximately 30 feet apart down the fall line at a depth of four to six feet. None was breathing or had a pulse, and after attempting CPR on Sarah, no further lifesaving measures were taken. Chris and Steve then acquired a signal 100 feet to the west. They found Steph buried about six feet deep. She was likewise not breathing and did not have a pulse.

By the time all six people had been dug out of the debris (two alive and four deceased), multiple helicopters were circling above with rescue personnel on board. Chris, Nate, Ethan, and Steve were hoisted off the scene. With darkness approaching, operations were discontinued until the following day, when recovery efforts were completed.

ANALYSIS

The Wilson Glades have seen many close calls. It is perceived as relatively safe compared with nearby areas, because it is less steep. It seldom avalanches naturally; as in this incident, slides seem more often human triggered.

Analysis of the crown profile revealed the slide was caused by a four-inch-thick weak layer of faceted snow formed during periods of cold, dry weather. It was buried three feet deep under the hard slab that failed. The crown was nearly 1,000 feet wide. The slope angle where the crown profile was recorded was 31 degrees, as was the slope where most of the ski tracks from Group A were located. Their uphill skin track was a touch steeper. Any slope above 30 degrees is considered avalanche terrain.

All the skiers except Chris had one or both skis still attached to their feet when they were buried, which may have contributed to deeper burials. Because they were all skinning uphill, the toe pieces of their bindings were likely in the walking or locked position, making it difficult for the skis to release from their feet. In a study of avalanche fatalities in the U.S. between 2009 and 2017, avalanche forecaster Evelyn Lees found that 32 percent of fatalities among tourers happened during the ascent. Her study stresses the need to find safe ascent routes.

Chris and Steve saved two lives (Nate and Ethan), and Chris, Nate, and Steve gave their best attempt to save the rest. Their rescue efforts were top-notch, and they knew how to perform companion rescue quickly and efficiently. They did the absolute best anyone could do with six full burials. (Source: Utah Avalanche Center.)

Read the full report from the Utah Avalanche Center.

Images



Position of eight skiers after the Wilson Glades avalanche. (The skin track is shown in red.) All but one of them were skinning up the slope when the slide occurred.

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