Avalanche Data

Avalanches don't care if you are a hunter, skier or an elk. If the snowpack is weak enough and the terrain is steep enough, any suitable trigger will do to set the snow in motion. This SS-AF-3-O avalanche was triggered by a hunter walking across a steep (45–50°) snow-loaded slope. Conditions on this north-northwest aspect at 8,600 feet had been perfect for the formation of faceted snow in the shallow snowpack. Snow had drifted 1–3 feet deep in some lee areas, and much of it had turned into fragile depth hoar.

The slide released 18 inches deep and 120 feet wide, some 60 feet above Robison. It ran 600 feet to where it narrowed into a gully and made a bend to the left, then continued for another 600 feet down the 20– 30° trough. The debris piled up to 25 feet deep in one place and was 10 feet deep where Robison was found.

Comments

Robison was hunting alone; there was no one to try to save his life after the avalanche. He was found with an ice mask around his head which indicates he may have been alive for some time under the snow. There were no indications of trauma from a wild avalanche ride; his mouth was not packed with snow and his glasses remained on his head.

This was the second hunter caught in an avalanche in 2 days (see accident 82-17). While more backcountry skiers are starting to carry avalanche rescue gear, it is doubtful that hunters are. Avalanches don't discriminate as to the activity category of their victims. A person on foot can trigger a slide just as easily as a person on skis. Avalanche skills and rescue gear are recommended for hunters, too, whenever they pursue their prey into steep, snow-covered terrain.

Where depth hoar tries to support a fresh soft-slab, there is a high probability of triggering an avalanche if the slope is steep enough. Many people discount the avalanche potential in the fall because it is not winter yet. Avalanches are not dependent on the time of year but can occur whenever the ingredients are present: a steep slope, a snowcover, a weak layer, and a trigger. Fall can be a dangerous time for avalanches because a shallow snowpack often turns into weak, faceted grains that don't bond well to each other. This makes a poor foundation for subsequent snows. There are several "bad" snowpack-structure scenarios, almost any of which can be found somewhere in the mountains at a given time.

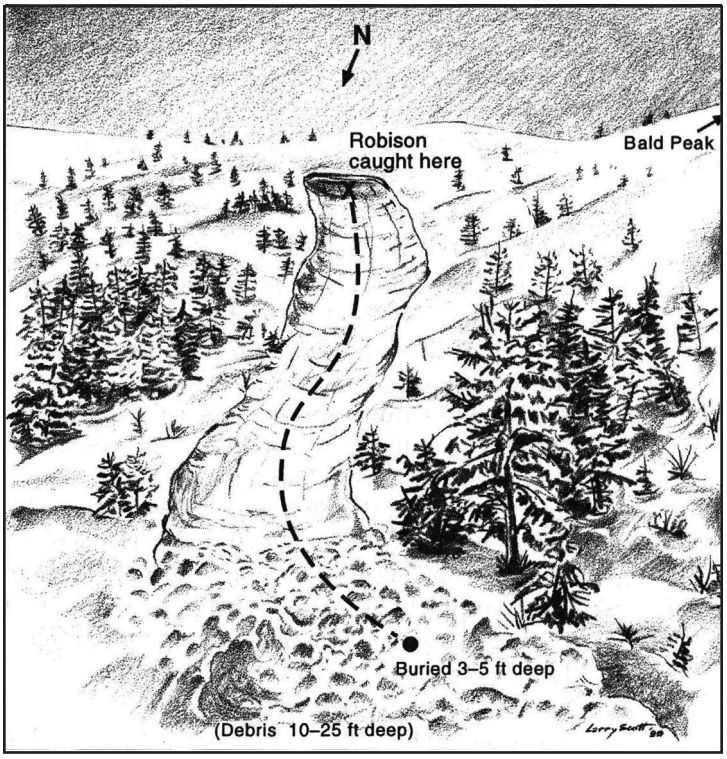

Figure 19. Accident 82-18, Montpelier, Idaho, November, 14, 1982.

82-19 DECEMBER 7 AND 8, 1982

Big Sky, Montana

3 lift skiers and 4 ski patrollers caught (three incidents), 3 partly buried, 2 buried, 3 injured

(Because of the continuity of two incidents here in 2 days, both are included as one narrative.)

Weather Conditions

November 1982 produced no major storms for the Big Sky ski area in southwest Montana, some 45 miles south of Bozeman. The snowpack was shallow, about 20 inches deep, until more fresh snow moved into the region November 30 to December 2. This was followed on the 5th by another storm depositing up to a