

**South Summit of Saddle Peak, Bridger Range**  
**1 skier triggered, caught, partially buried and injured**  
**Gallatin National Forest**  
**February 24, 2012**

**SYNOPSIS**

Three skiers hiked the ridge south from the top of Bridger Bowl Ski Area to access sidecountry terrain. From the top of the south summit of Saddle Peak one skier dropped onto the east face and skied 1,500 feet to the traverse back to the ski area. Following a similar line, the second skier triggered the slide approximately 20 feet down from the ridge crest. The avalanche was estimated to be 3-5 feet deep and 500 feet wide. It propagated over a ridgeline. She was swept 1,500 feet downhill and came to rest face down, head downhill with one arm and one leg buried. Her partners got to her within 10 minutes and called 911 since she was injured. US classification of the avalanche is HS-AS-O and sized D3, R3.

Photos:

<http://www.mtavalanche.com/images/12/view-helicopter>

<http://www.mtavalanche.com/images/12/saddle-debris>

<http://www.mtavalanche.com/images/12/slide-path-saddle-peak>

<http://www.mtavalanche.com/images/12/saddle-peak-slide>

Videos:

Bridger Avalanche (24 Feb): <http://www.youtube.com/watch?v=qf3cTHoWnyQ>

Bridger Snowpack (23 Feb): <http://www.youtube.com/watch?v=qf3cTHoWnyQ>

Saddle Peak (1 Feb): [http://www.youtube.com/watch?v=42\\_bVNI3UwE](http://www.youtube.com/watch?v=42_bVNI3UwE)

**WEATHER**

Snowfall and temperature data are from Bridger Bowl Ski area located one mile to the north of the accident site. In the prior four days approximately 3.2-3.6 inches of snow water equivalent fell. Winds during this time were very strong out of the west and northwest. They peaked on the evening of the 22<sup>nd</sup> with averages of 44 mph and gusts to 67 mph. Temperatures during the preceding days at the ridgetop (8,500 feet) ranged from 6°F to 26°F.

At the time of the accident (approximately 1 p.m.) ridgetop winds out of the west were averaging 25 mph with gusts to 31 mph. Skies were mostly sunny and the temperature was 15°F.

**AVALANCHE**

On Friday, February 24<sup>th</sup> at 10 a.m., Schlashman's lift at Bridger Bowl opened for the first time after the week's storm. This chairlift gives access to the uncontrolled backcountry to the south of the ski area. Avalanche transceivers are required to get on the lift. That day, two of the three skiers (hereby know as Skier1 and Skier3) had already taken two runs off of Saddle Peak when they decided to go to for a third, bringing a third partner with them (aka. Skier2). This was her first sidecountry ski of the day.

All three knew the avalanche danger was rated HIGH, which means human triggered slides were very likely. All three were very familiar with the sidecountry terrain. Skier1 was with a party that triggered a large avalanche on the west side of the range on February 21<sup>st</sup> when the danger was also HIGH. On the 24<sup>th</sup> they left the ski area boundary and hiked past the main summit of Saddle Peak to its south summit, a short distance away. Below the summit a shallow ridge splits the east facing slope into two drainages. Two ski tracks from earlier descents were visible. Skier1 dropped in first and skied the gully to the south but cut back north at the bottom, stopping 1,500 feet below on the traverse that would take them back to the ski area. Skier2 skied next following his general line. Twenty feet below the top she triggered the slide. The avalanche broke 3-5 feet deep and 500 feet wide on depth hoar crystals at the ground. She was swept away. Skier1 heard the roar, saw the cloud of debris and began searching with his beacon. He soon heard her yelling in the gully to the south. He then yelled to Skier3 who skied the bed surface to her, arriving first. She was face down, head downhill with one arm and one leg buried. Her arm and leg were injured. She was quickly dug out and Skier3 called 911.

#### SEARCH AND RESCUE

Gallatin County Search and Rescue flew volunteers Doug Chabot, Eric Knoff and Todd Thesing to the scene. The party had shoveled out a landing zone next to the injured skier. After dropping the volunteers off the helicopter left while they assessed and packaged her for transport. The helicopter returned and she, along with Todd and Skier3 flew to Bozeman Deaconess Hospital. She was diagnosed with a broken left arm and severe contusions on her right thigh. Her helmet showed signs of impact.

After extrication, Eric and Doug performed a beacon search in both gulleys. They were spotted from above by Bridger Bowl's General Manager, Randy Elliot and others. Once the scene was declared clear, everyone exited back to the ski area.

#### SNOWPACK

On the day of the accident the avalanche danger was rated HIGH on all slopes steeper than 35 degrees. The avalanche occurred on a slope steeper than 40 degrees. The GNFAC had issued an Avalanche Warning (denoting HIGH danger on all aspects and elevations) the previous two days. The snowpack in the Bridger Range was thin and weak. The prior four days of snow added 40% more to the snowpack's water content. The Bridger Bowl snow stake at Alpine reflected a jump from 44 inches on February 20<sup>th</sup> to 60 inches on the 24<sup>th</sup>. Weak snow at the ground and the middle of the snowpack was breaking easily in stability tests. More importantly, natural and human triggered avalanches released prior to this accident along the entire Bridger Range. Depth hoar crystals lined the bottom foot of the snowpack and

near surface facets were under the storm snow. Wind loading at the ridgetops created thick drifts that further stressed the weak facets. Our videos listed at the beginning of this report give a good indication of snowpack structure, poor stability and our concerns with avalanches.

Avalanche Advisory for February 24, 2012: <http://www.mtavalanche.com/advisory/12/02/24>

For more information or if you have questions, you can contact the GNFAC at 406-587-6984 or [mtavalanche@gmail.com](mailto:mtavalanche@gmail.com)

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