

## **GNFAC Avalanche Forecast for Sat Jan 14, 2017**

Good Morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Saturday, January 14<sup>th</sup> at 6:30 a.m. Today's advisory is sponsored by [Katabatic Brewery](#) and [Wisetail](#). This advisory does not apply to operating ski areas.

### Mountain Weather

This morning clear skies are creating a strong temperature inversion. Currently, valley temps are below zero while mountains temps range from the single digits to mid-teens above zero F. Winds are blowing 5-20 mph out of the W-SW. Today, temps will warm into the upper teens to mid-20s F under clear skies and winds will remain light to moderate out of the W-SW. The weather pattern remains high and dry through the weekend.

### Snowpack and Avalanche Discussion

#### Cooke City

The snowpack around Cooke City is still adjusting to the 3+ feet of snow that fell earlier in the week. Natural avalanches occurred during and immediately after the storm - many of these propagated long distances and ran full track ([photo](#), [photo](#), [video](#)). These slides likely failed on a layer of near surface facets that formed prior to the storm during the extended period of cold weather.

While natural avalanche activity has subsided, the potential for human triggered avalanches remains. Given the current snowpack structure, I would continue to be extra cautious when riding on or underneath steeper slopes. While most slides will stay confined to the upper 3 feet of the snowpack, there is the potential for slides to fail on weak layers near the ground. Regardless of what layer an avalanche is triggered on, it will likely be large and dangerous.

Today, all necessary ingredients for avalanches exist making human triggered avalanches likely. For this reason the avalanche danger is rated [\*\*CONSIDERABLE\*\*](#) on all slopes.

#### Madison Range Southern Gallatin Range

#### Lionhead area near West Yellowstone

The mountains near Big Sky and West Yellowstone picked up 1.5 to 2 feet of snow during the last storm. On Thursday, natural avalanches were observed on Fan Mountain near Big Sky and snowmobilers remotely triggered two small slides in the Lionhead area near West Yellowstone ([photo](#)). These slides involved the storm snow and likely failed on a layer of near surface facets.

The snowpack has gotten a breather over the past few days and the potential for natural and remotely triggered avalanches has declined. Yesterday, Alex rode in the Taylor Fork and did not observe any natural avalanches or signs of instability. He did get a fracture to propagate in a stability test, which is consistent with what I found in Bacon Rind on Thursday ([photo](#)).

These stability tests are good reminders the snowpack still has issues and that avalanches remain possible on the new snow/old snow interface ([video](#)). The challenge is – not all slopes are unstable. This makes careful snowpack evaluation essential before committing to steeper terrain.

Today, human triggered avalanches remain possible and the avalanche danger is rated [MODERATE](#) on all slopes.

### Bridger Range Northern Gallatin Range

The mountains around Bozeman have received roughly half the amount of snow as the areas around Big Sky and West Yellowstone. Due to the lower snow totals the snowpack is mostly stable. However, small areas of instability may be encountered on previously wind loaded slopes. These isolated areas mainly exist below the ridgelines in upper elevation terrain. While these slopes have had a few days to stabilize, it still remains possible for skiers or riders to triggered pockets of wind drifted snow.

Today, human triggered avalanches are possible on wind loaded slopes which have a [MODERATE](#) avalanche danger. Non-wind loaded slopes have a [LOW](#) avalanche danger.

Doug will issue the next advisory tomorrow morning by 7:30 a.m.

We rely on your field observations. Send us an email with simple weather and snowpack information along the lines of what you might share with your friends: How much new snow? Was the skiing/riding any good? Did you see any avalanches or signs of instability? Was snow blowing at the ridgelines? If you have snowpit or test data we'll take that too, but this core info is super helpful! Email us at [mtavalanche@gmail.com](mailto:mtavalanche@gmail.com) or leave a message at 406-587-6984.

### Upcoming Events and Education

**Month of January:** Montana Ale Works has chosen the Friends of the Avalanche Center as January's "Round It Up America" recipient. Every time you round-up your bill the change gets donated to the Friends. Pennies equal dollars!

**King and Queen of the Ridge**, Saturday, February 4<sup>th</sup>. A Hike and Ski/Ride-a-Thon fundraising event to support the Friends of the Gallatin National Forest Avalanche Center. Register with Bridger Bowl [HERE](#), make pledges [HERE](#).

### BOZEMAN

Tuesday, January 17, **Avalanche Center Forecaster's Social** at Montana Ale Works. A small-plate fare and beer tasting fundraiser for the Friends: \$40.00/person; 2 seatings (5:30 p.m. and 7:00 p.m). Get your tickets [HERE](#).

Evenings 18-19 January, field 21 or 22 January. **Introduction to Avalanches with Field Course**, 7-9:30 p.m. at MSU Sub Ballroom B. Sign up [HERE](#).

### COOKE CITY

**Weekly rescue training and snowpack update**, 6-7:30 p.m., The Antlers Lodge on Friday, field location Saturday TBA.

### BIG TIMBER

Tuesday, January 17, **Avalanche Awareness**, 6-7:30 p.m., Sweet Grass County High School.