

## **GNFAC Avalanche Advisory for Mon Dec 26, 2016**

Good Morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Advisory issued on Monday, December 26<sup>th</sup> at 7:15 a.m. Today's advisory is sponsored by [\*\*Mystery Ranch\*\*](#) and [\*\*Gallatin County Search and Rescue\*\*](#). This advisory does not apply to operating ski areas.

### Mountain Weather

Yesterday Santa delivered the best gift of all to the mountains - 4-6" of low density powder. Temperatures this morning are below zero F near Cooke City and single digits F elsewhere. Wind overnight was out of the west to northwest at 10-20 mph, except at Bridger Bowl where wind was a steady 30-40 mph. Today will be mostly cloudy with a trace of snow. Temperatures will reach the high teens F, and wind will be westerly at 15-25 mph. More snow is expected tomorrow.

### Snowpack and Avalanche Discussion

[Bridger Range](#) [Gallatin Range](#) [Madison Range](#)

#### Lionhead area near West Yellowstone

Yesterday's 4-6" of snow totaled .2-.3" of [snow water equivalent](#) (SWE). Wind readily transported this low density powder into soft wind slabs. These wind slabs were easily triggered by skiers yesterday, and they will be deeper and remain easy to trigger today. Be cautious of steep wind loaded slopes today, and avoid terrain traps to mitigate the consequences of an avalanche. Even small slides can be deadly if they carry a skier or rider into trees or over cliffs.

Snowfall over the past three days equaled over .5" of SWE near Bozeman and Big Sky, and 1" of SWE in the southern Madison Range and near West Yellowstone. This snowfall and strong wind formed deeper, heavier slabs over a weak layer of facets near the ground ([photo](#)). Eric and I observed this layer in the Northern Gallatin Range on Thursday and Friday. Where the snowpack was shallow it was weak, but not unstable ([video](#)). Where the snow was deeper it was unstable and difficult to trigger ([video](#)). Today, expect all slopes with this weak layer to be unstable after recent snowfall and wind. Doug went to Bacon Rind yesterday and got unstable results in his stability tests ([video](#)) where I found weak snow and stable results ten days ago ([video](#)). Avalanches on this weak layer could be large and destructive, and obvious signs of instability may be absent.

Today, fresh wind slabs will be easy to trigger and large avalanches are possible. The avalanche danger is [\*\*CONSIDERABLE\*\*](#).

#### Cooke City

The mountains near Cooke City received less snow over the past 48 hours, but a weak layer of facets near the ground still shows signs of instability. Avalanches on this layer are possible to trigger and could be large and destructive ([photo](#), [photo](#)). Careful snowpack and terrain evaluation is essential. Look for this sugary weak layer in a snowpit before committing to steep terrain, and don't let previous tracks lure you into a false sense of safety.

Recent snow and wind added weight to a weak snowpack and formed wind slabs that are possible to trigger today. These smaller slides could be deadly in high consequence terrain, or they could trigger a larger avalanche on the layer of facets at the base of the snowpack. The avalanche danger today is [\*\*CONSIDERABLE\*\*](#) on wind

loaded slopes, and MODERATE on all other slopes.

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

#### COOKE CITY

**TOMORROW!!** December 27 and Wednesday, December 28, **Weekly rescue training and snowpack update**, 6-7:30 p.m., Soda Butte Lodge on Tuesday, Field location Wednesday TBA.

Every Friday and Saturday, **Weekly rescue training and snowpack update**, 6-7:30 p.m., Soda Butte Lodge on Friday, Field location Saturday TBA.