

## **GNFAC Avalanche Forecast for Sat Jan 30, 2016**

Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Saturday, January 30, at 7:00 AM. Today's advisory is sponsored by [\*\*Lone Peak Brewery\*\*](#) and [\*\*Mystery Ranch\*\*](#). This advisory does not apply to operating ski areas.

### Mountain Weather

Over the past 24 hours the mountains around West Yellowstone and Cooke City picked up 10-12 inches of new snow, while the mountains around Bozeman and Big Sky picked up 4-8 inches. At 4 a.m. snow has stopped falling and temperatures range from the single digits to mid-teens F. Winds are blowing 15-30 mph out of the W-SW with ridgetop gusts exceeding 40 mph. Temperatures will warm into the upper teens to mid-20s F and winds will remain moderate to strong out of the W-SW. Skies will be partly cloudy this morning, but will become increasingly cloudy by this afternoon. The next storm arrives tonight bringing a good chance of mountain snow through tomorrow morning. The southern ranges should see 4-6 inches overnight while the northern ranges will see 2-4 inches.

### Snowpack and Avalanche Discussion

Southern Madison Range Southern Gallatin Range

Lionhead area near West Yellowstone Cooke City

The mountains around West Yellowstone and Cooke City got hammered by this latest storm. Both Madison Plateau and Fisher Creek Snotel sites are recording 1.1 inches of SWE in the past 24 hours. This rapid and heavy load is enough to put even the strongest snowpack under a tremendous amount of stress, but as we know our snowpack is anything but strong.

Today, the combination of new snow, strong winds and buried weak layers will create very unstable conditions, primarily on wind loaded slopes. Yesterday, I was in the southern Madison Range up the Taylor Fork and triggered small wind slabs. We turned around early due to rising instability ([video](#)).

Today, I expect natural and human triggered avalanches to occur in wind loaded terrain. It will best to stay off and out from underneath any slope that has wind deposited snow. While wind slabs are the primary avalanche concern, weak layers buried mid-pack and near the ground remain a problem. These layers will be under a heavy amount of stress and have the potential to produce large and dangerous avalanches.

Today, natural and human triggered avalanches are likely on wind loaded slopes which have a [\*\*HIGH\*\*](#) avalanche danger. Non-wind loaded slopes have a [\*\*CONSIDERABLE\*\*](#) avalanche danger.

Bridger Range Northern Gallatin Range Northern Madison Range

The northern ranges didn't get hit quite as hard, but they did hold their own. Both the Bridger Range and mountains around Big Sky picked up 4-8 inches of snow totaling .4 to .6 inches of SWE. This load doesn't match the southern areas, but it will be enough to put the snowpack on edge.

Wind loaded slopes will be the most likely to produce avalanches today. Strong winds out of the west-southwest will make east and north facing slopes the most suspect, but all aspects have the potential to hold wind deposited

snow.

A secondary problem is faceted layers buried deeper in the pack. There are two layers to look out for. One is buried 1-2 feet deep and the other exists near the ground ([video](#), [video](#)). Both these layers have produced natural and human triggered avalanches over the past few weeks ([photo](#), [photo](#), [photo](#)).

Today, dangerous avalanche conditions exist on wind loaded slopes which have a **CONSIDERABLE** avalanche danger. Non-wind loaded slopes have a **MODERATE** avalanche danger.

I will issue the next advisory tomorrow morning by 7:30 a.m. If you have any snowpack or avalanche observations to share, drop us a line at [mtavalanche@gmail.com](mailto:mtavalanche@gmail.com) or leave a message at 587-6984.

## **EVENTS and AVALANCHE EDUCATION**

*A complete calendar of classes can be found [HERE](#).*

### **TODAY!**

**West Yellowstone:** *1hr Avalanche Awareness*, West Yellowstone Holiday Inn, 7-8:30 p.m.

**Cooke City:** *Companion Rescue Clinic for Snowmobilers*. Information and registration here: <https://www.ticketriver.com/event/18078>

**Lewistown:** 9:00 a.m., *1hr Avalanche Awareness for Snowmobilers*, Lewiston Honda-Polaris. More information can be found [HERE](#).

**EVENT at BRIDGER BOWL:** February 6, *King and Queen of the Ridge*. A day of hiking and skiing the Ridge as a fundraiser for the Friends of the Avalanche Center. Teams and individuals are welcome! More info here: <http://bridgerbowl.com/event/king-and-queen-of-the-ridge>