

## **GNFAC Avalanche Advisory for Sat Dec 20, 2014**

Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Saturday, December 20 at 7:30 a.m. Today's advisory is sponsored by [\*\*Katabatic Brewing Company\*\*](#) in partnership with the **Friends of the Avalanche Center**. This advisory does not apply to operating ski areas.

### Mountain Weather

Over the past 24 hours the mountains picked up 2-4 inches of new snow. At 4 a.m. snow has stopped falling and temperatures are in the upper teens to low twenties F under partly cloudy skies. Winds are blowing 10-20 mph out of west and southwest with ridgetop gusts reaching close to 30 mph. Today, a brief window of clear weather will allow temperatures warm into the upper 20s to low 30s F. Winds will increase through the day out of the west and southwest with ridgetop gusts reaching close to 40 mph by this afternoon. Skies will become mostly cloudy late in the day as a more potent storm system approaches from the west. The mountains around West Yellowstone and Cooke City could see 4-6 inches of snow by tomorrow morning while the mountains around Bozeman and Big Sky could see 2-4 inches.

### Snowpack and Avalanche Discussion

[Bridger Range](#) [Gallatin Range](#) [Madison Range](#) [Lionhead area near West Yellowstone](#) [Cooke City](#)

Today, the primary avalanche concern will be wind slabs. New snow combined with winds out of the west and southwest will produce fresh slabs below ridgelines and on the leeward side of cross loaded terrain features. These newborn wind slabs will be sensitive to human triggers and have the potential to propagate farther than one might expect. On Wednesday, skiers triggered many small wind slabs near Fairy Lake in the Bridger Range ([photo](#)). This is a good example of what will be possible around our forecast area today. Avoiding slopes with wind deposited snow will be the best way to avoid triggering a slide.

As snow slowly piles up, slopes will not need to be wind loaded in order to produce avalanches. Yesterday, skiers north of Bridger Bowl triggered a few small slides that failed on a layer of facets that formed during the mid-December dry spell. This layer can be found throughout our forecast area and will become increasingly active as it gets loaded by new snow ([video](#)). This layer exists less than a foot below the surface and is easy to assess by digging a quick snowpit. With more snow and wind in the forecast, I expect avalanches failing on this layer to grow in size and distribution.

A forecast wouldn't be complete without talking about facets near the ground. While this pesky weak layer has gained strength in many areas, it continues to be a problem in others. Yesterday, Mark went to Beehive Basin near Big Sky and found this layer on many slopes ([snow pit](#)). It wasn't an immediate problem due to the lack of a heavy load, but will certainly be a growing concern once we get more snow. Mark also found this layer in Cooke City earlier in the week. He felt it has gained strength on most slopes in this area, but continues to be an issue in steep, rocky terrain with a thinner snowpack ([video](#)).

Today, human triggered avalanches are likely 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 at 7:30 a.m. If you have any snowpack or avalanche observations drop us a line at [mtavalanche@gmail.com](mailto:mtavalanche@gmail.com) or call us at 587-6984.

## **AVALANCHE EDUCATION and EVENTS**

Take a look at our [\*\*Education Calendar\*\*](#) for all our classes being offered.

**Snowmobiler Rescue Course**, Cooke City, December 27, 0800-1200. Register here:  
<https://www.ticketriver.com/event/13721>