

## **GNFAC Avalanche Forecast for Wed Dec 28, 2016**

Good Morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Wednesday, December 28<sup>th</sup> at 7:00 a.m. Today's advisory is sponsored by [Montana Ale Works](#) and [Cooke City Motorsports](#). This advisory does not apply to operating ski areas.

### Mountain Weather

In the last 24 hours the mountains from Big Sky to West Yellowstone and Cooke City have an 8-12" of new snow while the Bridger and northern Gallatin Ranges have 2-3". Winds are westerly and averaging 20-30 mph with gusts of 50 in the ski areas and 66 up Hyalite. Mountain temperatures are in the single digits under mostly cloudy skies. Another 1-2" will fall this morning and winds will continue to be strong and gusty.

### Snowpack and Avalanche Discussion

Madison Range Southern Gallatin Range

Lionhead area near West Yellowstone Cooke City

The mountains around Big Sky to Lionhead to Cooke City all received about .5" of [snow water equivalent](#) (SWE). This translates into 8-12" of low density powder. I am concerned about the weight of the new snow and wind-loading. This .5" of SWE is in addition to the 1" of SWE that fell over the weekend. Our snowpack has a weak, unstable foundation of sugary, faceted snow that will be straining to hold this new load. On Sunday in Bacon Rind ([video](#), [photo](#)), I had this layer collapse as I skied and also propagate in my snow pits. The next day in Taylor Fork my compression tests showed the same instability ([video](#)). Yesterday, I toured above Hebgen Lake and found a poor snowpack structure and inconclusive stability tests. Regardless, we opted to not ski avalanche terrain as I do not trust this faceted layer. The mountains around Cooke City have an additional concern: a thin layer of weak snow in the upper third of the snowpack. This layer collapsed under the weight of a skier over the weekend and likely has not become stable since then.

Strong westerly winds have been blowing for days at the ridgetops and willy-nilly at lower elevations. A foot of low-density powder won't stand a chance of remaining intact. It will be blown into thick wind drifts that will avalanche and potentially break to the ground on the facets. For today, the avalanche danger is rated [HIGH](#) on all wind-loaded terrain and [CONSIDERABLE](#) on all other slopes.

**SPECIAL NOTE TO COOKE CITY SLEDDERS:** Be extra careful. A [HIGH](#) danger means you are very-likely to trigger slides today.

Bridger Range Northern Gallatin Range

The Bridger and northern Gallatin Ranges received 2-3 inches of snow. The winds have been blowing steady with gusts in the 60s up Hyalite and near 50 mph at the ski area ([photo1](#), [photo2](#)). This new snow will be blown into wind drifts at all elevations since both ridgetop and mid-mountain winds are strong. Additionally, Alex and Eric both confirmed a layer of weak, sugary facets at the ground is possible to trigger ([Ellis video](#), [Hyalite video](#)). For today, the avalanche danger is rated [CONSIDERABLE](#) on wind-loaded terrain and [MODERATE](#) on all others.

Eric 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

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