

## **GNFAC Avalanche Advisory for Thu Dec 29, 2016**

Good Morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Thursday, December 29<sup>th</sup> at 7:00 a.m. Today's advisory is sponsored by [\*\*Yellowstone Arctic Yamaha and Yamaha Motor Corp\*\*](#) 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 no new snow has fallen. At 5 a.m. temperatures are in the single digits above or below zero F and skies are mostly clear. Winds are blowing 10-25 mph out of the W-NW. Today, a weak ridge of high pressure builds over the area producing a brief interval of calm and dry weather. Highs today will warm into the upper teens to mid-20s F and winds will continue to blow 10-25 mph out of the W-NW. The ridge begins to break down this evening as another storm approaches. Winds will increase tonight with gusts upwards of 60 mph possible by tomorrow morning. Snow moves into the area tomorrow afternoon and the mountains should see modest accumulation by Saturday morning.

### Snowpack and Avalanche Discussion

[\*\*Madison Range\*\*](#) [\*\*Southern Gallatin Range\*\*](#)

[\*\*Lionhead area near West Yellowstone\*\*](#) [\*\*Cooke City\*\*](#)

Today, [\*\*wind slabs\*\*](#) will be the primary avalanche concern in the mountains around Big Sky, West Yellowstone and Cooke City. Strong winds out of the W-NW yesterday combined with a foot of low density snow Tuesday night created perfect conditions for wind slab development. Thick wind drifts will be widespread on upper elevation slopes leeward to W-NW winds, but may be encountered on all aspects and elevations.

Yesterday, the Big Sky Ski Patrol triggered wind slabs 1-2 feet thick during control work. They found these slabs to be thick and stubborn. Today, remote triggers will be unlikely, which means a skier or rider will have to be on the wind drift before it breaks. This can create an ugly situation, especially in steep, high consequence terrain. Be hyper aware of the snowpack and terrain you're traveling in and avoid all slopes that appear to be wind loaded.

An additional concern will be avalanches failing on weak, faceted snow near the ground. Earlier in the week, Doug found this layer to be reactive in the Taylor Fork, Bacon Rind and mountains near Hebgan Lake ([\*\*video\*\*](#), [\*\*video\*\*](#), [\*\*photo\*\*](#)). This layer also produced large avalanches in the mountains around Cooke City last week.

Today, Human triggered avalanches are likely and the avalanche danger is rated [\*\*CONSIDERABLE\*\*](#) on all slopes.

[\*\*Bridger Range\*\*](#) [\*\*Northern Gallatin Range\*\*](#)

The Bridger Range and northern Gallatin Range received plenty of wind, but far less snow. These ranges did pick up a few inches, which has been readily transported by strong, gusty winds ([\*\*photo1\*\*](#), [\*\*photo2\*\*](#)). Firm wind drifts likely exist on the leeward side of ridgelines and exposed terrain features. I don't expect these drifts to be highly sensitive to human triggers, but they should be avoided if possible.

Weak snow near the ground also remains a concern, but without a significant load is becoming less reactive. Although we haven't seen avalanches on this layer for some time, it can't be entirely ruled out.

For today, human triggered avalanches are possible and the avalanche danger is rated **MODERATE**.

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

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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.

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### **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!

#### **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\*\*](#).

#### **COOKE CITY**

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