

## **GNFAC Avalanche Advisory for Fri Dec 23, 2016**

Good Morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Friday, December 23<sup>rd</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

A strong temperature inversion is in place this morning. Valley temps are in the single digits above or below zero while the mountains are ten to twenty degrees warmer. Currently, skies are clear and winds are blowing 5-20 mph out of the W-NW. Today will be one of transition as the next storm approaches. Skies will remain clear through the morning hours, but will become increasingly cloudy this afternoon. Winds will increase throughout the day and shift to the W-SW. Temps will remain mild in the mountains with highs in the mid-20s to low 30s F. Prefrontal moisture arrives tonight bringing 1-2" of snow to the mountains by tomorrow morning. A stronger wave of energy arrives Saturday night and Sunday. This should provide the best Christmas gift of all – good powder riding.

### Snowpack and Avalanche Discussion

[Cooke City](#) [Southern Gallatin Range](#) [Southern Madison Range](#)

#### Lionhead area near West Yellowstone

Recent avalanche activity in the southern ranges shares a common theme – wind loaded slopes failing on facets near the ground. Fortunately, the past few days have been relatively calm, which has given the snowpack a nice break. As the snowpack gets time to adjust, avalanche activity along with cracking and collapsing have become less common.

This is a tricky time to travel in avalanche terrain. The snowpack appears to be getting stronger, but the potential remains to trigger large, catastrophic slides. Triggering a slide in these conditions often requires finding a specific spot where a skier or rider could impact the weak layer. Steep, wind loaded slopes with variable snow depths are high probability areas for triggering a slide ([photo](#), [photo](#)). Today, it's safe to assume that all steep, wind loaded slopes will produce avalanches with human triggers.

For this reason, the avalanche danger is rated [\*\*CONSIDERABLE\*\*](#) on wind loaded slopes steeper than 35 degrees. All other slopes have a [\*\*MODERATE\*\*](#) avalanche danger.

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

#### Northern Madison Range

The northern ranges have a similar snowpack structure as the south, but they haven't received as much snow. This is making avalanches harder to trigger. However, facets near the ground remain a concern, mainly on wind loaded slopes ([video](#)). Today, I would be suspect of any slope that has wind drift snow. Fortunately, wind loaded terrain is easy to recognize and avoid.

On slopes that haven't been affected by the wind (which are few and far between) the snowpack is mostly stable. Yesterday, I was on Mt Ellis and found good skiing with good stability ([video](#)). I did make sure to put my shovel in the snow to assess the structure before committing to the slope. I suggest doing the same today before jumping into steeper terrain.

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.

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**

Tuesday, 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.