

## **GNFAC Avalanche Advisory for Wed Dec 24, 2014**

Good morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Christmas Eve, Wednesday, December 24, at 7:30 a.m. Today's advisory is sponsored by [\*\*Mystery Ranch\*\*](#) in partnership with the Friends of the Avalanche Center. This advisory does not apply to operating ski areas.

### Mountain Weather

I sure hope Santa is instrument rated, because he'll be flying blind in the middle of a storm tonight and might deliver presents to the wrong house. So, if anyone gets a new set of ice tools and crampons, they're mine and you can drop them off at the office.

Yesterday was mostly sunny with temperatures in the teens and westerly winds averaging 20-30 mph, gusting to 45. Today, expect cloudy skies, similar winds and mountain temperatures in the high 20's up north and teens down south. Snowfall will begin later this afternoon and continue into tomorrow. By Christmas morning the mountains will have 4-6 inches of new snow with Cooke City getting closer to 10 inches.

### Snowpack and Avalanche Discussion

#### Gallatin Range Madison Range

#### Lionhead area near West Yellowstone Cooke City

Above tree line winds are blowing and redistributing the 1-2 feet of fresh snow that fell by Monday night. The Fin in Cooke City avalanched sometime during the storm ([\*\*photo\*\*](#)) and is indicative of the problem we are facing: wind-loads and lots of new snow creating unstable conditions. Faceted snow at the ground is becoming less of an issue; instead we are finding a thin layer of small-grained facets and/or feathery surface hoar buried under the new snow. These weak crystals formed at the surface prior to the storm and are our main concern.

Mark found this layer buried in Taylor Fork on Saturday ([\*\*photo\*\*](#), [\*\*video\*\*](#)) and Eric and I got it to break on Buck Ridge on Sunday ([\*\*photo\*\*](#), [\*\*video\*\*](#)). In Beehive Basin on Monday I saw a small avalanche and had unstable results in my snowpit ([\*\*photo\*\*](#), [\*\*video\*\*](#)). There is no reason to believe that this layer has magically healed itself. Although it will be harder to trigger avalanches on lower-angled slopes today, all bets are off on steep terrain or any slope with a wind-load. Riding and skiing conditions have improved, but don't let your guard down, especially in the absence of obvious signs of instability. The snowpack is unstable and can bite.

For today, a [\*\*CONSIDERABLE\*\*](#) avalanche danger exists on all slopes steeper than 35-degrees and also on any slope that has been wind-loaded. All other terrain has a [\*\*MODERATE\*\*](#) avalanche danger.

#### Bridger Range

The Bridger Range is slightly more stable than other ranges because it did not get as much snow from the previous storm (~ 7 inches). It also has the same weak layer as other areas and slopes with a wind-load will be under additional stress. Given the variable and thin nature of the snowpack it is not out of the question to trigger avalanches today. Consequently, the danger is rated [\*\*MODERATE\*\*](#) on all slopes.

Mark 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>

**1-hour Avalanche Awareness for Snowmobilers**, West Yellowstone, 7 p.m., Saturday, January 3, Holiday Inn.

**Companion Rescue Clinic**, Bozeman, Fri eve and Sat field, January 9 and 10, REI. Register for the class here:

[www.rei.com/stores/bozeman.html](http://www.rei.com/stores/bozeman.html)

**1-hour Avalanche Awareness for Snowmobilers**, West Yellowstone, 7 p.m., Saturday, January 10, Holiday Inn.