

## GNFAC Avalanche Forecast for Sat Dec 25, 2010

Merry Christmas! This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Saturday, December 25, at 7:30 a.m. Montana Import Group, in partnership with the Friends of the Avalanche Center, sponsors today's advisory. This advisory does not apply to operating ski areas.

### Mountain Weather

A ridge of high pressure has produced perfect flying conditions for Santa. This morning mountain temperatures are in the mid-twenties to low thirties F and wind are blowing out of the W-SW at 10-25 mph, with the exception of the Big Sky where they are blowing closer to 30 with gusts up to 50 mph. Today, a strong southwest flow will raise temperatures into the high thirties F and winds will stay gusty out of the W-SW. Despite a little wind, today should be a warm and beautiful day to get out and play with the new toys.

### Snowpack and Avalanche Discussion

#### The northern Madison Range:

It is Christmas day and the skiers will be out - Playing with their new toys; I have no doubt. But a word of caution to those who venture far – a buried layer of surface hoar has raised the avalanche bar ([photo](#)) ([video](#)). This layer was not delivered by Saint Nick, but by the Scrooge who can be a real-jerk. It is like a present with a present inside, you have to keep looking because this layer can hide. But once it comes out, it can be a real pain, sending avalanches down, which is not a fun game. A skier found this out on Wednesday when skinning between Beehive and Bear, when he remotely triggered a slide that gave him a scare. On Thursday, Mark also found coal in his stocking, when he was hiking the same ridge and got cracking and collapsing ([photo](#)). These are not gifts we want to receive, for they mean the snowpack is unstable; that does not make us pleased. So if you are heading out, please be aware - that buried surface hoar does not always play fair. For this reason today - the avalanche danger is rated [CONSIDERABLE](#) - so be careful where you play.

#### The mountains around Cooke City and the Washburn Range:

I'd continue the rhyme, but alas it is Christmas and I didn't have the time. So in the mountains around Cooke City, a layer of small grained facets exists 2-3 feet deep and can be found on all aspects and elevations. This layer was put to the test by 18" of snow followed by strong winds at the start of this past week, producing natural avalanches on some slopes ([photo](#)). Mark discovered this layer in all of his snowpits on Tuesday and Wednesday and he found clean shears on this layer during his stability tests. Over the past week, this layer has had time to adjust but unfortunately it has not disappeared. Before riding in steep terrain, assess the slope you will be riding carefully. Use the terrain and obvious clues to make this an easy process – if there is recent avalanche activity on or near a slope you want to ride, use it as a guide to make a wise decision. You're probably not Santa and cannot just touch your nose and disappear up the chimney if things get tricky. Today for the mountains around Cooke City the avalanche danger is rated [MODERATE](#).

#### The Bridger Range, the entire Gallatin Range, the southern Madison Range, and the Lionhead area near West Yellowstone:

Buried weak layers are far less common outside of Cooke City and Big Sky. This does not mean that buried weak layers are non-existent in these areas but their distribution is sparse. On Thursday, Doug and I rode into Teepee Basin north of West Yellowstone and did not observe any buried weak layers in any of our five

snowpits. But on Wednesday, Doug found a layer of buried surface hoar located 8-10 inches below the surface in Bacon Rind, which is only a few miles from Teepee Basin ([video](#)). This is a great example of spatial variation and is a prime indicator that careful snowpack evaluation is crucial before taking the sleigh and team of reindeer into avalanche terrain.

In the Bridger Range the snowpack is generally stable, but on Wednesday skiers found a layer of buried surface hoar 8-10 inches below the surface near Flathead Pass. In addition, on Thursday a skier triggered a small wind slab north of Bridger Bowl near the Ramp. These are reminders that the snowpack in the northern ranges, despite a lack of new snow, still carry the ingredients to produce an avalanche. For this reason human triggered avalanches are possible on all slopes steeper than 35 degrees and the avalanche danger is rater [MODERATE](#). Less steep slopes have a [LOW](#) 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. Merry Christmas to all and to all a great day on the slopes.

### Avalanche Education

Avalanche Awareness for Snowmobilers and Skiers, West Yellowstone, Holiday Inn;

Lectures: Saturday, January 1 from 12-5 p.m.; Field: Sunday, January 2 all day.

No Registration Required. ([more information](#))

There are many upcoming avalanche classes in the month of January. Check them on our education page at: <http://www.mtavalanche.com/workshops/calendar>