

## **GNFAC Avalanche Forecast for Mon Jan 30, 2012**

Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Monday, January 30 at 7:30 a.m. The Pinhead Classic Telemark Festival sponsor today's advisory. This advisory does not apply to operating ski areas.

### Mountain Weather

Over the past 24 hours no new snow has fallen over our advisory area. Today, a weak weather disturbance embedded in a strong westerly flow will move into southwest Montana. Snow showers will develop over the mountains by mid morning, producing accumulations of 2-4 inches by tonight.

Currently, mountain temperatures are in the high teens to mid twenties F and winds are blowing out of the WSW at 25-45 mph. Temperatures will not warm much today and winds will remain strong out of the west, blowing 25-40 mph. Snow will diminish by late this evening and temperatures will drop 10-15 degrees.

### Snowpack and Avalanche Discussion

#### The mountains around Cooke City:

The mountains around Cooke City have a layer of facets buried 2-3 feet deep that can be found on many slopes ([photo](#)). This layer is now additionally stressed by the weight of 4-5 inches of new snow that fell over the past few days. On slopes with a southerly aspect this layer can be found resting over an ice crust, creating a potentially dangerous facet-crust combination under the existing slab. Additionally, west-northwest winds have blown snow onto leeward slopes, creating additional stress on this layer. Yesterday, riders in the area observed multiple natural avalanches, most of which occurred on south and east facing slopes ([photo](#)).

Today, snow and strong winds will continue to tip the scales, making the avalanche danger **HIGH** on all wind loaded slopes. Non-wind loaded slopes have a **CONSIDERABLE** avalanche danger.

#### The southern Madison and southern Gallatin Ranges, and the Lionhead area near West Yellowstone:

The mountains around West Yellowstone have the weakest snowpack in our forecast area. A cohesive slab 2-3 feet thick resting over weak facets near the ground is producing a structure ripe for causing avalanches ([snowpit](#)). Slopes steeper than 35 degrees and any slope that has received a wind load will be the most susceptible to human triggered avalanches. Yesterday, skiers near Hebgen Lake got unstable results in their stability tests and experienced cracking and collapsing, obvious signs of instability. Today, if you are riding in avalanche terrain, cautious route finding and conservative decision making are essential.

A poor snowpack structure continues to make human triggered avalanches likely and the avalanche danger is rated **CONSIDERABLE**.

#### The Bridger Range and northern Madison Range:

A variety of conditions can be found in the Bridger and northern Madison Ranges. On slopes that have not been affected by the wind, the snowpack is comprised mainly of weak, sugary facets ([snowpit](#)). These slopes have plenty of weak snow, but are relatively stable due to the lack of slab. However, strong winds over the past week have affected many slopes making for variable conditions. Yesterday, skiers on Yellow Mountain near Big Sky

found a poor snowpack structure, keeping their decision making conservative.

Today, the primary avalanche concern will be any slope that has been affected by the wind. These slopes likely have a slab resting over weaker snow, generating a structure capable of producing an avalanche.

For this reason human triggered avalanches are possible and the avalanche danger is rated [MODERATE](#).

#### The northern Gallatin Range:

The lack of significant snowfall combined with a stronger snowpack has made for generally stable conditions in the northern Gallatin Range. Triggering a slide will be difficult, but it's not entirely out of the question. Steep, upper elevation slopes, specifically those that have received a wind load will be the most prone to unstable snow. Likely trigger points will be on slopes directly below ridgelines or in steep-rocky terrain where the snowpack is thinner.

For today, human triggered avalanches are possible on wind loaded slopes and slopes steeper than 35 degrees where the avalanche danger is rated [MODERATE](#). Less steep, non wind loaded slopes have a [LOW](#) avalanche danger.

The avalanche danger could increase in all areas if snow and wind continue through the day.

Special Note: Backcountry Casanova Seth Meyer is now successfully engaged to his sweetheart Kristen Drake ([photo](#)). Congratulations!

Doug 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.

#### [Events/Education](#)

##### 10th Annual King and Queen of the Ridge

The 10th Annual King and Queen of the Ridge Hike/Ski-a-thon fundraiser is Saturday, Feb 11th. The event supports avalanche education in southwest Montana. Collect pledges for one, two or the most Ridge hikes you can do in the five hours of competition. 100% of the proceeds go to the Friends of Gallatin National Forest Avalanche Center. Kids and families are encouraged to hike too! [More Information](#) / [Registration Form](#)

##### Helena

1-hour Avalanche Awareness lecture at Exploration Works on Tuesday, January 31 at 7:00 p.m. Call 457-1800 or check our [calendar](#) for more information.

##### Bozeman

[Advanced Avalanche Workshop with Field Course](#). MSU, Wednesday and Thursday, February 1 and 2 from 7-9:00 p.m. with a field day Saturday, February 4. [Advanced registration](#) is required.