

## **GNFAC Avalanche Advisory for Tue Jan 31, 2012**

Good morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Tuesday, January 31 at 7:30 a.m. The Yellowstone Club Community Foundation in partnership with the Friends of the Avalanche Center sponsor today's advisory. This advisory does not apply to operating ski areas.

### Mountain Weather

The northern mountains picked up 1-2 inches of new snow with the southern areas getting 2-3 inches and Cooke City squeezing out 4-5 inches. This system came in with 20-40 mph westerly winds and temperatures in the high teens. This morning ridgetop winds have lessened to 15-30 mph with temperatures in the low teens. Today will be a mixed bag of clouds and sun. Tomorrow evening looks to be our next chance of snowfall with dry conditions through the weekend.

### Snowpack and Avalanche Discussion

#### The mountains around Cooke City:

Cooke City has received snow showers 11 out of the last 14 days. After a measly four inch snowfall on Saturday night, natural avalanches were seen on Sunday ([photo](#)). With 4-5 inches yesterday I'm expecting additional activity on a layer of small-grained facets buried 2-3 feet under the surface. On south-facing slopes these weak grains are sitting on an ice crust and are unstable. On other aspects this layer may not be on a crust, but no matter, increased loading from winds are creating natural slides ([photo](#)). During my visit last week I did not venture onto avalanche terrain, nor would I today. Since then, a foot of new snow and strong winds have kept the danger elevated. Today, the avalanche danger remains HIGH on all wind-loaded slopes. All other slopes have a CONSIDERABLE danger.

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

The mountains south of Big Sky to West Yellowstone have a weak snow structure. A few inches of new snow, especially with wind, is keeping the snowpack unstable. In the last 48 hours skiers reported whumphing and cracking of slopes near Hebgen Lake and also around Bacon Rind. A poor foundation of large-grained sugary facets is straining to hold up the thin winter snowpack. Given the new snow, wind and recent signs of instability, I'm rating the avalanche danger CONSIDERABLE on all slopes.

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

Eric was in the northern Bridger Range yesterday working with the NRCS crew to fix the Brackett Creek SNOTEL site. He reported a couple inches of new snow falling. These few inches of new snow will be blown into thicker slabs at the ridgelines and be easy to trigger. The snowpack here is weak. In the northern Madison Range the snowpack is deeper than the Bridger's, however, the stability is similar. Mark and Eric triggered a slide on Yellow Mountain last week on buried facets ([snowpit](#)). Over the weekend skiers north of Big Sky stuck to conservative lines even after getting good stability test results. They could not ignore the poor snow structure and recent activity. For today the primary avalanche concern is on wind-loaded slopes which have a CONSIDERABLE avalanche danger. All other slopes are rated MODERATE.

#### The northern Gallatin Range:

The northern Gallatin Range wins the beauty contest for the best looking snowpack in our area. Unfortunately for us the field of competitors is pretty ugly, so it was an easy win. The Hyalite drainage has deep snow that's lacking a widespread weak layer. Thinner zones like Mount Ellis have faceted snow, but without a large load these slopes are not under much stress. Eric toured there on Friday and noted the danger of hitting a buried tree stump concerned him more than triggering an avalanche. For today, the avalanche danger is rated [MODERATE](#) on any wind-loaded slope and also on any slope steeper than 35 degrees. All other slopes have a [LOW](#) 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.

### [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: TONIGHT

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.