

## **GNFAC Avalanche Forecast for Mon Feb 4, 2013**

Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Monday, February 4 at 7:30 a.m. **Northern Lights Trading Company** and **Javaman** sponsor today's advisory. This advisory does not apply to operating ski areas.

### Mountain Weather

This morning mountain temperatures are in the mid-teens to low twenties F and westerly winds are blowing 5-20 mph with ridgetop gusts reaching close to 50 mph in Hyalite. Today, temperatures will warm into the mid-twenties to low thirties F and winds will continue to blow 10-20 mph out of the west. Ridgetop gusts will remain strong in the mountains around Bozeman and Big Sky blowing 30-40 mph. An unsettled northwest flow aloft will produce light flurries in the mountains of southwest Montana; however, accumulations will stay less than an inch.

### Snowpack and Avalanche Discussion

#### Bridger Range Northern Madison Range Cooke City

Quiet weather over the past two days has allowed the snowpack to trend towards stability. Yesterday, I traveled south of Bridger Bowl expecting to find touchy conditions. Instead, my partners and I found a snowpack unwilling to produce signs of instability. This was a bit surprising considering the snowpack structure ([photo](#)). Observations from the Big Sky and Moonlight Basin Ski Patrols also point towards a snowpack that is gaining strength.

Although the snowpack is working overtime to adjust, heavily loaded slopes are far from reaching a happy balance. Today, throw a human trigger on any wind loaded slope steeper than 35 degrees and you will likely to get an avalanche. Fortunately this type of hazard is easy to recognize and avoid.

A secondary concern is faceted snow buried 2-3 feet deep. This problem is most noticeable in areas that had a shallow snowpack prior to the latest round of storms. Mid to low elevation terrain such Yellow Mountain near Big Sky and Town Hill outside of Cooke City will be likely areas to encounter this problem. In upper elevation terrain, south and west facing slopes hold the best potential for faceted snow near the ground ([video](#)).

Today, wind loaded slopes steeper than 35 degrees have a **CONSIDERABLE** avalanche danger. All other slopes have a **MODERATE** avalanche danger.

#### Northern Gallatin Range

A shallow snowpack before last week's pounding allowed many slopes to become weak and faceted. These slopes are now covered by 2-3 feet of new snow. Faceted snow near the ground is widespread in mid to low elevation terrain and can be found on many slopes in the alpine. This poor structure has been responsible for both natural and human triggered avalanches throughout the week. If you're traveling around Hyalite or the surrounding area pay attention to signs of instability such as cracking and collapsing and thoroughly assess the snowpack before committing to slopes steeper than 30 degrees.

Today, the presence of buried facets capped by a new snow will make human triggered avalanches likely on slopes steeper than 35 degrees which have a **CONSIDERABLE** avalanche danger. Less steep slopes have a

**MODERATE** avalanche danger.

Southern Madison Range Lionhead area near West Yellowstone

The southern Mountains did not receive as much snow over the past week; but buried persistent weak layers will keep the snowpack on edge. Yesterday, skiers in the Taylor Fork near Lightning Creek remotely triggered a slide from 100 meters away ([photo](#)). This slide likely failed on a layer of near surface facets formed in mid-January. This type of persistent weak layer is notorious for producing avalanches weeks even months after being buried. Conservative decision making and careful snowpack evaluation is essential when riding in the southern mountains.

Today, human triggered avalanches are likely on slopes steeper than 35 degrees which have a **CONSIDERABLE** avalanche danger. Less steep slopes have a **MODERATE** avalanche danger.

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.

### **February 16: 11<sup>th</sup> Annual King and Queen of the Ridge**

The 11<sup>th</sup> Annual King and Queen of the ridge Hike/Ski-a-thon fundraiser is Saturday, February 16. The event supports avalanche education. Enter as an individual or a team. Collect pledges for the number of hikes you can do in five hours. Kids and families are encouraged to hike too! Prizes will be awarded to the most hikes (1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup>); most money raised, most laps for a team, most money raised for a team. [More Information](#) / [Registration Form](#)

### **EDUCATION**

In **Bozeman**, on Wednesday, February 6, REI is hosting a *1-hour Avalanche Awareness lecture for Women*. Space is limited and registration is required: <http://www.rei.com/event/47916/session/64605>

The Friends are teaching a free *Companion Rescue Course* in **Big Sky**, at Grizzly Outfitters, on Friday, February 8 from 6-8 p.m., followed by a field session the next day from 10 a.m. to 2 p.m. Space is limited and pre-registration is required: <https://ticketriver.com/event/5830-companion-rescue-clinic-for-skiers-&-boarders>