

## **GNFAC Avalanche Advisory for Sun Feb 22, 2015**

Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Sunday, February 22, at 7:30 a.m. [Bountiful Table](#) and [Lone Peak Brewery](#) sponsor today's advisory. This advisory does not apply to operating ski areas.

### Mountain Weather

No new snow has fallen since yesterday morning and cold, clear weather has settled into southwest Montana. This brief cold snap is producing some of the coldest temperatures we've seen in months. At 4 a.m. Fisher Creek Snotel site near Cooke City is recording a temperature of -16 F. Other mountain locations are showing temps between -5 and -10 F. Today, highs will warm into the teens F under sunny skies and winds will remain calm. High pressure will dominate the weather pattern over the next 24 hours and no new snow is expected.

### Snowpack and Avalanche Discussion

[Bridger Range](#) [Northern Madison Range](#)

[Northern Gallatin Range](#)

Yesterday, skiers and riders were out in force taking advantage of the deepest snow the northern mountains have seen in weeks. Fortunately, the GNFAC did not receive any reports of natural or human triggered avalanches. This is a good indication the new snow has bonded well to the old snow surface in most locations.

Yesterday, my partners and I skied in Beehive Basin north of Big Sky and found 8-10" of new snow. Aside from a few small sluffs in steep terrain, the new snow was unreactive ([video](#)). Skiers up Hyalite found similar conditions yesterday. We did receive a report of skiers triggering two small avalanches north of Bridger Bowl on Friday ([photo](#)). This is a good reminder that avalanches failing on the new snow/old snow interface are still possible.

Another concern today will be wind slabs. Yesterday, winds did pick up during the afternoon blowing out of the north and east. These winds likely formed fresh wind slabs in upper elevation terrain. Due to the unusual wind pattern, skiers and riders may encounter pockets of wind drifted snow in unexpected locations. Although wind slabs won't be widespread, I do expect them to be sensitive to human triggers. Loose snow avalanches will also be a concern in steep terrain.

Today, human triggered avalanches are likely on wind loaded slopes steeper than 35 degrees which have a [\*\*CONSIDERABLE\*\*](#) avalanche danger. All other slopes have a [\*\*MODERATE\*\*](#) avalanche danger.

[Southern Madison Range](#) [Southern Gallatin Range](#)

[Lionhead Area near West Yellowstone](#) [Cooke City](#)

The lack of significant snowfall in the mountains around West Yellowstone and Cooke City has helped limit the avalanche hazard. In the mountains around Cooke City, a few inches of new snow combined with moderate winds out of the northwest has likely formed shallow wind slabs in upper elevation, leeward terrain. These fresh wind slabs may be reactive the weight of a skier or rider, but their size and distribution will be limited. Outside of new snow instabilities, the snowpack around Cooke City is looking strong.

In the mountains around West Yellowstone, mainly in the southern Madison Range, isolated wind slabs will also be a concern. This problem will be confined to upper elevation terrain below ridgelines where wind loading is most prominent. This area also has a layer of buried surface hoar 1-2 feet deep. Without the stress of recent snow, triggering an avalanche on this layer is becoming less likely, but should not be ruled out.

Today, human triggered avalanches are possible on wind loaded slopes and slopes steeper than 35 degrees which have a **MODERATE** avalanche danger. Less steep slopes without a wind load 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.

### **AVALANCHE EDUCATION and EVENTS**

Take a look at our **Education Calendar** for all classes being offered.

**Snow Science and the Human Factor**, Big Sky, Jefferson Room at the Yellowstone Center, Tuesday, February 24, 7-9 pm. The free event will feature a talk by Powder editor and MSU graduate John Stifter, multimedia presentations on the human factor in avalanche risk, a panel of experts from MSU's Snow & Avalanche Lab and Gallatin National Forest Avalanche Center, as well as a Q & A session.