

## GNFAC Avalanche Forecast for Thu Dec 4, 2014

Good morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Thursday, December 4 at 7:30 a.m. Today's advisory is sponsored by **Gallatin County Search and Rescue** in partnership with the **Friends of the Avalanche Center**. Backcountry conditions exist within the ski area boundary of Bridger Bowl and this advisory is relevant to that area. All other ski areas are closed to uphill travel.

### Mountain Weather

Since yesterday the mountains near West Yellowstone and Cooke City received 3-5 inches of snow, near Big Sky a trace of snow, and none near Bozeman. This morning temperatures were in the high 20s and low 30s F. Winds increased overnight and were blowing 15-30 mph from the SW gusting to 40 mph. Today will be warm, windy, and snowy. High temperatures will hover around freezing, and winds will continue from the SW. By tomorrow morning 2 inches of snow should fall near Bozeman and Big Sky and 3-4 inches will fall near West Yellowstone and Cooke City.

### Snowpack and Avalanche Discussion

#### Cooke City

Yesterday Beartooth Powder Guides did not see any recent natural avalanches. Mild weather has helped facets near the ground adjust to the massive load of new snow this area has received in the last two weeks when the snowpack increased 240% in terms of water content. Overnight this area received another 0.5 inches of [snow water equivalent](#) (about 5 inches of snow), and winds increased.

Are conditions improving – I think so, but we'll see.

Can you still trigger an avalanche near the ground – yes.

The most likely place to trigger an avalanche will be on slopes with the additional load of wind-blown snow. I'm hopeful that stability will slowly improve in this area, but I still do not trust the snowpack because there's a lot of uncertainty. With a layer of weak snow near the ground, new snow overnight, and increased winds, today the avalanche danger remains [CONSIDERABLE](#).

#### Bridger Range Gallatin Range Madison Range

#### Lionhead area near West Yellowstone

Yesterday my partner and I rode in the Taylor Fork area of the Southern Madison Range. We found plenty of weak facets 4-8 inches (10-20 cm) above the ground ([snowpit](#)). Some propagated fractures in stability tests while others did not. The likelihood of hitting rocks and trashing our sleds was much higher than the odds of triggering an avalanche.

Just as Doug found in Hyalite Canyon ([snowpit](#)) and Karl Birkeland found north of Bridger Bowl ([video](#)), the snowpack has gained strength in some places while in others it remains weak. It propagates fractures in some places but not others. Because the snowpack is so thin, it can change rapidly in response to changing weather, and it can vary widely from one slope to another. Currently the snowpack seems to be strengthening with warm temperatures and light snowfall.

Today, triggering an avalanche remains possible and the avalanche danger is rated [MODERATE](#). In coming weeks, the situation could change drastically so stay tuned.

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.

Have a Smartphone or Tablet? The Friends of the Avalanche Center just published two FREE apps so you can get the latest avalanche information, videos and photos: [iOS 8 GNFAC App](#); [Android app](#)

### **AVALANCHE EDUATION and EVENTS**

Take a look at our [Education Calendar](#) for all our classes being offered.

**Avalanche Awareness (1-hour), Wednesday, December 10, 6:30 p.m. at REI, Bozeman**

**Avalanche Awareness (1-hour), Thursday, December 11, 6 p.m. at Summit Motorsports, Bozeman**

**Weather Workshop, Thursday, December 11, 6:30 p.m. at REI, Bozeman**

**Fundraiser at Katabatic Brewing, Tuesday, December 16, 4-8 p.m., Livingston**

**Avalanche Awareness and Beacon Practice, Wednesday, December 17, 6:30-8:30 p.m. at Beall Park, Bozeman**

**Snowmobiler Introduction to Avalanches with Field Course**

West Yellowstone: Dec 18 and 19, 2014: <https://www.ticketriver.com/event/12955>

Five hours of lectures are followed by a full day field course. Topics covered include: avalanche terrain recognition, the affect weather has on avalanche hazard, the development of the mountain snowpack, decision making skills, and basic search and rescue procedures.