

## **GNFAC Avalanche Forecast for Sat Dec 27, 2014**

Good Morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Saturday, December 27, at 7:30 a.m. Today's advisory is sponsored by [Cooke City Motorsports & Yamaha](#) in partnership with the Friends of the Avalanche Center. This advisory does not apply to operating ski areas.

### Mountain Weather

Flurries near Bozeman produced a trace of snow yesterday. Overnight temperatures dropped to a few degrees either side of zero F with WSW winds blowing 10 mph gusting 15-30 mph. Today temperatures should make it into the teens F, and winds will increase slowly with an approaching storm. Snow should arrive this afternoon. By tomorrow morning 3-5 inches should fall in most places with more falling during the day on Sunday.

### Snowpack and Avalanche Discussion

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

Lionhead area near West Yellowstone

It's really hard to assess the likelihood of human triggered avalanches right now, and there is a lot uncertainty. Despite the uncertainty, stating what we know provides some clarity.

1. There are several weak, faceted layers in the snowpack. One near the ground and one near the middle of the snowpack. Skiers yesterday in the northern Bridger Range found a layer of facets about 2 feet above the ground ([photo](#)) that propagated fractures in extended column tests, ECTP24.
2. Avalanches will most likely break on one of these two layers. See recent [videos](#) showing these layers.
3. Snowfall during the last few days has stressed these weak layers. It hasn't been a massive load, but enough to keep the snowpack somewhere near its breaking point.
4. During the last week, the snowpack has not had much time to adjust to the weight of new snow.
5. There have only been a few avalanches to give us warning signs. More slides probably would have happened if more people had been in the backcountry this week.
6. Winds have been relatively light for the last 24 hours, but were blowing stronger a few days ago.

Today the line between a stable slope and an unstable one is very blurry. The list of what we know tells me to have a wide margin of safety so that I don't end up on the wrong side of the line and get caught in an avalanche. On some slopes, but not all, triggering an avalanche is likely. On others it's hard to say. Regardless, going into avalanche terrain is serious business. For all these reasons, the avalanche danger is rated **CONSIDERABLE**.

### Cooke City

The mountains near Cooke City contain a much deeper and stronger snowpack than other areas. Yesterday Eric and his partner found remnants of weak layers in the snowpack, but these layers wouldn't break in stability tests ([photo](#)). The main problem will be wind slabs that formed a few days ago. Additionally a few steep rocky slopes, like ones on Crown Butte or similar terrain, have a thinner snowpack where you could trigger an avalanche on a faceted layer near the ground. For today the avalanche danger is **CONSIDERABLE** on wind loaded slopes steeper than 35 degrees. All other slopes have a **MODERATE** danger.

Get a sense of snowfall, wind and avalanche activity on our “[What’s been happening](#)” page. It’s something we used to write by hand just to use in the office but decided to put it online. Check it out [HERE](#).

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 our classes being offered.

**1-hour Avalanche Awareness for Snowmobilers**, West Yellowstone, 7 p.m., Saturday, January 3, Holiday Inn.

**Companion Rescue Clinic**, Bozeman, Fri eve and Sat field, January 9 and 10, REI. Register for the class here: [www.rei.com/stores/bozeman.html](http://www.rei.com/stores/bozeman.html)

**1-hour Avalanche Awareness for Snowmobilers**, West Yellowstone, 7 p.m., Saturday, January 10, Holiday Inn.