

## **GNFAC Avalanche Advisory for Thu Dec 25, 2014**

Good Morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Christmas Day, December 25, at 7:30 a.m. Today's advisory is sponsored by [Montana Import Group](#) in partnership with the Friends of the Avalanche Center. This advisory does not apply to operating ski areas.

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### **AVALANCHE WARNING**

We are issuing a **Backcountry Avalanche Warning for the Bridger Range, Gallatin Range, Madison Range, and the Lionhead area near West Yellowstone.** Heavy snowfall and strong winds from odd directions will create widespread instability and the avalanche danger is rated **HIGH** on all slopes. Very dangerous avalanche conditions exist and both natural and human triggered avalanches will be likely. Travel in avalanche terrain and avalanche runout zones should be avoided.

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### Mountain Weather

Overnight 7-11 inches of snow fell near Big Sky and in the Bridger Range, 6-8 inches in the mountains near West Yellowstone and Cooke City, and 5 inches in the northern Gallatin Range and Hyalite Canyon. Temperatures this morning were in the mid-teens F and dropping as cold air descends from the north. Yesterday winds blew from the SW then shifted to the north overnight and were blowing N and NE 10-15 mph this morning gusting 20-30 mph.

Snow should continue this morning with another 2-4 inches falling but taper off by midday. Temperatures will fall to the single digits F and N/NE winds will increase this morning. More snow should arrive Saturday night.

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### Snowpack and Avalanche Discussion

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

[Lionhead area near West Yellowstone](#)

Buried weak layers + new snow + wind from odd directions = unstable and dangerous conditions.

I don't trust the snowpack at all. Most slopes have either weak facets near the ground or a layer of weak facets/surface hoar near the middle of the snowpack ([photo](#)). Today's new snow plus new snow earlier this week has stressed these weak layers. You may or may not see many obvious signs of instability today like collapsing or cracking. Additionally, snowfall and wind will make spotting recent avalanches hard to do. A small, dog triggered avalanche ([photo](#)) in Beehive Basin, just north of Big Sky on Monday was a big warning sign that more avalanches are likely. We have several recent videos worth watching ([Lionhead](#), [Beehive](#), [Buck Ridge](#), [Taylor Fork](#)).

Strong winds transporting the new snow have loaded many slopes where I expect avalanches will definitely break on their own. Eric observed winds drifting snow at all elevations in Hyalite yesterday. Winds blew from the SW yesterday and this morning they were blowing from the N and NE. Slopes that don't normally get wind loaded will be today.

For today, the avalanche danger is **HIGH**. Some slopes will produce avalanches on their own while others will definitely produce human triggered avalanches.

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## Cooke City

The mountains near Cooke City received about 6 inches of new snow overnight. In the last 7 days this area has received 3 inches of [snow water equivalent](#) (roughly 3.5 feet of snow). Even though the snowpack is generally stronger than it is in other parts of the advisory area, this is a massive load for the snowpack to support. Wind loaded slopes may easily have double this load. Anything breaks when stressed enough, and the snowpack near Cooke City is no exception ([photo](#)). For this reason today, some avalanches may happen on their own, but a skier or snowmobiler will definitely trigger an avalanche if they enter avalanche terrain and the danger is rated **HIGH** on wind loaded slopes steeper than 35 degrees. All other slopes have a **CONSIDERABLE** avalanche danger.

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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.

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## AVALANCHE EDUATION and EVENTS

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

**Snowmobiler Rescue Course**, Cooke City, December 27, 0800-1200. Register here:  
<https://www.ticketriver.com/event/13721>

**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.