# **GNFAC** Avalanche Forecast for Tue Dec 24, 2019

Good Morning. This is Dave Zinn with the Gallatin National Forest Avalanche Forecast on Tuesday, December 24<sup>th</sup> at 7:00 a.m. Today's forecast is sponsored by Highline Partners and Uphill Pursuits. This forecast does not apply to operating ski areas.

#### Mountain Weather

In the past 24 hours, mountain temperatures were in the 20s to 30s F and winds averaged 10-20 mph from the southwest to southeast. The mountains around Big Sky and West Yellowstone picked up 1-2" of snow with the remainder of our area staying dry. Snow today will favor the southern ranges. The mountains around West Yellowstone will get 6-10" of new snow and other areas will get 1-3". Temperatures will be in the 30s F and winds will be 15-30 mph from the south.

Snowpack and Avalanche Discussion



Madison Range Southern Gallatin Lionhead Range Island Park

The last significant snowstorm in the Lionhead, Madison, and Southern Gallatin Ranges was ten days ago and with it steep slopes avalanched naturally and under the weight of riders (avalanche activity). Last night 1-2" of snow fell with 6-10" possible by Christmas morning. As snow adds up today, the avalanche danger will increase. Yesterday in the Taylor Fork, Ian and I found a weak snowpack (video). On Sunday, Alex and Doug observed similar weak structures in the Lionhead Ridge (video), and I found a series of crusts mixed with weak facets on a tour to Beehive (video). The constant in the Madison, Southern Gallatin and Lionhead Ranges is a poor structure that will produce avalanches under the weight of new snow.

As it snows today, watch for signs such as new avalanches, cracking and collapsing of the snowpack as indicators of increasing danger. Carefully assess the snowpack and make conservative terrain choices by staying off and out from under steep slopes to manage this hazard. The danger is rated **MODERATE** and will rise as snow falls.



Ten days have passed since Cooke City received significant snowfall, but reports of avalanches are continuing to come in, including one large slide in the Hayden Creek Drainage three days ago (avalanche activity - photo, 2, 3). Doug, Ian, and Alex all visited Cooke City last week and found buried weak layers on many slopes. These layers were more prevalent in areas with a south facing component (photo, video). The forecasted 1-3" of new snow today will not significantly change the avalanche picture in Cooke City. Dig a snowpit to look for existing weak layers about halfway down in the snowpack and avoid steep slopes where you find them. Large, human triggered avalanches are possible, and the danger is **MODERATE**.



The snowpack in the mountains near Bozeman is generally stable. Without new snow, avalanches are unlikely. Winds hammered slopes through the weekend, leaving little untouched. Saturday, riders triggered fresh drifts of snow 3-5 feet deep in the Bridger and Northern Gallatin Ranges (**photo**, **photo**). On Sunday, climbers in Hyalite felt a hard wind slab collapse under their weight with a large "whumph" (**activity**). Instabilities related to this weekend's wind have stabilized but look for isolated areas where they may persist and choose a different slope if you find hard, wind packed snow that sounds or feels hollow. The avalanche danger is **LOW** in the Bridger and Northern Gallatin Ranges. Look for isolated areas of instability and assess the consequences of small avalanches.

If you get out, please send us your observations no matter how brief. You can fill out an **<u>observation form</u>**, email us (**<u>mtavalanche@gmail.com</u>**), leave a VM at 406-587-6984, or Instagram (#gnfacobs).

## **Upcoming Avalanche Education and Events**

Our education calendar is full of awareness lectures and field courses. Check it out and plan to attend one or two: Events and Education Calendar.

### BOZEMAN

15 & 16 January, **Introduction to Avalanche w/ Field Course**, Evenings of January 15 & 16 plus one field day either January 18, 19 or 25. Snowmobile specific field day offered January 25. **More info and Register Here**.

#### COOKE CITY

Every Friday and Saturday, **Snowpack Update and Rescue Training**. Friday, 6:30-7:30 p.m. at the Soda Butte Lodge. Saturday anytime between 10-2 @ Round Lake.

#### WEST YELLOWSTONE

January 4, 1-hr Avalanche Awareness, 7-8 p.m. at West Yellowstone Holiday Inn.