

## GNFAC Avalanche Forecast for Sat Jan 21, 2017

Good Morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Saturday, January 21<sup>st</sup> at 6:45 a.m. Today's advisory is sponsored by [Yellowstone Club Community Foundation](#) and [Wisetail](#). This advisory does not apply to operating ski areas.

### Mountain Weather

Skies are partly cloudy and there's no new snow this morning. Winds are averaging 10-20 mph with gusts of 25-30 out of the S-SW with mountain temperatures in the mid-teens. Today, S-SW winds will be 10-15 mph, temperatures will warm to the 20s and skies will become mostly cloudy. Moist air will push in from the south and bring scattered snow showers later this afternoon. By morning I expect a trace to 1" of snow in the north and 1-2" in the southern areas.

### Snowpack and Avalanche Discussion

Madison Range Southern Gallatin Range Lionhead area near West Yellowstone Cooke City

The snowpack is gaining strength but there are two weak layers we are keeping our eye on. One is sugary facets near the ground (depth hoar) and the other is a thin layer of facets a couple feet under the surface. The facets at the ground are everywhere, the other layer is not. On Wednesday in Lionhead the depth hoar was obvious and I was happy to see this layer getting stronger ([video](#)). As I know from going to the gym, *getting* strong and *being* strong are two different things. Avalanches could still be triggered on the depth hoar from thinner areas of the snowpack. The snow is 5-7 feet deep around Cooke City and 4-5 feet deep in the other areas, but near the edges of avalanche paths it would be shallower.

Thursday evening 1-2" of new snow covered up a layer of feathery, surface hoar crystals ([photo](#)). This was confirmed yesterday at Bacon Rind in the southern Madison Range and I imagine there are many more slopes where it is preserved. They are weak and persistent and we will track this new weak layer closely in the coming weeks.

The snowpack is trending towards stability but the weak snow structure causes me to pause. Although the likelihood of triggering is decreasing I am still traveling as though avalanches are possible. For today, the avalanche danger is rated [MODERATE](#).

Bridger Range Northern Gallatin Range

The Bridger Range and northern Gallatin Range have a stable and shallow snowpack (less than 3 feet deep). These mountains have not gotten significant snow in 9 days. Eric dug in on the west side of Saddle Peak on Wednesday and found unsupportable, weak, faceted snow ([snowpit](#)) which will become unstable with a big snowstorm, but not today. On the east side of the range he skied Saddle Peak and was treated to a wide variety of challenging, but stable snow that ranged from wind sculpted to frozen chunks ([video](#)). Stability and conditions are similar up Hyalite. Yesterday, on my day off, I went climbing and found either snow so hard we needed crampons or knee-deep facets that we sunk into. For today, the avalanche danger is rated [LOW](#) on all slopes.

Alex will issue the next advisory tomorrow morning by 7:30 a.m.

We rely on your field observations. Send us an email with simple weather and snowpack information along the lines of what you might share with your friends: How much new snow? Was the skiing/riding any good? Did you see any avalanches or signs of instability? Was snow blowing at the ridgelines? If you have snowpit or test data we'll take that too, but this core info is super helpful! Email us at [mtavalanche@gmail.com](mailto:mtavalanche@gmail.com) or leave a message at 406-587-6984.

### **Upcoming Events and Education**

**Month of January:** Montana Ale Works has chosen the Friends of the Avalanche Center as January's "Round It Up America" recipient. Every time you round-up your bill the change gets donated to the Friends. Pennies equal dollars!

**King and Queen of the Ridge**, Saturday, February 4<sup>th</sup>. A Hike and Ski/Ride-a-Thon fundraising event to support the Friends of the Gallatin National Forest Avalanche Center. Register with Bridger Bowl [HERE](#), make pledges [HERE](#).

### **BOZEMAN**

**Advanced Avalanche Workshop w/Field Course**, 7-9:30 p.m. Thursday and Friday, January 26 and 27 (MSU Sub Ballroom C); field day, Saturday 28<sup>th</sup>. Sign up [HERE](#).

### **COOKE CITY**

**Weekly rescue training and snowpack update**, 6-7:30 p.m., The Antlers Lodge on Friday, field location Saturday TBA.

### **WEST YELLOWSTONE**

January 21, **Avalanche Awareness**, 6-7:30 p.m., West Yellowstone Holiday Inn.

### **DILLON**

February 4 and 5, **Intro to Avalanches with Field Day**, More info and sign up [HERE](#).