

## **GNFAC Avalanche Forecast for Sun Dec 11, 2016**

Good Morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Advisory issued on Sunday, December 11<sup>th</sup> at 7:15 a.m. Today's advisory is sponsored by [Yellowstone Arctic Yamaha and Yamaha Motor Corp](#) in partnership with the **Friends of the Avalanche Center**. This advisory does not apply to operating ski areas.

### Mountain Weather

Snowfall totals since yesterday morning are 6-8" in the Bridger Range and Cooke City, and 3" throughout the rest of our advisory area. Wind has been out of the west to northwest at 15-25 mph with gusts over 50 mph yesterday afternoon. Today, wind will be out of the west to southwest around 10-15 mph with speeds increasing to around 30 mph this evening. Temperatures this morning are in the single digits F and will reach the mid-20s F today. The mountains will get 3-6" inches of snow tonight with more expected through tomorrow.

### Snowpack and Avalanche Discussion

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

[Lionhead area near West Yellowstone](#) [Cooke City](#)

Yesterday in the Northern Madison Range, a snowmobiler was caught and fully buried in an avalanche in the second Yellowmule on Buck Ridge. He was located with an avalanche beacon by his partners and was uncovered with minimal injuries for a fortunate outcome. This event highlights the importance of being prepared with the right gear and the right partners. The avalanche likely broke on a layer of weak sugary snow above an ice crust on the ground ([photo](#)) and was on a heavily wind loaded slope.

Snowfall totals since Thursday equal 1" of [snow water equivalent](#) (SWE) throughout our advisory area with over 1.5" of SWE in the southern ranges. Strong winds yesterday transported new snow into fresh drifts near ridgelines and increased the stress on buried weak layers ([video](#)). Wind slabs and new snow slabs may rest over weak snow that formed on the surface during last week's cold temperatures, and could be easy to trigger today. Avoid steep terrain if you see fresh wind slabs or cracking and collapsing in the new snow.

New snow and wind-loading also added weight to a layer of weak facets near the ground ([video](#), [video](#), [video](#)). Ski patrols triggered avalanches on this layer over the last week ([photo](#), [photo](#)); and avalanches failed on this layer in the backcountry, including the one that caught and buried a snowmobiler yesterday on Buck Ridge. Wind loaded slopes will be the most likely place to trigger an avalanche on this layer, but avalanches are also possible on this layer on non-wind loaded slopes. Choose terrain with lower consequences and dig a hole to look for this layer before committing to steep terrain.

Recent snow and strong winds create unstable conditions today and the avalanche danger is rated **CONSIDERABLE**.

I will issue the next advisory tomorrow morning at 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**

### **BOZEMAN**

15 December, **Avalanche Awareness and Beacon Practice**, 6-8 p.m. at Beall Park.

### **WEST YELLOWSTONE**

15 and 16 December, **Snowmobile Introduction to Avalanches w/ Field Day**, West Yellowstone Holiday Inn Conference Hotel. More info and sign up [HERE](#).

### **COOKE CITY**

Every Friday and Saturday, **Weekly rescue training and snowpack update**, Super 8 on Friday 6-7:30 p.m. and field location TBA for Saturday.

### **BILLINGS**

15 December, **Snowmobiling In and Identifying Avalanche Terrain**, 6-8 p.m., Big Horn Resort.