

GNFAC Avalanche Advisory for Wed Jan 18, 2012

Good morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Wednesday, January 18 at 7:30 a.m. This advisory is sponsored by the **Cliff Gullett Memorial Fund** in partnership with the **Friends of the Avalanche Center**. This advisory does not apply to operating ski areas.

ISSUED ON JANUARY 19 2012 AT 5:30 am

The Gallatin National Forest Avalanche Center is issuing a **Backcountry Avalanche Warning for the Lionhead area near West Yellowstone and the mountains around Cooke City**. Heavy snowfall, high winds and an extremely weak snowpack are causing unstable conditions. **Today the avalanche danger is HIGH on all slopes**. Areas of unstable snow exist. Natural and human triggered avalanches are likely. Avalanche terrain including avalanche runout zones should be avoided.

This warning will either be terminated or updated by 6:00 AM on January 20, 2012

Mountain Weather

Mountain temperatures are in the high single digits and winds are averaging 30-40 mph out of the west to southwest with gusts ripping to 70 mph. Cooke City has seven inches of new snow with Taylor Fork and West Yellowstone showing two inches. Today, winds will decrease, but still blow strong with temperatures rising into the teens. Snowfall will pick up later today and by tomorrow morning I expect 2-4 inches in the northern mountains and 6-8 inches in the southern zones. Tomorrow looks to be snowy too.

Snowpack and Avalanche Discussion

The mountains around Cooke City:

There are two basic truths about Cooke City: it snows and it's windy. Seven inches fell with winds tearing across the mountains and through the valleys. The anemometer on Lulu Pass is showing a north direction, but I'm guessing the 30-60 mph winds are swirling around the compass. It would be hard to find a slope not affected by the wind. Wind-loaded slopes might avalanche naturally today, especially as drifts continue to grow. Slides may break at the old snow surface, but step down into weaker layers of facets. Be aware that slopes that avalanched during the New Years Eve cycle could avalanche again with this new load. For today, the avalanche danger is rated **CONSIDERABLE** on all wind-loaded slopes and **MODERATE** elsewhere.

The Bridger, Madison and Gallatin Ranges, the Lionhead area near West Yellowstone:

Late yesterday the Bridger and Big Sky ski patrols mentioned that winds were loading slopes creating "thin, zippy wind slabs" about six inches deep. The Bridgers did not get snow in the last 24 hours, but they had nine inches by Monday morning that blew to the west side of the range and now is blown back to the east. All this movement creates very small grains that pack densely together into hard slabs. Winds have been powerful and new snow will feed the wind drifts. From the Bridger Range to West Yellowstone, with the exception being the Hyalite drainage, the snowpack has many layers of weak, faceted snow. I found this on Monday north of Bridger Bowl ([video](#)) and yesterday on Buck Ridge south of Big Sky where, stepping off my sled, I sank to the ground. Eric's [photo](#) from this area on Friday shows the weak snow structure which will be unable to support a

thick slab of snow.

So far there's been lots of wind, but not much snow. Slabs will be thin, but sensitive to triggering on steep slopes. For today, the avalanche danger is rated **CONSIDERABLE** on all slopes with a wind-load that are steeper than 35 degrees. All other slopes have a **MODERATE** danger. The avalanche danger will rise if we get the expected snows. As slabs continue to build from wind-loading it will become easier to trigger avalanches.

Mark 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 or call us at 587-6984.

Events/Education

Bozeman

[Introduction to Avalanches with Field Course](#). MSU, SUB Ballroom C, 7-9:30 p.m. Jan 25 and 26 with a field day Jan 28.

Great Falls

[1-hr Avalanche Awareness Lecture](#) Thursday, January 19, 7-8 p.m. at Greenup Performance

West Yellowstone

[1-hr Avalanche Awareness Lecture](#) Saturday, January 21, 7-8 p.m. at West Yellowstone Holiday Inn

Billings

[Snowmobiler Introduction to Avalanches with Field Course](#). Lectures on Tuesday, January 24 from 6-9 p.m. at Hi-Tech Motor Sports with an all day field session in Cooke City on Sunday, Jan 29. PRE-REGISTER BY JAN 23 at Hi-Tech!! Register with Sharon at 406-652-0090; hitech@hi-techmotorsports.com.