

GNFAC Avalanche Advisory for Sat Jan 22, 2011

Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Saturday, January 22, at 7:30 a.m. Montana Ale Works, in cooperation with the Friends of the Avalanche Center, sponsors today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

A strong frontal passage moved through our area around 1 am this morning producing strong winds and heavy snow. In a matter of hours, 4-5 inches of snow fell in the mountains around Big Sky and West Yellowstone while the Bridger Range and northern Gallatin Range picked up 2-3 inches. The mountains around Cooke City picked up 7-8 inches.

Winds spiked with the arrival of the front, producing gusts over 60 mph in Hyalite and Big Sky. Winds have mellowed a bit, but are still blowing out of the WNW at 20-30 mph with gusts in the 40s. Temperatures are ranging from 11 degrees in Cooke City to the high teens-low 20s throughout the rest of our advisory area. Today, winds will remain strong out of the WNW and temperatures will rise into the 20s F. Snowfall will taper off this morning and skies will become partly cloudy by this afternoon. No significant accumulation is expected over the next 24 hours.

Snowpack and Avalanche Discussion

The Bridger, Madison and Gallatin Ranges, the Lionhead area near West Yellowstone, the mountains around Cooke City and the Washburn Range:

This latest round of snow is one of a string of storms that has impacted our area over the past week. This onslaught of storm cycles has brought abundant snow and wind to Southwest Montana, producing numerous natural and human triggered avalanches from Cooke City to the Bridger Range. Nearly every slide over the past week has been due to a heavy wind load - a factor which has pushed many slopes past their breaking point.

Although we saw a quick reprieve from snowfall yesterday, we did not get a break from the winds. Yesterday, Mark and I skied in the northern Bridger Range and struggled to find any slope that had not been wind affected. We observed a natural wind slab avalanche near Ross Peak that occurred on a NW facing slope around 8,000 ft. This slide broke 1-2 ft deep and 50-75 ft across. A larger slide with a similar aspect naturally occurred on Saddle Peak Thursday morning. The mountains around Big Sky have also seen recent avalanche activity, with some slides stepping down to deeper layers ([photo](#)).

We have been seeing similar activity on wind loaded slopes in the southern ranges as well. On Thursday, skiers in the Taylor Fork triggered a pocket of windblown snow and an observer in Cooke City reported several natural wind-slab avalanches ([photo](#)). Many of these slides failed on deeper layers in the snowpack ([photo1](#), [photo2](#)). Areas with weak faceted crystals near the ground do not have a specific pattern with respect to aspect or elevation, but are commonly found where the snowpack is relatively shallow. Experiencing cracking/collapsing and being able to shove a ski pole down to the ground are good indications the snowpack is shallow and potentially unstable.

With a fresh dose of snow and wind last night, human triggered avalanches remain likely on all wind loaded slopes where the avalanche danger is rated [CONSIDERABLE](#). Slopes without a wind load have a [MODERATE](#) avalanche danger.

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 or call us at 587-6984.

SURVEY

The *Friends of the Gallatin National Forest Avalanche Center* are sponsoring a survey. We're trying to find out how we're doing, what we can do better and who our users are. The survey is 4 pages long and takes 5-10 minutes to complete. <http://www.surveymonkey.com/s/YFCKDZH>

Beacon Park Opening Celebration

The Bozeman Recreation Department is celebrating the opening of the Bozeman Beacon Park on Friday, January 28th from 4:00 to 6:00 p.m. at Beall Park, 415 N. Bozeman. The Recreation Department will offer food, refreshments, music, and training on how to use the park with your avalanche beacon. This event is free to the public. For information call 582-2290.

Avalanche Education

January 26, 27 and 29 in Bozeman

Basic Avalanche Awareness – Next Wednesday & Thursday 7:00 p.m. – 9:30 p.m. at MSU EPS Building, Room 103 with a field day on Saturday at Bridger Bowl ([more information](#)) ([Prepay](#))

February 2, 3, and 5 in Bozeman

Advanced Avalanche Awareness –Wednesday & Thursday 7:00p.m. – 9:30 p.m. at MSU SUB Room 235 with a field day on Saturday at Bridger Bowl. ADVANCED REGISTRATION REQUIRED ([more information](#)) ([Register](#))

For additional information and a listing of other avalanche classes, go to:

<http://www.mtavalanche.com/workshops/calendar>