

GNFAC Avalanche Forecast for Tue Mar 1, 2011

Good morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Tuesday, March 1, 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

Since yesterday morning two inches of snow fell from Big Sky to West Yellowstone with Cooke City getting four inches. Mountain temperatures are in the upper teens, just a few degrees colder than yesterday's high. Wind is the weather story. West to southwest winds started blowing yesterday morning and are averaging 25 mph with gusts to 68 mph. Mid slope anemometers are showing winds raking all elevations. These speeds will decrease to 20-30 mph later this morning. In the next 24 hours, under mostly cloudy skies mountain temperatures will climb only a few degrees with little chance of snowfall.

Snowpack and Avalanche Discussion

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

It's going to be difficult to find slopes not affected by the wind. Many are scoured, some are drifted with shallow pockets and a few have meaty wind-loads. With wind speeds reaching over 60 mph, even pock marked, scoured surfaces will get further eroded. The strongest winds were at the ridgetops, but mid elevation slopes were not spared with snow being cross loaded into gullies. Mark took a long tour in the Spanish Peaks on Sunday and found most snow glued down and not moving. Without a widespread weak layer, the stability issue is confined to wind affected slopes where it's still possible to trigger an avalanche. Recent winds also helped add a few feet of growth to the cornices at the ridgetops. Cornices are scary because they break further back than expected, plus they are big triggers. Each six foot tall by three feet deep by three feet wide section of snow weighs about 2,000 pounds, so a 12 foot long cornice is an 8,000 pound (4 ton) trigger. Weak layers are relative, so even in a strong snowpack a big trigger can sometimes create an avalanche ([photo 1](#), [photo 2](#)).

For today, the avalanche danger is rated [MODERATE](#) on any slope wind-loaded as well as any slope steeper than 35 degrees. Lower angled, non-wind-loaded terrain has a [LOW](#) avalanche danger.

The mountains around Cooke City and the Washburn Range:

The mountains outside Cooke City got four inches of snow yesterday with strong winds. My partner and I had a beautiful, calm, sunny day on Sunday, only to have blizzard conditions at the passes yesterday morning. I'm not instrument rated on my snowmobile so navigation was limited to the groomed trail. Snow was blowing and loading slopes at all elevations. On Sunday we saw an avalanche on Abundance and Sheep mountains caused by cornice falls. We also investigated a small skier triggered slide near Round Lake on a wind-loaded rollover ([photo 1](#), [photo 2](#), [snowpit](#)). My primary avalanche concern is on wind-loaded slopes. I do not expect avalanches to break deep. Instead I'm concerned with slabs formed in the last 24-36 hours which will be the most likely to fracture.

For today, all wind-loaded terrain has a [CONSIDERABLE](#) avalanche danger. Slopes mercifully spared the wind will have [MODERATE](#) danger if they are steeper than 35 degrees and [LOW](#) on less steep.

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.

PHOTOS, SNOWPITS, VIDEO and SURVEY RESULTS

1. We've recently uploaded more [photos](#) and [snowpits](#) to our web site, more than what are linked in the advisory.
2. We're creating a series of "How To..." stability test videos. So far we've got clips on performing a CT and ECT. There are located under [<Stability Tests>](#) on the Resources page.
3. The results from our survey are posted online. Thanks to all who participated. You can check out the results at <http://bit.ly/fpLuSi>.

Upcoming Events

TONIGHT: 3rd Annual Montana Ale Works Fundraiser

Twenty- five bucks gets you food and beer in a great atmosphere with proceeds going to the Friends. See you tonight!

When: 6:00 p.m. in the Railcar at Ale Works in Bozeman

Details: Chef Roth at Montana Ale Works is creating tapas style servings that will be paired with select beer from Lone Peak Brewery. More information [HERE](#).

SATURDAY: Pinhead Classic

The 30th Annual Pinhead Classic on is Saturday, March 5th. "Gangsters and Flappers" is this year's costume theme, so come dressed up to race, socialize and win great prizes. Registration is \$30 but get you all sorts of cool stuff. All proceeds benefit the Friends of the Avalanche Center. Check out the website <http://pinheadclassic.com> for details.