

GNFAC Avalanche Advisory for Wed Mar 21, 2012

Good Morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Wednesday, March 21 at 7:30 a.m. A Montana FW&P Recreation Trails Grant sponsors today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

In the last 24 hours the mountains got one inch of new snow in the northern ranges with 2-3 inches falling down south. Wind speeds increased last night from the west to southwest averaging 30 mph with gusts reaching 64 mph in Hyalite. This morning, under partly cloudy skies, temperatures are in the high teens in the south and mid-20s in the north. Today will remain partly cloudy and windy with mountain temperatures rising into the upper 30s.

Snowpack and Avalanche Discussion

It has snowed every day for the last eight days in the southern mountains and seven out of those eight days in the northern ranges. The snow pipeline is shut off, but loading continues from the wind at all elevations. We have a weak, unstable snowpack and the current wind-loading will keep slopes poised to avalanche. The snowpack has not caught her breath yet. She is still adjusting to this new load. And remember, no matter what you find in your snowpits, stability tests always take a back seat to avalanche activity which is bulls-eye data that slopes are unstable.

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

The Football Field on Saddle Peak avalanched naturally sometime before dawn yesterday ([six pictures](#)). Eighteen inches of new snow with strong winds added more load than the facets at the ground could handle. Prior to this storm, 4.5" of snow water ([SWE](#)) had been added, a very substantial load. The avalanche pulled out the entire winter snowpack and along with it, an entire season of ski tracks. Tracks are not signs of stability. I wish they were, but they are not. They fool folks time and time again. Luckily this avalanche released in the dead of night saving many lives.

The avalanche equation is simple: new snow + wind + buried facets = avalanches. Areas with the most snow had the biggest avalanches. Natural slides were large and destructive around West Yellowstone and in the southern Madisons ([video](#)). I saw many slides in Taylor Fork and triggered a large slide in Sunlight Basin on Monday ([video](#), [photo](#)). I rode into Teepee Basin yesterday and had poor visibility, but could still make out a few new crown lines.

A [HIGH](#) avalanche danger continues today on any slope that is wind-loaded or any slope steeper than 35 degrees. All other slopes have a [CONSIDERABLE](#) danger.

The northern Madison Range:

The mountains surrounding Big Sky have gotten about three inches of SWE in the last eight days. This was not enough of a load to create widespread natural activity, but certainly enough to create dangerous conditions.

Slopes with a thinner snowpack have bigger, weaker facets at the ground and are a particular concern. A large natural slide on Cedar Mountain was spotted yesterday by Big Sky Ski Patrol in one of these thin areas. Given

the new snow, strong winds and poor snow structure, the avalanche danger is rated [HIGH](#) on wind-loaded slopes steeper than 35 degrees and [CONSIDERABLE](#) everywhere else today.

The northern Gallatin Range and mountains around Cooke City:

Eight days of snow has dropped 3.5" SWE around Cooke City and 2.6" SWE in the northern Gallatin Range. These areas are geographically far apart, yet have similar avalanche concerns. The buried facets are not as widespread in these zones and they did not receive the crushing loads we see in the Bridger or southern Madison Ranges. However, winds are loading many slopes which should be given a wide berth. For today, the avalanche danger is rated [CONSIDERABLE](#) on all wind-loaded terrain and [MODERATE](#) on all other slopes.

WET SNOW AVALANCHE DANGER

The sun may be warm enough to wet the snow surface creating point release avalanches. These are possible triggers for deeper, dry slab avalanches. Winds may inhibit this warming, but with more sun forecasted through the week, wet avalanches seem inevitable. The wet snow avalanche danger could rise from [LOW](#) to MODERATE by mid-day on slopes getting direct sunshine.

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.