

GNFAC Avalanche Advisory for Tue Feb 8, 2011

Good morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Tuesday, February 8, at 7:30 a.m. Bridger Bowl, in cooperation with the Friends of the Avalanche Center, sponsors today's advisory. This advisory does not apply to operating ski areas.

AVALANCHE WARNING

The Gallatin National Forest Avalanche Center is issuing a Backcountry Avalanche Warning for the Bridger and northern Gallatin Ranges as well as the mountains outside Cooke City. Heavy snowfall since Saturday has been deposited on a weak snowpack. Strong winds at all elevations have loaded slopes further. The avalanche danger is rated [**HIGH**](#) on all slopes. Very dangerous avalanche conditions exist in these ranges. Travel in avalanche terrain is not recommended and avalanche runout zones should be avoided.

Mountain Weather

The final round of snow dropped 6-8 inches in the Bridger and northern Gallatin Ranges. Cooke City picked up 5 inches and 1-2 inches fell everywhere else. Winds blew out of the west to northwest at 25-50 mph yesterday morning before dramatically shifting to the east mid-afternoon. Following this wind shift, mountain temperatures dropped almost 20 degrees in three hours, bottoming out at minus two, while winds lessened and snowfall stopped. Winds are currently blowing 20-30 mph out of the ESE in the Bridger Range with other mountains having light, easterly, 10 mph winds. Today will be partly cloudy with mountain temperatures reaching the high single digits with no snowfall expected.

Snowpack and Avalanche Discussion

The Bridger and northern Gallatin Ranges, the mountains around Cooke City and the Washburn Range:

Yesterday's 6-8 inches of snow and strong winds tipped the avalanche danger scale to [**HIGH**](#) on all slopes which meets the criteria for a warning. A layer of facets created at the surface eight days ago is failing and fracturing from the stress of the new snow. Almost 30 inches (2.4" of SWE) fell since Saturday. On Sunday, this bad snow structure showed its first signs of instability ([snow profile](#)) ([photo](#)). On Mount Blackmore in the northern Gallatin Range we discovered poor stability test scores and a natural avalanche near the summit ([video](#)). In the Bridger Range two skiers triggered two separate avalanches near Frazier Lake. One skier was caught, partially buried and broke his femur ([accident report](#)). That same day, a skier remotely triggered an avalanche outside Cooke City in Yellowstone N.P. ([photo](#)). With yesterday's snowfall and blizzard winds, I'm not touching avalanche terrain today. Sunny weather after a big snowstorm is magical, but don't let the beauty cloud your judgment. We need to give the snowpack time to adjust to its new burden.

The northern Madison Range:

The northern Madison Range got the wind, but not enough snow to warrant a warning. They received about 17 inches (1.5-2" SWE) which also fell onto a weak snow surface of small, sugary facets. These buried facets will fracture and avalanche. Slopes that were wind-loaded will likely have natural activity while others will be ripe for human triggers. These mountains demand scrutiny and a cautious approach. Today, very dangerous avalanche conditions exist on all wind-loaded slopes which have a [**HIGH**](#) avalanche danger. All other slopes have a hefty [**CONSIDERABLE**](#) danger.

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

Storms flowing out of the northwest have a habit of dropping piecemeal portions to the southern Madison and southern Gallatin Ranges. These areas got a 8-12 inch snack of snowfall instead of the full value meal; but when you're hungry sometimes a snack will do. These mountains also buried a surface weak layer, but the new snow load isn't enough to create widespread instability. Yesterday a skier on Bacon Rind found mostly stable conditions. Skiers near Hebgen Lake and snowmobilers at Lionhead found similar results: good riding and turning on the new snow with no signs of instability. The weak layer is easy to find since it's only buried under the new snow. For today, our primary avalanche concern is on wind-loaded slopes that have a [CONSIDERABLE](#) avalanche danger. All other terrain has a [MODERATE](#) 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.

9th ANNUAL KING AND QUEEN OF THE RIDGE

The 9th Annual King and Queen of the Ridge will be held at Bridger Bowl this Saturday, February 12. ALL proceeds go to the Friends of the Avalanche Center who use the money to promote avalanche education in southwest Montana. You can help raise money to continue this education in two ways: 1). Get pledges and hike the ridge. You don't have to do 20 laps – you can get flat pledges and hike just once! 2). Sponsor someone. If you don't have someone to sponsor, consider sponsoring the GNFAC since we'll be hiking for dollars. Go to http://bridgerbowl.com/events/view_event/81/ for more information and registration forms.

Avalanche Education

February 9 in Bozeman

Lucas Zukiewicz-NRCS, from the Montana Snow Survey will present information about the SNOTEL system in Montana, and how to gather and interpret SNOTEL information for backcountry avalanche conditions and travel planning. This free lecture will be held at the REI on 19th Street, from 6:30 p.m. to 8:00 p.m. More info can be found at: <http://www.rei.com/event/16591/session/20368>

February 12 and 13 in Cooke City

Avalanche Workshop for Snowmobilers and Skiers – Lectures on Saturday 12 p.m. – 4:30 p.m. field session on Sunday 9 a.m. – 3 p.m. ADVANCED REGISTRATION REQUIRED ([more information and registration](#))

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

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