

## **GNFAC Avalanche Forecast for Mon Nov 29, 2010**

Good Morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Monday, November 29, at 7:30 a.m. The **Big Sky Ski Patrol**, in cooperation with the **Friends of the Avalanche Center**, sponsor today's advisory. This advisory does not apply to operating ski areas.

### Mountain Weather

A cold northwest flow continues to deliver light precipitation to much of our advisory area. Over the past 24 hours the [Shower Falls](#) Snotel site in the northern Gallatin Range has recorded six inches of 5% snow. The Bridger and Madison Ranges have picked up 2-3 inches while the mountains around West Yellowstone and Cooke City have remained mostly dry.

At 4 am this morning mountain temperatures are in the mid to low teens F in the northern mountains and single digits F in the mountains around Cooke City and West Yellowstone. Winds are blowing out of the W-NW at 5-15 mph with the exception of Cooke City, where they are blowing 20-25 mph. Today, temperatures will rise into the twenties F under mostly cloudy skies. Light precipitation will continue over the northern mountains this morning with no real accumulations expected. Conditions will start to clear up by this evening and we should receive a welcomed shot of sunshine tomorrow into Wednesday.

### Snowpack and Avalanche Discussion

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

Over the past two days, 3-6 inches of light density snow has accumulated throughout the mountains of our advisory area. Light to moderate winds have kept wind loading confined to upper elevation ridgelines. With this new dose of snow and wind, triggering pockets of fresh wind deposited snow is our main avalanche concern.

Another concern is the older wind slabs underlying the new snow, which also have the ability to fail under the weight of a skier or rider. Yesterday, Doug and I skied north of Bridger Bowl and found both fresh deposits of wind blown snow as well as dense, older slabs sitting 6-8 inches below the surface. These thick, cohesive slabs, which likely formed late last week, are sitting over lighter density snow and have created a weak interface between layers. A stability test indicated that these stiff slabs have the ability to propagate a fracture with a test score of ECTP 11 ([photo](#)). The Bridger Bowl Ski patrol found similar conditions while doing control work on Slushman's.

Even though density changes and wind slabs are capable of propagating a fracture, our snowpack currently lacks a persistent weak layer. This is a big plus in that avalanche activity has been confined to wind loaded terrain. However, this does not mean that there are not buried weak layers in the snowpack, and all slopes should be approached using good backcountry protocol. This means carrying a beacon, shovel and probe and knowing how to use it. Tragically a snowmobiler was killed on Friday in the Uinta Mountains east of Salt Lake City because he left his rescue gear in the car ([accident](#)).

Today, human triggered avalanches are possible, mainly in wind loaded terrain, and the avalanche danger is rated **MODERATE**.

Doug 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](mailto:mtavalanche@gmail.com) or call us at 587-6984.

### **Upcoming Avalanche Education**

Basic Avalanche Awareness – Wed & Thurs, December 1 & 2, 7:00pm – 9:30pm at SUB Ballroom B&C; 12/4-Field day at Bridger Bowl ([more information](#)) ([Prepay \\$25 fee](#))

Avalanche Awareness for Snowmobilers – Wed & Thur, December 1 & 2, 7pm – 9:30pm at Team Bozeman, 2595 Simmental Way and a field session either Sunday, Dec 5th or 12th depending on snow ([more information](#))

1hr Avalanche Awareness - Tue, December 7, 6:30pm – 7:30pm @ REI Bozeman, 2220 Tschache Lane

Join Lucas Zukiewicz from the Montana Snow Survey for a FREE presentation/discussion on the SNOTEL system in SW Montana. The discussion will cover how to access SNOTEL information and interpret the data for snow and weather conditions. Sat, December 11, 7:30pm – 8:30pm at World Boards.