

GNFAC Avalanche Forecast for Thu Jan 6, 2011

Good morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Thursday, January 6, at 7:30 a.m. **Montana Import Group**, in cooperation with the **Friends of the Avalanche Center**, sponsors today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

An additional inch or two of snow fell in the past 24 hours. This morning temperatures were in the low 20s F at 9000ft except near Cooke City and West Yellowstone where temperatures were closer to 10 degrees F. Only slightly lower elevations have temperatures approaching 30 degrees F. Strong winds yesterday continued this morning blowing 15-30 mph from the W. Warm air advection and tight pressure gradients in the weather models mean today's weather will be warm and windy with temperatures in the high 20's to low 30's and 15-30 mph W winds. Some snowfall is expected, but no more than an inch should accumulate. This weekend, however, looks promising for snow and colder weather.

Snowpack and Avalanche Discussion

The northern Madison Range:

Doug and I went to Buck Ridge yesterday, just south of Big Sky, where there was about a foot of new snow though it seemed much deeper in spots. This new snow had been scoured from ridgetops by strong winds, and ski patrols on Lone Mtn. easily triggered wind slabs and new snow avalanches with both explosives and ski cuts. Buried surface hoar, about 2-3 ft deep, has plagued the mountains near Big Sky. In our stability tests yesterday, this layer required moderate force to break but did not propagate fractures despite the significant stress of new snow, and we couldn't find any natural avalanches on this layer. This surface hoar layer has generally gained strength but not at the same rate on all slopes. In some areas, as skiers found high in Beehive Basin on Tuesday, this layer remains weak.

With significant new snow and wind, fresh wind slabs are the main concern today and the avalanche danger is **CONSIDERABLE** on all wind loaded slopes. All other slopes have a **MODERATE** avalanche danger.

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

Stability evaluations in the rest of the advisory area are much simpler. The snowpack lacks widespread, persistent weak layers, and the main problem will be fresh wind slabs ([photo](#)) which should be easy to identify and avoid. With warm weather these wind slabs should begin to bond but will remain sensitive today. The winter season and the snowpack are still young, and areas of weak snow can be found. While these areas are isolated, their existence reminds us to remain attentive. Often we can identify these areas by feeling changes in the snow under our skis or our track. Assessing stability with a snowpit is always a good idea, but it is especially so if the snowpack suddenly feels different.

For today, the avalanche danger is **CONSIDERABLE** on wind loaded slopes where human triggered avalanches are likely. For slopes without wind deposits, the avalanche danger is rated **MODERATE** on all slopes steeper than 35 degrees while lesser angled slopes have a **LOW** 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.

Avalanche Education

January 9, Sunday in Helena:

The Friends of GNFAC in cooperation with the Helena Snowdrifters snowmobile club will present a FREE avalanche seminar. The schedule will be as follows:

9am to 11a.m.: 1 hour avalanche awareness lecture; "Dozen More Turns" movie; 12-2 p.m.: Rescue lecture followed by beacon overview. The course will take place at the MACO Building at 2717 Skyway Drive in Helena. For more information : <http://www.mtavalanche.com/workshops/calendar>

January 11, Tuesday in Big Timber:

In partnership with the Sweetgrass County High School in Big Timber, the Friends of the Avalanche Center will offer a FREE Basic Avalanche Awareness Workshop at the Big Timber High School between 7-8 p.m.

January 12, Wednesday in Billings:

The Friends of the Avalanche Center in partnership with Families for Outdoor Recreation will offer a FREE Basic Avalanche Awareness Workshop and beacon demonstration at Hi Tech Marine in Billings, MT between 6-8:30 p.m.

January 12, Wednesday in Dillon:

In partnership with the Birch Creek Center at UM Western in Dillon, MT, the Friends of the Avalanche Center will offer a FREE Basic Avalanche Awareness Workshop in Block Hall, Room 311 on the campus of UM Western at 7-8 p.m.

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

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