

GNFAC Avalanche Forecast for Wed Jan 5, 2011

Good morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Wednesday, January 5, at 7:30 a.m. **World Boards**, in cooperation with the **Friends of the Avalanche Center**, sponsor today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

At 6 a.m. the Yellowstone Club is showing ten inches of new snow. All the other ski areas got six inches with other sites also reading 3-6 inches. Temperatures warmed into the teens as wind speeds increased out of the southwest averaging 20-30 mph with gusts reaching 40-50 mph. Under mostly cloudy skies mountain temperatures will climb into the low 20s today with strong southwest winds. More flurries this morning and again later tonight will drop an additional two to four inches.

Snowpack and Avalanche Discussion

The northern Madison Range:

Up to ten inches of light, 5% powder, fell in the mountains around Big Sky last night. Southwest winds are blowing 20-30 mph which is moving the new snow into soft slabs near the ridgelines. The northern Madison Range has a layer of buried surface hoar 12-18" deep on many slopes and this new snow will keep the avalanche danger heightened. We received three observations from these mountains yesterday: one wrote about collapsing and surface hoar propagating fractures in a snowpit on Yellow Mountain; another had compression tests failing with light taps near Beehive Peak while a third found stable snow and no surface hoar on west-facing slopes in Beehive Basin. Divergent reports like these can occur as the weak layer begins to strengthen and loses its consistency throughout a region. Although this ultimately makes finding the instability trickier, it's a trend we like to see. Given the new snow, wind and buried weak layer, the avalanche danger today is rated **CONSIDERABLE** on all wind-loaded terrain. On slopes not affected by the wind the danger remains **MODERATE**.

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

Three to six inches of light density powder has fallen at most SNOTEL sites which are also measuring .2-.4 inches of [Snow Water Equivalent \(SWE\)](#). The new snow will be drifted into soft slabs on the ridgelines and easily triggered, but not step down into older snow. The avalanche danger will be spiked only on wind-loaded terrain since most ranges have a strong snowpack ([photo](#)) ([video](#)). Mt Ellis, Teepee Creek, Lionhead, and Cooke City have layers that are bonding well together. A lone blip in this story was reported by a skier in Taylor Fork in the southern Madison Range yesterday. He noted collapsing and found surface hoar buried a foot deep. On one hand, this is good news because we know the instability is not widespread. On the other hand, it shows that we still need to be on the lookout for buried weak layers. Luckily it's only 12" deep and we can find it with hand pits.

Today, it's likely a person could trigger a slide on wind-loaded slopes, so I'm rating the avalanche danger **CONSIDERABLE** on this terrain. 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.

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.

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>