

## **GNFAC Avalanche Forecast for Sun Mar 6, 2011**

Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Sunday, March 6, at 7:30 a.m. Javaman, in cooperation with the Friends of the Avalanche Center, sponsors today's advisory. This advisory does not apply to operating ski areas. The Friends of the Avalanche Center would like to thank all who participated in the 30<sup>th</sup> annual Pinhead Classic. The event was a great success despite snowy and wet conditions. ([photos](#))

### Mountain Weather

Over 18 inches of new snow has fallen in the mountains around Cooke City since yesterday morning. The rest of our advisory area has picked up 5-7 inches. This morning mountains temperatures are ranging from the mid teens to low 20s F and winds are light out of the WSW at 5-15 mph. Today temperatures won't get much warmer and winds will stay light out of the WSW. Another weak weather disturbance will move in by early afternoon producing light snow showers throughout southwest Montana. An additional 2-4 inches will fall around Cooke City and West Yellowstone while 1-2 inches will fall in the mountains around Big Sky and Bozeman.

### Snowpack and Avalanche Discussion

#### The mountains around Cooke City and the Washburn Range:

Can you say POWDER! Since yesterday morning the mountains around Cooke City have received over 18 inches of low density snow. In most cases 18" of new snow equals well over an inch of water (SWE), but currently the Fisher Creek Snotel site is only recording .5 inches of SWE in the past 24 hours. This translates to cold smoke powder. A skier in Cooke City confirmed this saying yesterday was by far the deepest day of the season.

Fortunately .5 inches of SWE is not an overbearing load for the snowpack to support. Another positive factor is this storm came in with very little wind keeping slab development minimal. This means avalanche activity will likely stay confined to the new snow. However, 18+ inches is a tremendous amount of snow no matter how you measure it. Slopes steeper than 35 degrees and any slope that has been affected by the wind will likely produce human triggered avalanches. In deep conditions like these staying out from avalanche run out zones and avoiding terrain traps such as gullies and creek beds is advised.

Today, human triggered avalanches are likely on wind loaded slopes and slopes steeper than 35 degrees where the avalanche danger is rated **CONSIDERABLE**. Less steep slopes without a wind load have a **MODERATE** avalanche danger.

#### The Bridger, Madison and Gallatin Ranges, and the Lionhead area near West Yellowstone:

A generally stable snowpack in the mountains around Bozeman, Big Sky and West Yellowstone will have little trouble supporting the 5-7 inches of new snow that fell over the past 24 hours. The main avalanche concern will be the new/old snow interface. On south facing slopes a slight crust will provide a smooth surface for the new snow to slide on. The Bridger Bowl Ski Patrol found south facing slopes to be reactive to ski cuts yesterday afternoon. Both the Big Sky and Moonlight Basin Ski Patrols also found the new snow to be reactive to ski cuts. Testing steep slopes before you commit will help determine the sensitivity of the new snow.

A lack of reactive weak layers means there is little in the way avalanche activity outside of the new snow issues. Yesterday I skied Saddle Peak and found nothing but dense-stable snow in my snowpits. Mark also found stable conditions in the Taylor Fork on Friday. However, there remains a slight possibility of triggering a hard wind slab. Old wind slabs of varying stiffness may be perched over softer snow below. These older slabs will be difficult to trigger, but will likely result in dangerous avalanches. Likely areas to trigger one of these hard slabs are slopes that have been scoured by the wind and have a shallow snowpack.

Today, human triggered avalanches are possible on wind loaded slopes and slopes steeper than 35 degrees where the avalanche danger is rated [MODERATE](#). Less steep slopes without a wind load have a [LOW](#) avalanche 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](mailto:mtavalanche@gmail.com) or call us at 587-6984.

#### PHOTOS, SNOWPITS, VIDEO and SURVEY RESULTS

1. We've recently uploaded more [photos](#) and [snowpits](#) to our web site.
2. We're creating a series of "How To..." stability test videos. So far we've made clips on performing a CT and ECT. There are located under <[Stability Tests](#)> on the Resources page.
3. The results from our survey are posted online. Thanks to all who participated. You can check out the results at <http://bit.ly/fpLuSi>.