

## **GNFAC Avalanche Forecast for Wed Mar 16, 2011**

Good morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Wednesday, March 16, at 7:30 a.m. Yellowstone Club Community Foundation, in cooperation with the Friends of the Avalanche Center, sponsors today's advisory. This advisory does not apply to operating ski areas

### Mountain Weather

In the last 24 hours 16 inches of snow has fallen in the southern Madison Range and a foot near Cooke City. Moonlight Basin received seven inches while two to three inches fell in Hyalite and the Bridger Range. The storm is not done. Westerly winds are averaging 20-30 mph with gusts hitting 60 mph. Mountain temperatures are in the high 20s. Today I expect 8-12 inches in the southern mountains and 4-6 inches in the northern ranges as winds slightly abate and temperatures drop into the low 20s.

### Snowpack and Avalanche Discussion

#### The Bridger, the northern Madison and northern Gallatin Ranges:

Snowfall in the north has been sporadic. At 6 a.m. seven inches has fallen around Lone Peak while the mountains around Bozeman got two to three inches so far. The wind was not so discretionary. It's blowing strong everywhere. It's quite possible to find natural avalanche activity today and I feel confident a skier or snowmobiler could trigger wind drifts. Without buried weak layers, avalanche activity will be confined to the last few days' new snow. More snowfall and strong winds today are creating a CONSIDERABLE avalanche danger on all wind-loaded slopes and a MODERATE danger elsewhere.

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

The southern mountains are getting fire hosed. Over two feet has fallen in 48 hours and it's still snowing. The snow is not light powder either—its 10% density cream. This snowfall measures two inches of snow water equivalency—a lot of stress to be added in such a short period of time. Eric found faceted layers around Bacon Rind and Teepee Creek which will be straining to support this new load. Mark rode around Cooke City yesterday and saw a large avalanche on Republic Peak ([photo](#)), but no activity anywhere else. He also hunted for weak layers, but came up empty. Other than the facets Eric found, we have not seen widespread instabilities. The upper few feet of the snowpack is a hodgepodge of ball bearing graupel pellets, ice crusts underlying the new snow, and fluctuating densities in the storm snow. But the real driving force behind the rising avalanche danger is the heavy rate of snowfall and ripping winds. Large snow loads can stress even the strongest layers to their breaking point ([video](#)).

With winds gusting to 60 mph, two feet of new snow and more falling every hour, slopes will be unstable today and have a CONSIDERABLE avalanche 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](mailto:mtavalanche@gmail.com) or call us at 587-6984.

### Avalanche Video Clip from Utah

<http://youtu.be/1ynAm5Wao1I?hd=1>

This is a great clip of a snowmobiler triggering a slide on March 9<sup>th</sup> in the Uinta Mountains, UT. He hurt his leg, trashed his machine, but should recover fine. Watching the clip a few things stand out:

1. Small slopes can be dangerous, especially when slides push you into trees.
2. His helmet cam shows how fast even a small slide accelerates.
3. Partners watching from a safe zone are worth their weight in gold.