

## GNFAC Avalanche Forecast for Fri Mar 25, 2011

Good morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Friday, March 25, 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

Since yesterday Cooke City received about 1 inch of new snow while other areas remained dry. Temperatures this morning were in the high teens to low 20s F with S and SW winds averaging 10-15 mph. If skies remain cloudy, high temperatures will only climb into the upper 20s F. Winds shouldn't change much and continue from the S and SW. This afternoon will see a slightly better chance for snowfall than yesterday but accumulations will only be a few inches with southern areas receiving more and areas near Bozeman possibly remaining dry.

### Snowpack and Avalanche Discussion

The Bridger, northern Madison and northern Gallatin Ranges, the mountains around Cooke City and the Washburn Range:

Both last week's and this week's storm delivered a rapid, heavy load of snow. This is important because snow exhibits a strong dependence on strain rate. Essentially, snow can deform and adjust to slow loading but rapid loading and deformation will cause it to break. A combination of new snow avalanches and a few breaking deeper in the snowpack followed each storm. Fortunately large avalanches occurred only in isolated areas. Because the snowpack lacks widespread persistent weak layers, stability has quickly improved. Warm spring weather helped speed this process. The most likely area to trigger an avalanche will be steep, rocky slopes where the snowpack is relatively thin and contains some faceted snow. A slide just north of Bridger Bowl ([photo](#)) one on Crown Butte near Cooke City ([photo](#)) occurred on these types of slopes.

For today, heightened avalanche conditions exist on these specific terrain features making human triggered avalanches possible. On slopes steeper than 35 degrees, the avalanche danger is rated MODERATE. Less steep slopes have a LOW avalanche danger. Consider wise words from one avalanche professional: "Even if the snowpack is stable, trees and rocks are more stable." Don't let your guard down and consider the run out of every slope.

The southern Madison and southern Gallatin Ranges and the Lionhead area near West Yellowstone:

The mountains south of Big Sky and near West Yellowstone received less snow during this week's storm. In the Taylor Fork area yesterday, Doug and Karl found nothing but stable snow and could only spot one recent avalanche ([photo](#)) on a steep, wind loaded slope in Sunlight Basin. With boring (i.e. stable) snowpits and no weak layers that would propagate fractures, it was a day of riding not research for avalanche scientists. Today generally safe avalanche conditions exist. Human triggered avalanches are unlikely but not impossible and the avalanche danger is rated LOW.

### WET SNOW AVALANCHE DANGER

The wet snow avalanche danger today depends on cloud cover. If skies clear and the sun appears, small point releases are likely on sunny aspects. On slopes shaded from the sun where the best skiing and riding conditions exist, wet snow avalanches are unlikely.

Eric 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.

Ride in honor of Steve Green

Next weekend on Saturday, April 2<sup>nd</sup>, [\*\*ride Buck Creek Ridge\*\*](#) in honor of Steve Green who died in an avalanche last April in McAtee Basin. Meet at 9:30 a.m. at the Buck Creek parking lot near the Corral.