

## **GNFAC Avalanche Forecast for Thu Mar 24, 2011**

Good morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Thursday, March 24, at 7:30 a.m. Bridger Bowl, in cooperation with the Friends of the Avalanche Center, sponsors today's advisory. This advisory does not apply to operating ski areas.

### Mountain Weather

Temperatures cooled overnight and were in the teens F this morning. Winds were blowing 10-20 mph from the S except at the Hyalite weather station where they were blowing 30-45 mph. Moisture is approaching from the south and will bring snowfall to the southern areas around noon. Temperatures in most places will be near 30 F and S winds will blow 10-20 mph. By tomorrow morning the mountains near Cooke City and West Yellowstone should receive 2-4 inches of snow, the mountains near Big Sky 1-2 inches, and mountains near Bozeman 1 inch.

### Snowpack and Avalanche Discussion

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

This time of year conditions change rapidly. Skiing and riding can be good in the morning but deteriorate rapidly by afternoon when temperatures soar and the sun appears. Avalanche conditions can fluctuate equally as much. During a storm like the one on Monday and Tuesday, rapid heavy snowfall can lead to new snow avalanches especially with a bit of wind. Fortunately instabilities within the storm snow heal rapidly, often in 24-48 hours. With yesterday's warm temperatures, the new snow has settled quickly and instabilities in the recent snow will be minimal today.

In most places the snowpack is strong and deep ([photo](#)). In most snowpits, we find strong, dense snow that easily supports the load of new snow. On most slopes there are no persistent weak layers in the snowpack. BUT the snowpack is not completely uniform and isolated slopes do have some weak snow. In some cases these slopes were scoured by previous wind events. In other cases these slopes exist in steep, rocky areas. The rapid heavy load from this week's storm highlighted these slopes by producing avalanches. One human triggered slide occurred just north of Bridger Bowl on Tuesday. It broke about 4ft deep in a steep rocky area near the ridgetop on a layer of facets ([photo1](#), [photo2](#), [snowpit](#)). Another human triggered slide occurred yesterday near Cooke City on a NW facing slope ([photo1](#), [photo2](#)). A large natural avalanche, 3ft deep and 200-300ft wide, occurred on Cedar Mountain probably on Tuesday.

However, many stable slopes can be found today. Look for slopes with a deep snowpack, and consider wise words from one avalanche professional: "Even if the snowpack is stable, trees and rocks are more stable." Think about the consequences of an avalanche on every slope and where an avalanche will take you. For today the avalanche danger is rated [MODERATE](#) on slopes steeper than 35 degrees and [LOW](#) on less steep slopes.

### WET SNOW AVALANCHE DANGER

Point releases of wet snow occurred yesterday. None were very large, but most occurred on S facing slopes especially near exposed rock bands. With temperatures in the teens F overnight and clouds moving into the area, the snow shouldn't heat up much and wet snow avalanches are unlikely. The mountains near Bozeman have the best chance for sunshine and warm temperatures. In these areas the wet snow avalanche danger could rise if clouds don't keep snow surface temperatures below freezing.

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.