

## **GNFAC Avalanche Forecast for Sat Apr 7, 2012**

Good Morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Saturday, April 7 at 7:30 a.m. The Friends of the Avalanche Center sponsor today's advisory. This group of volunteers works hard to raise money to support the Avalanche Center and provide avalanche education in SW Montana. This advisory does not apply to operating ski areas.

### Mountain Weather

#### NWS Forecast Discussion

Yesterday it snowed a lot, temperatures dropped, and winds were relatively calm. Since yesterday morning, the mountains near West Yellowstone received 27 inches of snow, near Cooke City 15 inches, near Big Sky and Bozeman 10 inches. There must have been a donut hole in the storm over the southern Madison Range and the Taylor Fork area which only received 3 inches of snow. This morning temperatures dropped into the low teens F and winds were blowing 10 mph from the W with gusts of 15 mph. Skies were clearing this morning and today will be a mix of sun and clouds. Temperatures will rise into the mid to high 20s F. Winds will blow from the W and SW and increase this afternoon blowing 10-15 mph with gusts of 25 mph.

### Snowpack and Avalanche Discussion

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

In the last 48 hours the following snowfall and [SWE](#) amounts were recorded:

- Fisher Creek SNOTEL near Cooke City – 26 inches of snow (2 inches SWE)
- Madison Plateau SNOTEL near West Yellowstone – 28 inches of snow (1.9 inches SWE)
- Bridger Bowl – 15 inches of snow (1.7 inches SWE)
- Moonlight Basin near Big Sky – 16 inches of snow (0.9 inches SWE)
- Shower Falls SNOTEL in the northern Gallatin Range – 14 inches of snow (1.2 inches SWE)

In most places this snow fell on a thick melt-freeze crust and easily slid. The Bridger Bowl Ski Patrol found pockets of wind deposited snow in odd places after E winds yesterday morning. This wind deposited snow readily produced avalanches. Near Cooke City a skier triggered a soft slab avalanche 12-14 inches deep from 100 feet away ([photo](#)), and Cooke City Motorsports reported a natural avalanche on one of the steep slopes above the unplowed section of Route 212. With so much new snow, avalanches should be easy to trigger today.

There are two weather factors that will potentially increase the avalanche danger. Any increased winds will easily transport the new snow which has a very low density of 5-6%. Also, clear skies and strong sunshine in some areas may warm the new snow close to its melting temperature and trigger avalanches in the new snow.

Another avalanche concern that should be in the back of your mind is weak snow near the ground ([photo](#)). This weak snow exists in the mountains near Bozeman, Big Sky, and West Yellowstone on all aspects. It produced large dry slab avalanches 18 days ago and large wet snow avalanches 11 days ago. Triggering an avalanche on this layer will not be easy, but the consequences would be severe. Near Cooke City, the snowpack is much deeper and stronger making this problem much less of a concern. Today the avalanche danger is rated [CONSIDERABLE](#).

The southern Gallatin and southern Madison Ranges:

The Carrot Basin SNOTEL site recorded only 7 inches of snow (0.6 inches of [SWE](#)) in the last 48 hours and 3 inches of this snowfall occurred in the last 24 hours. While these areas have a similar snowpack to other areas, less new snow means fewer avalanches. For today the avalanche danger is rated [MODERATE](#), but watch for any increased winds which will easily form fresh wind slabs.

I will issue the final 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.