

GNFAC Avalanche Forecast for Sat Feb 12, 2011

Good morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Saturday, February 12, 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

Yesterday light snowfall near Cooke City produced about 1 inch of new snow while all other areas were dry. Temperatures this morning were in the low 20s F near Bozeman and Big Sky where winds were ripping at 25-60 mph from the W. Further south temperatures were in the low teens F and winds were blowing 10-25 mph. Partly sunny skies will allow high temperatures to climb into the low 30s, but the main event will be winds which show no signs of slowing today.

Snowpack and Avalanche Discussion

The Bridger and northern Gallatin Ranges:

The Bridger and northern Gallatin Ranges received the most snow last weekend, and this week they have received the strongest winds blowing steady at 30-40 mph with gusts over 60 mph. Additionally there is a widespread weak layer of facets under the new snow ([photo](#)). The only good news is that warm temperatures will have a gradual stabilizing effect. The most sensitive slopes today will be ones at higher elevations (ie-colder) where wind-blown snow rests on top of the faceted layer ([photo](#)). For this reason the avalanche danger is rated [CONSIDERABLE](#) on slopes that are wind loaded and steeper than 35 degrees. All other slopes have a [MODERATE](#) danger.

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

The rest of the advisory area has a similar layer of facets under new snow from last weekend.

- Near West Yellowstone and Lionhead, this layer is widespread but not buried very deeply and not stressed very much unless it has a wind slab on top.
- Near Cooke City and Big Sky, this layer is not very widespread nor is it very sensitive, but these areas received more snow than the mountains near West Yellowstone thus stressing this layer a bit more. This weak layer is most prevalent on slopes with a southerly exposure and a slight crust about 1-2 ft deep.

Winds generally haven't been blowing as strong as they have near Bozeman, but they have been plenty strong to transport available snow to the lee sides of ridges and gullies forming wind slabs which can be triggered by a skier or rider ([photo](#), [video](#)). A wind slab (about 8 inches deep and 60 feet wide) was triggered by a skier in the backcountry on Lone Mountain recently. Wind slabs are always a concern. They are generally easy to identify and best to avoid especially in high consequence terrain. During recent days they have likely grown more cohesive and stiffer but slightly harder to trigger. This means recently formed wind slabs may surprise you because some will not budge while others will let you ride onto them and break when you least expect it.

Today heightened avalanche conditions exist on terrain features having both wind-blown snow on top of a thin layer of weak facets and the avalanche danger is rated [MODERATE](#).

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 or call us at 587-6984.

TODAY: 9th ANNUAL KING AND QUEEN OF THE RIDGE

ALL proceeds go to the Friends of the Avalanche Center who use the money to promote avalanche education in southwest Montana. Registration closed yesterday, but stop by the top of the Bridger lift to cheer us on, and consider a last minute sponsorship of the GNFAC since we'll be hiking for dollars.