GNFAC Avalanche Advisory for Sat Apr 9, 2011

Good morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Saturday, April 9, 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 most places received an additional 3-5 inches of snow. Strong easterly winds in the Bridger Range calmed overnight to 10-15 mph and shifted to the SSW this morning. All other areas received very little wind yesterday. Today wind directions will swing around the compass and only blow about 10 mph. Temperatures were in the teens to low 20s F this morning and should climb to near 30 F today with mostly cloudy skies. More moisture and some instabilities in the atmosphere will bring another 2-3 inches of snow to Cooke City while other areas will get an inch at most.

Snowpack and Avalanche Discussion

The Bridger Range:

Strong winds from odd directions created tricky avalanche conditions in the Bridger Range yesterday. In the past 48 hours the <u>Brackett Creek</u> SNOTEL site in the northern Bridger Range recorded 1.6 inches of <u>SWE</u> (about 16 inches of dense snow). The Bridger Bowl Ski Patrol reported sensitive wind drifts, some up to 5ft thick, and the primary avalanche issue today is fresh wind slabs and drifts. Some may have gained strength overnight but others will remain sensitive. Today on wind loaded slopes the avalanche danger is rated <u>CONSIDERABLE</u>. On slopes without a wind load the avalanche danger is rated <u>MODERATE</u>.

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

After a series of storms since Monday, observers have reported 2-3 feet of new snow near Cooke City and West Yellowstone and 1 foot near Big Sky. Since Thursday winds have been light. The primary avalanche concerns exist within the new snow (photo). Yesterday at the far southern end of the Madison Range, my partner and I observed minor cracking in the upper 5-10 inches of snow. On slopes approaching 40 degrees we were able to trigger small slabs. Fortunately the snow was very predictable and did not break above us or much wider than the length of our skis. We also saw debris from a large wet snow avalanche which occurred during very warm weather about one week ago.

Today should be a good day for powder. New snow is bonding quickly, it hasn't been wrecked by the sun, and stability assessments are quick and relatively easy. I'd give the snowpack at least another day or two to adjust to recent loading before riding the steepest, most aggressive lines. For today with so much new snow heightened avalanche conditions exist on some terrain features. Human triggered avalanches are definitely possible and the avalanche danger is rated <u>MODERATE</u>.

I will issue the last advisory tomorrow morning at 7:30 a.m. If you have any snowpack or avalanche observations, drop us a line at <u>mtavalanche@gmail.com</u> or call us at 587-6984.