GNFAC Avalanche Advisory for Tue Nov 30, 2010

Good Morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Tuesday, November 30, at 7:30 a.m. Team Bozeman, in cooperation with the Friends of the Avalanche Center, sponsor today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

Clear skies allowed the temperatures to drop into the single digits this morning. There's no new snow to report and ridgetop winds have been blowing west to southwest at 15-30 mph. Today will cloud up as moisture streams in from the Pacific; however I'm only expecting a teaser of snow by tomorrow morning with flurries that might add up to an inch in the southern mountains. Temperatures should warm to the teens today as winds remain westerly at 20-30 mph.

Snowpack and Avalanche Discussion

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

Throughout southwest Montana the snowpack is 3-4 feet deep at 8,000 feet or higher. Skiing and riding conditions are great for this time of year and the snowpack structure and stability issues are currently uniform from the Bridger Range to West Yellowstone to Cooke City. Having all our mountains exhibit similar traits makes avalanche forecasting easier, but conditions rarely stay this way.

Our primary avalanche concern is wind-blown snow near the ridgetops. In the Bridger Range on Sunday, Eric and I got a shear to propagate in our snowpit one foot from the surface under a soft wind slab (snow-profile). Folks in Beehive Basin and up Hyalite Canyon over the weekend found similar conditions. Bridger Bowl ski patrollers tested this layer with explosives on slopes being controlled for the first time, but did not get widespread slides. Skiers and snowmobilers outside Cooke City were paying attention to the wind slabs too. They saw west-facing leeward slopes stripped clean of snow and small avalanches on east-facing slopes of Sunset Peak and near Lulu Pass. Currently, throughout our advisory area, all the shears being reported are under wind slabs, at storm interfaces or on mildly faceted crystals. There's no persistent weak layer in the snowpack which is why avalanche activity has remained minimal.

A secondary avalanche concern is thin areas of snow at rock outcroppings and cliff bands where rocks act as Miracle-Gro for facets. These small gardens of weak, unstable snow could avalanche, especially when overburdened with wind drifts. We saw evidence of this last week when a large pocket on the Football Field of Saddle Peak released naturally over the cliffs.

Our snowpack is trending toward stability, but it's still possible to trigger an avalanche on wind slabs at the ridges and on thinner, unstable snow near rocky outcrops. Given these specific areas of concern today's avalanche danger is rated **MODERATE** on all slopes.

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 or call us at 587-6984.

Upcoming Avalanche Education

Basic Avalanche Awareness – Wed & Thurs, December 1 & 2, 7:00pm – 9:30pm at SUB Ballroom B&C; 12/4-Field day at Bridger Bowl (more information) (Prepay)

Avalanche Awareness for Snowmobilers – Wed & Thur, December 1 & 2, 7pm - 9:30pm at Team Bozeman, 2595 Simmental Way and a field session Dec 12^{th} (more information)

1hr Avalanche Awareness - Tue, December 7, 6:30pm – 7:30pm @ REI Bozeman

Join Lucas Zukiewicz from the Montana Snow Survey for a FREE presentation/discussion on the SNOTEL system in SW Montana. The discussion will cover how to access SNOTEL information and interpret the data for snow and weather conditions. Sat, December 11, 7:30pm – 8:30pm at World Boards.