GNFAC Avalanche Advisory for Fri Feb 17, 2012

Good morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on, Friday, February 17 at 7:30 a.m. Montana Import Group, in partnership with the Friends of the Avalanche Center, sponsors today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

Overnight 2-3 inches of snow fell throughout the advisory area. Winds decreased slightly from yesterday and this morning were blowing 10 mph with gusts of 25 mph from the W except in the Bridger Range where winds were blowing 20 and gusting to 30. Temperatures were in the low to mid teens F. Snow will continue this morning with an additional 2-3 inches falling. Some areas may see some sun this afternoon before another small dose of snow arrives Saturday. Temperatures will rise into the low 20s F, and winds will decrease a little by afternoon.

Snowpack and Avalanche Discussion

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

New snow fell on 5 of the last 7 days. This snow by itself has not been enough to change the avalanche danger much since it has slowly accumulated, and riding conditions have improved. More importantly, however, this snowfall provided ammunition for increased winds to build many fresh wind slabs.

- Skiers on Saddle Peak yesterday reported heavy wind loading and many small slab avalanches (photo)
- A regular skier in Hyalite found many fresh wind slabs that readily cracked and slid while others did not. He also observed more natural avalanches yesterday than any other of the 50 days he's skied there this season. (photo1, photo2)
- Karl, Doug, and I skied in Hyalite yesterday. Unfortunately wind slabs and drifts did not crack or produce avalanches for us, but they should not be trusted. One may not avalanche while another will. The good news is that winds did not form wind slabs very far below ridgelines and lots of good powder could be found.
- Ski Patrollers at Big Sky triggered wind slabs that formed early yesterday morning.
- Natural avalanches occurred near Cooke City during recent days with calm winds. With increased winds more will certainly occur. (photo1, photo2)

Now is a tricky time because deeper instabilities and larger avalanches could start occurring. In the current weather pattern with small incremental loads, it is hard to say exactly when these large avalanches will occur, but we know this point is not far away. Throughout the advisory area, the structure of the snowpack is bad. It has depth hoar and other faceted crystals in the lower half of the snowpack covered by a cohesive slab. Hyalite Canyon is the exception. There are some faceted layers in the snowpack but they are much stronger there than in other areas.

The primary concern is fresh wind slabs. A secondary concern is avalanches breaking on deeper layers in the snowpack or at the ground. These would most likely occur on the same slopes where fresh wind slabs exist. Today, all wind loaded slopes have a <u>CONSIDERABLE</u> avalanche danger. Non wind loaded slopes have a <u>MODERATE</u> avalanche danger.

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 <u>mtavalanche@gmail.com</u> or call us at 587-6984.

NRCS Snowpack Summary Graphs

For the current state of our snowpack depth (about 70% of average on the Gallatin), check out these two graphs generated by NRCS (graph 1, graph 2).

EDUCATION

West Yellowstone - Saturday, February 18

FREE 1-hour Avalanche Awareness for snowmobilers at the Holiday Inn. 7-8 p.m. in the room next to the bar.