GNFAC Avalanche Advisory for Sun Feb 19, 2012

Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on, Sunday, February 19 at 7:30 a.m. Gallatin County Search and Rescue, in partnership with the Friends of the Avalanche Center, sponsors today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

Over the past 24 hours 3-5 inches of snow has fallen over the advisory area with the exception of the Bridger Range which picked up 6-7 inches. Mountain temperatures are currently in the single digits and winds are blowing 5-15 mph out of the WNW. Today, an unsettled weather pattern will continue with an additional 1-2 inches possible in the mountains. Temperatures will warm into the teens and winds will increase to 10-20 mph out of the WNW. Conditions will gradually dry out by tomorrow but another storm system is scheduled to arrive on Tuesday.

Snowpack and Avalanche Discussion

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

Without question this winter has been unusual. Long dry spells have been the dominating weather pattern, sporadically interrupted by quick and intermittent snow storms. This dryer than average winter has aided the development of multiple persistent weak layers which are now scattered throughout the snowpack (snowpit).

As winter finally returns, buried faceted layers will start to become more reactive. A layer of near surface facets now buried 1-2 feet deep can be found on most slopes throughout our advisory area (photo). This layer will be most sensitive on any slope that has been wind affected. Yesterday, Mark found these buried facets to be widespread in the mountains around Cooke City and triggered a slide on this layer on a north facing slope (video). Skiers also triggered slides on this layer in Hyalite.

Although winds have not been exceptionally strong, they have blown hard enough to affect many mid to upper elevation slopes. Yesterday, the Moonlight Basin and Big Sky ski patrols triggered numerous fresh wind slabs that broke 1-2 feet deep. Wind loaded slopes are today's primary avalanche concern.

However, as the snow piles up and more stress is added to the snowpack, avalanches on sheltered slopes could be triggered by a skier or rider (photo).

Today, fresh snow sitting over a layer of facets buried 1-2 feet deep will make human triggered avalanches likely on all wind loaded slopes and slopes steeper than 35 degrees which have a <u>CONSIDERABLE</u> avalanche danger. Less steep, non wind loaded slopes have a <u>MODERATE</u> avalanche danger.

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.

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).