GNFAC Avalanche Forecast for Mon Apr 2, 2012

Good Morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Monday, April 2 at 7:30 a.m. Yellowstone Club Community Foundation sponsors today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

Over the past 24 hours 10-12 inches of snow fell in the northern Madison Range, 8 inches fell in the Bridger Range, 4-6 inches fell in the southern Madison Range and 1-2 inches fell in the mountains around West Yellowstone and Cooke City. Currently, temperatures are in the single digits on Lone Mountain and 10-20 degrees elsewhere. Winds are blowing 10-20 mph out of the WSW. Today, cool temperatures will persist with highs reaching into the upper 20s to low 30s. Winds will continue to blow 10-20 mph out of the WSW. A building ridge of high pressure will produce clear and calm conditions through the day. A warming trend will begin tomorrow and last through Wednesday.

Snowpack and Avalanche Discussion

The Bridger Range, Gallatin Range, Madison Range and Lionhead area near West Yellowstone:

Spring is an erratic time for weather and snowpack conditions. This spring season seems more perplexing than most. Buried depth hoar, above average temperatures, rain, sun and new snow have created an avalanche equation even Einstein would find challenging.

Yesterday, Doug traveled to Lionhead and found more than six feet of dense snow sitting on top of fist hardness facets near the ground. According to Doug, if he hadn't excavated his pit to the ground, he would have assumed the snowpack was good to go (photo). Unfortunately, this weak base layer can be found on most slopes throughout the advisory area with the exception of Cooke City.

Today, the primary avalanche concern will be slides initiating in the new snow and stepping down to depth hoar near the ground. This scenario is reminiscent of the set up that caused the large slides in Bridger Bowl nearly a week ago (photos, video).

Today a fresh load totaling ¹/₂ to nearly 1" of water resting over a poor snowpack structure will make human triggered avalanches likely on slopes steeper than 35 degrees which have a <u>CONSIDERABLE</u> avalanche danger. Less steep slopes have a <u>MODERATE</u> avalanche danger.

The mountains around Cooke City:

The mountains around Cooke City have over 8 feet of dense-stable snow above 9000 ft. Fortunately, this area lacks a widespread weak layer. Yesterday, skiers in the area found a stout melt-freeze crust on most slopes. This will keep the avalanche hazard to a minimum today. However, this area has received a few inches of new snow making wind loaded slopes today's primary avalanche concern.

Today, the avalanche danger is rated <u>MODERATE</u> on wind loaded slopes. Non-wind loaded slopes have a LOW avalanche danger.

Doug 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.

Avalanches: Decision-making and Psychology

On March 28 the GNFAC and Friends hosted a Professional Development Workshop on "Decision-making and Psychology". All six lectures are uploaded to YouTube. Making high consequence decisions in dynamic, dangerous environments is tricky stuff. These lectures are by an avalanche worker, forecaster, SEAL, airline pilot, and psychologist. Watch, listen and learn. You can view the lectures here: http://www.youtube.com/playlist?list=PLEFAE2148A0027DF6&feature=view_all