GNFAC Avalanche Forecast for Sun Mar 20, 2011

Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Sunday, March 20, at 7:30 a.m. World Boards, in cooperation with the Friends of the Avalanche Center, sponsors today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

A fast moving storm has deposited 5 inches of snow in the Bridger Range and 1-2 inches elsewhere. Pre-frontal winds reached 40 mph yesterday afternoon, but decreased as the storm moved through. Currently, winds are blowing 10-20 mph out of the WSW with ridgetop gusts reaching close to 30 mph. Clear skies are keeping temperatures cool, with most mountain locations reading in the single digits to mid-teens F. Today, winds will continue to blow 10-20 mph out of the WSW and temperatures will rise into the mid 20's to low 30's F under mostly clear skies. Clouds will gradually move in this evening as a weak weather disturbance pushes in from the west. 1-2 inches of snow is possible in the mountains by tomorrow morning.

Snowpack and Avalanche Discussion

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

Weather is the architect of avalanches. The two main weather factors that contribute to slab development and avalanche activity are snow and wind. Over the past four days our advisory area has received a healthy dose of both, resulting in natural and human triggered avalanches. Most slides have stayed confined to the new snow, but a few have stepped down into deeper layers. The largest slide to occur in the past four days was a natural slide in the northern Bridger Range. This slide broke 3-5 ft deep, 400 ft wide, and nearly ripped out the entire seasons snowpack (video, photo1, photo2, photo3). The Moonlight Basin Ski Patrol also observed slides that stepped down into deep layers in their Headwaters Terrain.

Although deep slab instabilities are the exception and not the rule, they need to be considered when riding in steep wind loaded terrain. Avoiding likely trigger points such as shallow or rocky areas will help reduce the chances of triggering a deeper slide. A more likely scenario will be triggering a shallower pocket of windblown snow. On Thursday, a skier triggered and was caught in a slide in the Hourglass Chute north of Bridger Bowl. This slide probably failed on a layer of surface hoar which has been sporadically found in the area. Another slide was observed on the West side of Saddle Peak in the Bridgers, the cause of this slide is unknown. Also, on Friday, a skier remotely triggered a wind slab that broke 18" deep and 150 ft across in the northern Madison Range (photo). Remotely triggered slides are concrete evidence that sensitive conditions exist. Although the snowpack has had time to adjust to the load deposited earlier this week, a quick shot of snow and wind last night will keep things on edge.

Today, human triggered avalanches are likely on wind loaded slopes steeper than 35 degrees where the avalanche danger is rated CONSIDERABLE. All other slopes have a MODERATE 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.

Avalanche Video Clip from Utah

http://youtu.be/1ynAm5Wao1I?hd=1

This is a great clip of a snowmobiler triggering a slide on March 9th in the Uinta Mountains, UT. He hurt his leg, trashed his machine, but should recover fine. Watching the clip a few things stand out:

1. Small slopes can be dangerous, especially when slides push you into trees.

2. His helmet cam shows how fast even a small slide accelerates.

Partners watching from a safe zone are worth their weight in gold.