GNFAC Avalanche Forecast for Fri Feb 24, 2012

Good morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Friday, February 24 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

Lingering snowfall yesterday produced 2-3 inches in most areas. Last night winds increased blowing 20 mph and gusting to 40 mph from the W. This morning winds calmed and were blowing 10-15 mph with gusts of 25 mph. Temperatures were in the single digits to low teens F. A short-lived, upper level ridge will bring dry weather today with a mix of sun and clouds and temperatures near 20 degrees F. Winds will remain about the same speed but shift to the SW as a trough of low pressure approaches tonight. Snowfall will begin tomorrow morning.

Snowpack and Avalanche Discussion

The mountains around Cooke City:

On Wednesday, a snowmobiler was killed in an avalanche on the groomed road leading to Daisy Pass. Four people were caught, one was fully buried and died, two were buried with an arm sticking out of the snow, and one was buried to his knees. All had rescue gear and the victim was uncovered in less than 10 minutes. He was caught with the tail of his sled still on the groomed road as he got off to turn it around. Yesterday Doug and Eric investigated this avalanche (video and photos 1, 2, 3, 4, 5) and will publish a full accident report in the next day or two. Unfortunately they were not able to examine the snowpack at the crown because snowfall and high winds had reloaded the starting zone of this avalanche. It may have been a naturally triggered avalanche and these riders were unfortunately in the wrong place at the wrong time. This fact is scary because avalanche terrain above the road is not obvious and I have parked my sled near this area many times.

Doug and Eric observed many other recent avalanches, but some were difficult to identify because the starting zones had been reloaded as well. Also on Wednesday, skiers triggered an avalanche on "Town Hill" just above Cooke City. It broke 2 ft deep and 300 ft wide. An avalanche warning was in effect for this area yesterday, and today the avalanche danger has only slightly dropped. Any slope steeper than 35 degrees has a HIGH avalanche danger. Less steep slopes have a CONSIDERABLE avalanche danger.

The Bridger Range:

The Bridger Range had an avalanche warning for the past two days. Since Monday the snowpack increased in water content by 40% at the Brackett Creek SNOTEL site. This new snow is a dramatic addition of stress on a very faceted snowpack that has yet to be tested by a large storm. Yesterday during avalanche control work at Bridger Bowl, ski patrollers experienced collapsing of the snowpack, a sure sign of unstable conditions. Karl and I skied north of Bridger Bowl where we observed a few slides that occurred during the storm. Unfortunately in this area, these avalanches were difficult to spot and signs of instability were not obvious, but we cautiously avoided all avalanche terrain. Our stability tests showed that avalanches will break either deep in the snowpack or at the ground (video). Today the avalanche danger is HIGH on slopes steeper than 35 degrees and CONSIDERABLE on less steep slopes.

This is a tricky time because you may see someone ride a steep slope and not trigger an avalanche. With a thick slab of dense snow covering weak layers in the snowpack, it's hard to say whether the 1st person, the 2nd, or

even the 10th person on a slope will trigger it. Seeing ski tracks on a slope doesn't mean it's stable, tracks only mean someone got lucky.

The Gallatin and Madison Ranges and the Lionhead area near West Yellowstone:

The Gallatin and Madison Ranges and the Lionhead area near West Yellowstone were not included in the avalanche warning only because these areas received less snow this week. These areas contain a thin layer of near-surface facets (photo) buried about 2 ft deep on all aspects; however, it does not exist in some lower elevation areas. I did not find it on Mt Ellis on Wednesday. This layer produced avalanches prior to this week's snowfall. A good example is an avalanche that occurred in Beehive Basin last weekend (photo, video). This layer will continue to produce avalanches, but they will be bigger. Yesterday, the Moonlight Basin Ski Patrol triggered an avalanche that initially broke 20 inches deep, then broke on deeper layers in the snowpack producing an avalanche 4-6 ft deep (photo). This is a likely scenario for the backcountry. Today the avalanche danger is CONSIDERABLE 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.

Events/Education

<u>FREE 1-hr Avalanche Awareness Lecture</u>, Friday, March 2, 7-8 p.m. at the West Yellowstone Holiday Inn in the room next to the bar.

31st Annual Pinhead Classic

Come to Bridger Bowl on Saturday, March 17th (St. Patrick's Day) with telemark skis, AT skis, alpine skis, snowboards, split boards, or even snow blades. The theme is Snowpocalypse based on the wildly popular Mayan 2012 apocalypse. \$30 gets you into the races, a pint glass, t-shirt, a good time, a raffle ticket, and food by Cafe Fresco. Pre-register at Mystery Ranch or Grizzly Ridge March 11-16. Visit http://pinheadclassic.com/ or the Pinhead Facebook page for more info.