GNFAC Avalanche Advisory for Fri Mar 9, 2012

Good morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Friday, March 9 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

The past two days have started with cold temperatures which have limited daytime warming. This morning, however, temperatures were in the high 20s F. Winds were blowing 10-15 mph gusting 20-30 mph from the W and SW. A ridge of high pressure will dominate today's weather and provide clear skies with lots of sunshine. Cloudy skies this morning shouldn't last very long, and winds should remain about the same. Temperatures will approach 40 degrees F in most areas although the Bridger Range could see temperatures approaching 50 degrees F.

Snowpack and Avalanche Discussion

Wet snow avalanche danger

With air temperatures close to freezing this morning and clear sunny skies expected today, the danger of wet snow avalanches should rise to **CONSIDERABLE** by this afternoon on sun exposed slopes. The warmest conditions are expected in the mountains near Bozeman, and the snowpack should give warning signs in the form of pinwheels of wet snow rolling downhill followed by small point releases near exposed rocks.

The northern Madison Range:

Yesterday I rode just south of Big Sky along Buck Ridge, in McAtee Basin and on Cedar Mtn and was amazed at the number of avalanches (photos, video). Many were natural and a few were human triggered. This avalanche activity started on March 1st with the most recent avalanche happening Wednesday morning, March 7th. Avalanches occurred on most aspects both above and below treeline. A few broke on depth hoar at the ground, but most broke on a layer of small facets about 3 feet deep. A group of avalanche researchers on Cedar Mtn yesterday experienced collapsing of the snowpack and got unstable results in their stability tests (snowpit). If snowmobiling today, it may be possible to get a false sense of confidence in the snowpack on some popular slopes. The weak layer of facets responsible for many of these avalanches was destroyed by snowmobile traffic on these popular slopes before it was buried.

I am not completely sure why so much avalanche activity just occurred near Big Sky and did not occur in other areas. However, I am sure that recent avalanches are clear signs of unstable conditions not to be ignored. For this reason today, the avalanche danger is **CONSIDERABLE** on all slopes steeper than 35 degrees and **MODERATE** on less steep slopes.

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

Fewer avalanches have been reported in the rest of the advisory area. The question is "Do these areas have more stable snow?" Or "Has there been similar avalanche activity but we don't know about it?" What we do know is that the rest of the advisory area has a similar layer of faceted crystals buried about 3 feet deep. This layer is either 3 feet deep in the middle of a deeper snowpack, or it is about 3 feet deep near the ground in a thinner

snowpack (**photo**, **video**). Recent stability tests and a lack of **reported** avalanche activity seem to indicate that these facets have gained some strength. BUT, buried facets should not be trusted too much and avalanche activity near Big Sky is a good warning sign for other areas.

Today, the odds of triggering an avalanche have decreased making the danger MODERATE. Keep in mind the snowpack this season has generally been unstable and has not earned any trust. There are persistent weak layers in the snowpack on most slopes and I would be very hesitant to trust these layers with my life without making a very thorough and slope specific stability assessment.

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 mtavalanche@gmail.com or call us at 587-6984.

Events/Education

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.

1-hour Avalanche Awareness at REI, Bozeman

Tuesday, March 20 at 6:30 pm. Sign up for this FREE class here.