GNFAC Avalanche Advisory for Tue Mar 13, 2012

Good morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Tuesday, March 13 at 7:30 a.m. The **Cliff Gullett Memorial Fund**, in partnership with the Friends of the Avalanche Center, sponsor today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

Warm and windy describe this morning's weather. Mountain temperatures are near 30F under partly cloudy skies as west to southwest winds average 25-30 mph and gusts to 70 mph at the Yellowstone Club. Clouds will increase as a cold front moves in from the southwest. Winds will get even stronger as the front passes later today. Temperatures will drop into the low 20s and by morning the southern mountains will get 2-4 inches of snow with the northern ranges getting 1-2 inches.

Snowpack and Avalanche Discussion

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

Throughout our entire forecast area we are finding weak layers propagating in our stability tests. Extended Column Tests (ECT) are our consistent favorite. These tests are showing instability in two layers:

- 1. facets two to three feet below the surface, or
- 2. on poorly bonded depth hoar crystals near the ground, typically on slopes with less than four feet of snow.

Yesterday my partner and I went into the <u>Throne</u> area of Bracket Creek in the Bridger Range. We found eight inches of dense new snow described as "Alaska cream dream". This new snow adhered to the melt freeze crust on east and south faces and bonded well to the old snow surface on other aspects. The only activity we saw were a few loose sluffs on steeper slopes.

The snowpack was less than four feet deep in our pit and we had depth hoar failing in our stability tests (photo).

On Sunday, Eric and I went to different areas of the northern Madison Range and got similar results of fractures propagating in our stability tests on both layers of facets (video). An MSU student doing research on Mt Ellis did 40 ECTs yesterday, all propagating on a layer about two feet deep. In the last week we've had reports of either avalanche activity or stability tests propagating in Hyalite, Beehive Basin, Buck Ridge, Yellow Mountain, Taylor Fork and Lionhead.

The snow structure is still poor as evidenced in our **snowpit profiles**. Getting slopes to fracture is getting more difficult with time, yet the buried weak layers are still breaking in our tests. We are finding this on most slopes in our advisory area and it's our primary concern. A secondary concern is isolated pockets of wind-blown snow in the Bridger Range. Since avalanches are still possible, for today, the danger is rated **MODERATE**.

Given the increasing cloud cover, winds and approaching cold front, I do not expect wet snow avalanches to be a concern today.

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.

The <u>NRCS released a new bar graph</u> showing the Gallatin Basin at 83%, Madison at 82% and Jefferson at 84% of the 30-year average.

Events/Education

<u>31st Annual Pinhead Classic</u>

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 <u>http://pinheadclassic.com/</u> or the Pinhead <u>Facebook</u> page for more info.

1-hour Avalanche Awareness at REI, Bozeman

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