GNFAC Avalanche Advisory for Sun Dec 26, 2010

This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Sunday, December 26, at 7:30 a.m. Hans Saari Memorial Fund, in partnership with the Friends of the Avalanche Center, sponsors today's advisory. This advisory does not apply to operating ski areas

Mountain Weather

A strong southwest flow is keeping temperatures warm and is producing gusty ridgetop winds. Currently, mountain temperatures are hovering around freezing, with the exception a few locations in the north where temperatures have climbed into the 40's F. Winds are blowing out of the W-SW at 15-30 mph with gusts over 50 mph being recorded at the <u>Hyalite weather station</u>. Today, temperatures will climb into the 40's under mostly cloudy skies and winds will remain strong out of the SW. The mountains around West Yellowstone and Cooke City could see a few light snow showers this afternoon, but the no real accumulations are expected.

Snowpack and Avalanche Discussion

The northern Madison Range:

Strong southwest winds over the past 24 hours have produced touchy slabs on north facing slopes. Yesterday, the Moonlight Basin Ski Patrol remotely triggered a small wind slab that broke up to 8 inches deep and they experienced cracking and collapsing in wind loaded terrain. The Big Sky Ski Patrol also found sensitive conditions on wind loaded slopes.

Wind deposited snow is adding additional stress to an already weak layer of buried surface hoar 1-1.5 feet below the surface (video). This layer has now been buried for over two weeks and continues to produce signs of instability such as cracking, collapsing and recent avalanches (photo). If you are traveling in the backcountry around Big Sky, this includes Beehive Basin and Buck Ridge, be extra cautious on wind loaded slopes and slopes steeper than 35 degrees. Today buried surface hoar and recently formed wind slabs make human triggered avalanches likely and the avalanche danger is rated <u>CONSIDERABLE</u>.

The mountains around Cooke City and the Washburn Range:

A buried layer of small grained facets can be found 2-3 feet below the surface in the mountains around Cooke City. Mark found this layer on Tuesday and Wednesday in nearly all his snowpits, but was encouraged by the lack of propagation this layer displayed during stability tests. With no new snow over the past few days, this layer has remained fairly quiet. However, this does not mean that triggering an avalanche is out of the question. On steep slopes, specifically near ridgelines and shallow areas in the snowpack, the odds of triggering an avalanche increases. Today buried facets make human triggered avalanches possible and the avalanched Danger is rated MODERATE.

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

The snowpack outside of Big Sky and Cooke City lacks the distribution of widespread weak layers, but isolated pockets of weak snow can be found. Buried surface hoar 8-10 inches deep has been observed in the northern Bridger Range near Flathead Pass as well as in Bacon Rind in the southern Madison Range (video). These layers may be intermittent, but the fact they exist warrants carful snowpack evaluation and terrain assessment when

traveling in the backcountry. For today, with some weaknesses present in the snowpack, the avalanche danger is rated <u>MODERATE</u> on all slopes steeper than 35 degrees and <u>LOW</u> on less steep 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 <u>mtavalanche@gmail.com</u> or call us at 587-6984.

Avalanche Education

Avalanche Awareness for Snowmobilers and Skiers, West Yellowstone, Holiday Inn;

Lectures: Saturday, January 1 from 12-5 p.m.; Field: Sunday, January 2 all day.

No Registration Required. (more information)

There are many upcoming avalanche classes in the month of January. Check them on our education page at: http://www.mtavalanche.com/workshops/calendar