GNFAC Avalanche Forecast for Mon Dec 31, 2012

Good morning and happy New Year's Eve Day. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Monday, December 31 at 7:30 a.m. Today's advisory is sponsored by Gallatin County Search and Rescue in partnership with the Friends of the Avalanche Center. This advisory does not apply to operating ski areas.

Mountain Weather

Yesterday the Bridger Range picked up 3-4 inches of low density snow, all other areas picked up a trace to one inch. Today, weak disturbances imbedded in a northwest flow will produce a slight chance of snow in the northern mountains; the mountains around Cooke City and West Yellowstone will likely remain dry. Currently, temperatures are in the single digits F and winds are blowing 5-10 out of the WNW with the exception of the Bridger Range where winds are blowing 10-25 out of the WNW. Today, temperatures will warm into the teens under partly to mostly cloudy skies and winds will blow 5-20 out of the WNW. The northern mountains will continue to see a slight chance of snow where 1-2 inches is possible by tomorrow morning.

Snowpack and Avalanche Discussion

Bridger Range Madison Range Gallatin Range

Lionhead area near West Yellowstone Cooke City

It's time to put 2012 to bed. 2013 will be starting off with a snowpack that's promising, but not perfect. It's a bit like the Vikings making the playoffs - now is the time to be optimistic, but also focused on the challenges ahead. Currently, most of our avalanche concerns lie in the upper layers of the snowpack. Recent bouts of clear and calm weather have formed surface hoar and near surface facets on a variety of slopes. If this quiet weather pattern continues, these weak layers will become better developed and more widespread. If these layers persist long enough to be buried by a heavy load, they will likely produce avalanches.

With that said, the snowpack is still looking pretty good. Yesterday, my partners and I toured to Hyalite Peak and found stable conditions on southeast and northeast facing slopes. Yesterday, Doug also found good stability in the Lionhead when he went to investigate an avalanche report. The slide was reported as human triggered, but upon arrival Doug found that it was a natural avalanche caused by a falling piece of cornice (photo). The crown was 50 feet wide with a small run out - the slide had limited propagation and no other signs of instability were observed - which was encouraging.

This event basically sums up our current situation. Most slopes are stable, but a few harbor buried weak layers capable of producing avalanches (<u>photo</u>). Slopes where the snowpack is less than a meter deep, specifically those in steep, rocky terrain will be most susceptible to human triggered slides.

One area to pay attention to will be upper elevation slopes in the Bridger Range. Shallow soft slabs may exist below the ridgeline, which could be sensitive to human triggers. I don't expect these slabs to be deep or well connected, but it's something to look for if touring in the Bridgers.

Today, generally safe avalanche conditions exist on slopes less than 35 degrees which have a <u>LOW</u> avalanche danger. Slopes steeper than 35 degrees have a <u>MODERATE</u> Avalanche danger.

Doug 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.

EDUCATION

Thursday, January 3, 6:00 p.m., 1-hour Avalanche Awareness lecture at 406 Brewing Company, Bozeman.

Tuesday, January 8, 7:00 p.m., 1-hour Avalanche Awareness at Big Timber High School.

Wednesday, January 9, 6:30 p.m., 1-hour Avalanche Awareness at REI, Bozeman.

Thursday and Saturday, January 10 and 12, Rescue Clinic. Thursday at 6:00 p.m. at REI, Bozeman and Saturday at 10 a.m. in the field, location TBD. For more info and to register go http://www.rei.com/event/47692/session/64126

Saturday and Sunday, January 12 and 13, Snowmobiler Introduction to Avalanches with Field Course. For more information and to sign up: https://www.ticketriver.com/event/4979-snowmobiler-introduction-to-avalanches-w-field