GNFAC Avalanche Forecast for Mon Jan 14, 2013

Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Monday, January 14 at 7:30 a.m. Today's advisory is sponsored by Mystery Ranch in partnership with the Friends of the Avalanche Center. This advisory does not apply to operating ski areas.

Mountain Weather

Since yesterday morning a trace of new snow fell in the northern mountains while the southern mountains remained dry. Currently, temperatures are frigid at 10-15 below zero F and winds are blowing 5-15 mph out of the WNW with the exception of the Bridger Range where winds are blowing 15-25 mph. Today, the mercury will climb into the single digits above zero under partly to mostly cloudy skies. Winds will remain out of WNW blowing 10-20 mph. There is a chance the winds could pick up this afternoon as a storm approaches from the north. Snow is likely tonight with 2-4 inches possible in the mountains around Bozeman and Big Sky. The mountains around West Yellowstone will see 1-3 inches and Cooke City will likely be the winner picking up 4-6 inches.

Snowpack and Avalanche Discussion

Bridger Range Madison Range Gallatin Range

Lionhead area near West Yellowstone Cooke City

The absence of significant snow and wind over the past 72 hours has allowed the snowpack to hit the reset button. Yesterday, my partner and I toured around Bacon Rind in the southern Madison Range and found a snowpack that was well adjusted to the most recent load (video, photo). This was a bit surprising, considering how weak the surface snow was just before the most recent storm. This was consistent with the observations Mark and I made in the Lionhead area on Saturday. Without going too far out on a limb, I feel confident saying the snowpack in this area is trending toward stability.

The layer of facets that formed during the first week of January can also be found in the mountains around Bozeman and Big Sky. However, the most recent load was not enough to cause a significant avalanche problem in this area. This layer is least developed in the mountains around Cooke City.

Today, the primary avalanche concern throughout our advisory area will be wind loaded slopes. Although winds have not been consistently strong, localized wind events have formed slabs below ridgelines and on the lee side of exposed terrain features. In some areas wind slabs will be resting over a layer of facets. This layer is gaining strength, but on slopes where the load is more significant this layer could be reactive (photo). Wind slabs could also be resting over lower density snow that is not faceted. This type of instability is usually short lived, but could be a problem over the next few days. Recognizing and avoiding slopes that appear heavily loaded or wind affected will be the best way to stay out of trouble.

There is the possibility for a skier or rider to trigger a slide on a steep, non-wind loaded slope. This problem exists mostly in the southern mountains where a foot of snow rests over a known weak layer (<u>photo</u>). Evaluating the snowpack and terrain carefully is essential before committing to steeper slopes.

Today, human triggered avalanches are possible and the avalanche danger is rated MODERATE.

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 <u>mtavalanche@gmail.com</u> or call us at 587-6984.

EDUCATION

Wednesday, January 16, 7:00 p.m. "The Sidecountry is Backcountry" at MSU's Procrastinator Theater in Bozeman, a free 1-hour presentation.

Saturday, January 19, Rescue Clinic for Snowmobilers in Cooke City starting at Cooke City Motorsports. This 6 hour clinic teaches how to use avalanche rescue gear and perform an avalanche rescue. Registration is required. For more info and to sign up, visit: <u>https://www.ticketriver.com/event/4980-companion-rescue-clinic-for-snowmobilers</u>

Saturday, January 19, 6 -7 p.m., 1-hour Avalanche Awareness at the Cooke City Community Center.

Wednesday, Thursday, and Saturday, January 23, 24, and 26. MSU Introduction to Avalanches with Field Course. Wed and Thurs evenings and all day Saturday. For more information and to register, visit: https://www.ticketriver.com/event/4970-introduction-to-avalanches-w--field-course