GNFAC Avalanche Forecast for Sat Mar 19, 2016

Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Saturday, March 19, at 7:00 AM. Today's advisory is sponsored by Yellowstone Arctic Yamaha and Yamaha Motor Corp in partnership with the Friends of the Avalanche Center. This advisory does not apply to operating ski areas.

Mountain Weather

A strong ridge of high pressure is producing clear skies and calm conditions. This morning temperatures range from the single digits above or below zero – the coldest temps we've seen in over a month. Winds are light out of the W-NW. Today, skies will remain clear and winds will blow 5-15 mph out of the W-NW. Temperatures will warm into the 20s to low 30s by this afternoon. High pressure will remain the dominant weather pattern through the weekend.

Snowpack and Avalanche Discussion

Southern Madison Range Southern Gallatin Range

Lionhead area near West Yellowstone Cooke City

The southern areas have a few different layers of concern. On all but north facing slopes a thin layer of facets above or below a melt freeze crust buried 1-3 feet deep has recently produced natural and human triggered avalanches (**photo**). Yesterday, skiers around Cooke City got collapsing on this layer at 9,800 ft. on a south facing slope. Also around Cooke City, skiers observed a large natural slide that broke 1-2 feet deep and 200-300 feet wide on an upper elevation-east facing slope. It was likely the result of wind deposited snow sitting over a facet-crust combination and appeared to be triggered by a cornice fall.

Surface hoar buried 2-4 feet deep is also a concern in the southern mountains. This layer has become less reactive, but continues to produce unstable results in stability test (<u>video</u>). Both of these buried persistent weak layers continue to hold the potential to produce avalanches.

An additional concern today will be wet loose avalanches. This problem will be most widespread on steep, sun exposed slopes. With plenty of fresh snow to move around, wet loose avalanches could be larger than one might expect. Wet loose avalanches also make good triggers for larger slab avalanches (**photo**).

Today, both dry snow and wet snow avalanches are possible and the avalanche danger is rated **MODERATE**.

Bridger Range Northern Madison Range

Northern Gallatin Range

Today, the primary avalanche concern in the northern ranges will be wet loose avalanches. On steep, sun exposed slopes surface layers will destabilize under the influence of warmer temps and strong solar input. Yesterday, my partner and I toured around Mt. Blackmore in the northern Gallatin Range and found over a foot of fresh snow. The new snow was well bonded to the old snow surface and we found stable conditions (video).

Today will be a different story. Fresh snow combined with warming temps and abundant sunshine will create a prefect recipe for wet snow activity. Watch for signs of instability such as pin wheels and point releases and avoid steeper slopes where these signs are present. Given the cold temps this morning, wet loose activity won't be a significant problem until this afternoon. Outside of new snow instabilities, the northern ranges have a mostly stable snowpack.

Today, the avalanche danger will start out **LOW**, but will rise to **MODERATE** as the day progresses.

Doug will issue the next advisory tomorrow morning by 7:30 a.m. If you have any snowpack or avalanche observations to share, drop us a line at mtavalanche@gmail.com or leave a message at 587-6984.

EVENTS and AVALANCHE EDUCATION

A complete calendar of classes can be found **HERE**.