GNFAC Avalanche Advisory for Mon Feb 23, 2015

Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Monday, February 23, at 7:30 a.m. **Montana FW&P Recreation Trails Grant** in partnership with the Friends of the Avalanche Center sponsor today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

A strong ridge of high pressure is currently dominating the weather pattern. This is creating clear skies, calm winds and cold temperatures. This morning temps range from the single digits above or below zero F and winds are light out of N-NE. Today, temperatures will warm into the 20s F under clear skies and winds will remain light out of the N-NE. High pressure will persist for the next 24 hours, but another storm system is forecasted to impact the area Tuesday night into Wednesday.

Snowpack and Avalanche Discussion

Bridger Range Northern Madison Range

Northern Gallatin Range

Our primary avalanche concern for the northern ranges is the how well the new snow is bonding to the old snow surface. In the Bridger Range and northern Madison Range (Big Sky area) close to a foot of snow fell on Friday and Saturday. The northern Gallatin Range (Hyalite area) picked up almost two feet of new snow. Our recent field days and backcountry observations have indicated that the new snow is bonding well to the old snow surface on all aspects and elevations (video, video)

Yesterday, Doug and I toured into Hyalite and found very wintery conditions. The thermometer read -19 F when we left the car, but temps warmed into the single digits as the day progressed. We found 20" of new snow at 9,500 ft which was non-reactive in stability tests. We did observe one small natural avalanche that appeared to be the result of wind loading during or immediately after the storm (**photo**). Two small human triggered avalanches were also reported later in the day. One was on Mt. Blackmore (**photo**) and the other was near Palace Butte. Both these avalanches occurred within the newly deposited snow. Similar conditions were observed by skiers in Beehive Basin yesterday. Mark also found stable conditions up Portal Creek in the northern Gallatin Range.

Without snow and wind over the past 36 hours, the recent storm snow has had time to settle and bond with the old snow surface. Steep, wind-loaded terrain may still hold some areas of instability and caution should be warranted if traveling in these zones. Otherwise the pack is looking strong and stable.

Today, Human triggered avalanches are possible on wind loaded slopes steeper than 35 degrees which have MODERATE avalanche danger. All other slopes have a LOW avalanche danger.

Southern Madison Range Southern Gallatin Range

Lionhead Area near West Yellowstone Cooke City

Recent observations from Cooke City and West Yellowstone all point towards a strong and stable snowpack. Over the weekend, reliable observers in Cooke City dug multiple snowpits and found no layers of concern. They also observed skiers and riders hitting avalanche terrain without incident. These are both good indicators the snowpack is unlikely to produce avalanches.

In the mountains around West Yellowstone, the lack of recent snowfall has allowed the snowpack to become well adjusted and non-reactive. There is a layer of buried surface hoar 1-2 feet deep in this area that may be a problem once it snows more, but for now this layer has become mostly dormant.

Today, generally safe avalanche conditions exist and both natural and human triggered avalanches are unlikely. For this reason the avalanche danger is rated **LOW**.

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.

AVALANCHE EDUCATION and EVENTS

Take a look at our **Education Calendar** for all classes being offered.

Snow Science and the Human Factor, Big Sky, Jefferson Room at the Yellowstone Center, Tuesday, February 24, 7-9 pm. The free event will feature a talk by Powder editor and MSU graduate John Stifter, multimedia presentations on the human factor in avalanche risk, a panel of experts from MSU's Snow & Avalanche Lab and Gallatin National Forest Avalanche Center, as well as a Q & A session.

1-hour Avalanche Awareness, Bozeman, REI, 6:30 - 8 p.m., Wednesday, March 11.