GNFAC Avalanche Forecast for Fri Apr 8, 2016

Good morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Advisory issued on Friday, April 8, at 7:00 AM. Today's advisory is sponsored by <u>Montana Ale Works</u> and <u>Alpine Orthopedics</u>. This advisory does not apply to operating ski areas.

Mountain Weather

Temperatures reached the mid-50s F yesterday and are in the low to mid-30s F this morning, except in the Bridger Range where temperatures are around 40 F. Winds yesterday afternoon were out of the northwest at 15-20 mph and calmed to 5-15 mph overnight. Today will be sunny with wind at 5-10 mph and temperatures near 60 F this afternoon.

Snowpack and Avalanche Discussion

Bridger Range

Temperatures in the Bridger Range last night were not cold enough to allow the snowpack to refreeze after yesterday's melt. Warmer temperatures today will melt the snowpack to greater depths and wet snow stability will decrease quickly. Buried weak layers exist on some slopes and have caused avalanches in the last week (photo1, photo2). Wet slab avalanches occur when water from snowmelt or rain drains through a layered snowpack, which will be possible today. The wet snow avalanche danger will be MODERATE this morning and could rise to HIGH this afternoon. Avoid avalanche terrain and runout zones if you are sinking deeper than boot top in wet snow, or see natural wet loose avalanches or growing pinwheels of snow. Dry snow avalanches are unlikely and the dry snow avalanche danger is LOW.

Madison Range Gallatin Range

Lionhead area near West Yellowstone Cooke City

In the mountains south of Bozeman, near freezing temperatures and clear skies overnight allowed the snow surface to refreeze. Thick frozen crusts on the surface create stable conditions in the morning, which Eric and I observed in the Taylor Fork yesterday (video). However, wet snow stability will decrease rapidly as above freezing temperatures melt crusts. Dry unconsolidated snow under the crusts will quickly warm and increase the size of wet loose avalanches. Wet loose avalanches start from a point and entrain snow as they move downhill. They can easily sweep a skier over cliffs or into trees and other terrain traps. Though not in our advisory area, deep wet slide debris was observed at low elevations in Emigrant gulch, which shows how large and dangerous these instabilities can be (photo), and wet loose avalanches were observed in colder unconsolidated snow at higher elevations (photo). The wet snow avalanche danger will start LOW this morning and rise to CONSIDERABLE this afternoon.

Weak layers are buried 2-4 feet deep on some slopes and will be difficult to affect where the snow surface is frozen. Wet slab avalanches will be possible on these layers if the snow above melts and introduces water to the snowpack. Dry slab avalanches will be possible where the snow surface is dry such as high elevation and shady slopes. Deeper avalanches could be triggered by natural cornice falls or wet loose avalanches. These lurking instabilities make the **dry snow** avalanche danger **MODERATE** today. Cornices are large and can break farther back from the edge than expected. Above freezing temperatures will make them easy to trigger or fall naturally. Give these monsters a wide berth as you travel along ridgelines, and avoid slopes below them.

For more spring snow travel advice see the article I posted on our blog page, here.

Our last advisory of the season is Sunday, April 10.

I 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 <u>mtavalanche@gmail.com</u> or leave a message at 587-6984.

EVENTS and AVALANCHE EDUCATION

A complete calendar of classes can be found <u>HERE</u>.