GNFAC Avalanche Advisory for Wed Mar 23, 2016

Good morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Advisory issued on Wednesday, March 23, at 7:15 AM. Today's advisory is sponsored by <u>Cooke City Motorsports</u> and <u>Lone Peak Brewery</u>. This advisory does not apply to operating ski areas.

Mountain Weather

Snowfall yesterday favored the mountains near Big Sky with up to 11" of low density snow. The mountains near Bozeman got 7", and 3-5" fell near West Yellowstone and Cooke City. Winds overnight were 10-20 mph out of the north-northwest, and temperatures this morning are in the teens F. Today will be mostly cloudy with light snow showers this afternoon. Temperatures will be in the 20s F and wind will be out of the northwest at 10-20 mph. Minimal snow accumulation is expected today with more snow Thursday and Friday.

Snowpack and Avalanche Discussion

Southern Madison Range Southern Gallatin Range

Lionhead area near West Yellowstone Cooke City

Snowfall in the southern mountains yesterday totaled .2-.5" of snow water equivalence (<u>SWE</u>) and fell on a variety of snow surfaces. Prior to this snow, warm days and cold nights formed weak facets on the surface on high elevation and shady slopes. Melt-freeze crusts, which may be accompanied by weak facets, formed on sunnier slopes. Avalanches will be possible today where new snow formed slabs over a weak snow surface, and loose snow avalanches will slide on steep slopes. Light to moderate northwest winds formed wind-slabs that are confined to ridgelines and possible to trigger.

A secondary concern in the southern mountains is weak layers of facets or surface hoar buried 2-4 feet deep. Avalanches failed on these layers over the weekend near Cooke City (photos), and Doug and I found them in our snowpits at Lionhead (video) and Taylor Fork (video) in the past week. Yesterday's snowfall is not enough weight to greatly stress deeper weak layers. However, a deeper avalanche is possible if you find the right spot on a slope or if an avalanche in the new snow carries enough force to trigger a deeper avalanche. New snow and buried weak layers make the avalanche danger today MODERATE.

Bridger Range Northern Madison Range Northern Gallatin Range

Yesterday's storm favored the mountains near Bozeman and Big Sky with .5-.7" of snow water equivalence (SWE). Prior to this snow, weak facets formed on the surface of the snowpack on higher elevation and shady slopes. Skiers in Hyalite yesterday reported finding this weak snow and the Big Sky ski patrol reported it prior to the storm. A melt-freeze crust formed on sunny slopes, which may be accompanied by facets.

Avalanches will be possible where new snow has formed slabs over a weak snow surface. Dig to look for these recently buried weak layers before riding a slope. Loose snow avalanches are possible on steep slopes. Wind slabs from light northwest winds will be confined to ridgelines and possible to trigger. The snowpack is relatively stable below the recent storm interface and deeper avalanches are unlikely. Today, new snow and a new buried weak layer make the avalanche danger **MODERATE** on all slopes.

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 mtavalanche@gmail.com or leave a message at 587-6984.

EVENTS and AVALANCHE EDUCATION

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