GNFAC Avalanche Forecast for Sun Dec 28, 2014

Good Morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Sunday, December 28, at 7:30 a.m. Today's advisory is sponsored by **Bountiful Table** and **Lone Peak Brewery**. This advisory does not apply to operating ski areas.

Mountain Weather

Over the past 24 hours the Bridger Range has received over a foot of new snow. The rest of the advisory area has picked up 4-6 inches. At 4 a.m. it's still snowing and temperatures are in the single digits to low teens F. Winds are blowing 10-20 mph out of the W-NW. Today, snow will continue with an additional 2-4 inches likely in most areas. The Bridger Range could see up to 6 inches by tonight. Today, temperatures will warm into the upper teens to low twenties F and winds will continue to blow 10-20 out of the W-NW. Cold air arrives tonight with lows dropping well below zero F.

Snowpack and Avalanche Discussion

Bridger Range

The Bridger Range is currently getting hammered by snow. Nearly six inches has fallen over the past six hours making the 24 hour total over a foot. This rapid and heavy load will create multiple avalanche problems. The main problem will be avalanches failing in the new snow. Today, I expect any slope steeper than 35 degrees to produce natural and human triggered avalanches. A secondary problem will be avalanches failing on weak layers buried deeper in the pack. On Friday, a group of skiers got unstable results on a layer of facets buried two feet below the surface (**photo**). This layer will be under a tremendous amount of stress from the recent storm snow. Regardless of the avalanche problem, I would avoid all avalanche terrain today.

For this reason, the avalanche danger is rated **<u>HIGH</u>** on all slopes steeper than 35 degrees. Less steep slopes have a **<u>CONSIDERABLE</u>** avalanche danger.

Gallatin Range Madison Range Lionhead area near West Yellowstone

Consistent snowfall over the past few weeks has put the strength and integrity of the snowpack to the test. Fortunately, the snowpack seems to be holding up and there have been very few human triggered avalanches reported. However, we know there are a variety of weak layers buried in the pack, all of which are capable of producing avalanches (videos). As this latest storm adds yet another load, this may be the straw that breaks the camel's back.

Today, I would play the conservative card and keep slope angles well below 35 degrees. Pay close attention to your surrounding terrain and avoid skiing or riding on lower angle slopes connected to larger-steeper slopes. Remote triggers are not highly likely today, but they are a possibility.

Also, avoid skiing or riding any slope that has received wind deposited snow. With an additional round of snow and wind overnight, wind slabs will be a likely problem today.

With more snow and wind in the forecast, human triggered avalanches are likely and the avalanche danger is rated **CONSIDERABLE**.

Cooke City

The mountains near Cooke City contain a much deeper and stronger snowpack than other areas. Over the past few days I found remnants of weak layers in the snowpack, but these layers wouldn't break in my stability tests (**photo, video**). Today, the main problem will be wind loaded slopes. New snow and moderate winds out of the W-NW have formed fresh wind slabs, which will likely fail under the weight of skier or rider. Additionally a few steep rocky slopes, like ones on Crown Butte or similar terrain, have a thinner snowpack where you could trigger an avalanche on a faceted layer near the ground. For today the avalanche danger is rated **CONSIDERABLE** on wind loaded slopes. Non-wind loaded slopes have a **MODERATE** avalanche danger.

Get a sense of snowfall, wind and avalanche activity on our "What's been happening" page. It's something we used to write by hand just to use in the office but decided to put it online. Check it out HERE.

I 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 EDUATION and EVENTS

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

1-hour Avalanche Awareness for Snowmobilers, West Yellowstone, 7 p.m., Saturday, January 3, Holiday Inn.

Companion Rescue Clinic, Bozeman, Fri eve and Sat field, January 9 and 10, REI. Register for the class here: www.rei.com/stores/bozeman.html

1-hour Avalanche Awareness for Snowmobilers, West Yellowstone, 7 p.m., Saturday, January 10, Holiday Inn.