GNFAC Avalanche Advisory for Thu Dec 22, 2016

Good Morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Wednesday, December 22st at 7:00 a.m. Today's advisory is sponsored by **Grizzly Outfitters** in partnership with the **Friends of the Avalanche Center**. This advisory does not apply to operating ski areas.

Mountain Weather

Over the past 24 hours no new snow has fallen. At 5 a.m. temperatures range from the single digits to mid-teens F under clear skies. Winds are blowing 10-20 mph out of the W-SW. Today, a ridge of high pressure will remain over the area. This will produce plenty of sunshine and moderate temperatures. Highs today will warm into the mid to upper 20s F and winds will remain light to moderate out of the W-SW. The next chance for snow arrives Friday night and Saturday.

Snowpack and Avalanche Discussion

Cooke City Southern Gallatin Range Southern Madison Range

Lionhead area near West Yellowstone

Yesterday was a reprieve from new snow and wind. This welcome intermission gave the snowpack a little time to adjust. After an active period of natural and human triggered avalanches, today should be a little calmer. This however does not mean the light is green on all slopes.

After an intense wind event followed by 4-6 inches of snow Tuesday night, the snowpack remains under a notable amount of stress. Areas that received a heavy wind load will be the most prone to producing avalanches. Instabilities mid-pack and near the ground both have the potential to produce slides (**many photos**).

Yesterday, Ski Guides outside of Cooke City observed multiple natural avalanches that occurred over the past few days (**photo**, **photo**). They also experienced cracking and collapsing in isolated areas. Today, careful snowpack evaluation, cautious route finding and conservative decision making are essential.

With the snowpack continuing to show signs of instability, the avalanche danger is rated **CONSIDERABLE** on wind loaded slopes and slopes steeper than 35 degrees. Less steep, non-wind loaded slopes have a **MODERATE** avalanche danger.

Bridger Range Northern Gallatin Range

Northern Madison Range

Strong winds throughout the week left very few slopes unscathed in the northern ranges. On Tuesday, Doug and I were in the Bridgers and found firm, punchy wind slabs on all aspects and elevations. Many of these wind drifts were sitting over weak facets near the ground (**video**, **snowpit profile**). This is a recipe for avalanches.

Over the course of the week, the Big Sky Ski Patrol triggered numerous large avalanches during control work. Most of these slides were the result of wind deposited snow sitting over basal facets. A skier south of Big Sky also observed a large natural avalanche on Cedar Mountain. This slide appeared to have failed earlier in the week.

Today, the combination of wind slabs and weak layers make human triggered avalanches likely on wind loaded slopes steeper than 35 degrees which have a **CONSIDERABLE** avalanche danger. All other slopes have a **MODERATE** avalanche danger.

I will issue the next advisory tomorrow morning by 7:30 a.m.

We rely on your field observations. Send us an email with simple weather and snowpack information along the lines of what you might share with your friends: How much new snow? Was the skiing/riding any good? Did you see any avalanches or signs of instability? Was snow blowing at the ridgelines? If you have snowpit or test data we'll take that too, but this core info is super helpful! Email us at mtavalanche@gmail.com or leave a message at 406-587-6984.

Upcoming Events and Education

COOKE CITY

Tuesday, December 27 and Wednesday, December 28, **Weekly rescue training and snowpack update**, 6-7:30 p.m., Soda Butte Lodge on Tuesday, Field location Wednesday TBA.

Every Friday and Saturday, **Weekly rescue training and snowpack update**, 6-7:30 p.m., Soda Butte Lodge on Friday, Field location Saturday TBA.