GNFAC Avalanche Forecast for Tue Dec 20, 2016

Good Morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Tuesday, December 20th at 6:45 a.m. Today's advisory is sponsored by <u>Cooke City Super 8/Bearclaw Bob's</u> and <u>Excel</u> **Physical Therapy**. This advisory does not apply to operating ski areas.

Mountain Weather

At 5 a.m. the southern mountains have gotten a couple inches of new snow. Winds are west to southwest at 30-40 mph with gusts of 60+ on Lone Peak. Temperatures are in the teens to low 20s in the north and single digits in the south. For today, winds will remain strong and westerly with temperatures rising only a few degrees before falling into the single digits tonight. Snowfall today will measure 1-3" in the north and 3-5" in the southern ranges. Tomorrow and Thursday are forecasted to be sunny.

Snowpack and Avalanche Discussion

Cooke City Southern Gallatin Range Southern Madison Range Lionhead area near West Yellowstone

Today will be windy and snowy in the southern mountains which will keep the avalanche danger elevated. The mountains around Cooke City have not gotten much of a reprieve from last week's natural avalanche cycle (**photo page**). On Sunday, a snowmobiler triggered a 2-5' deep avalanche near Daisy Pass as he was riding up the hill. He was able to throttle onto the bed surface and self-arrest; a close call.

On Sunday, Alex and I rode into Taylor Fork where we saw small and large natural avalanches (**photo**). The snowpack was unsupportable and our tracks sunk to the ground offering a first-hand experience of the weak, sugary, faceted snow that's responsible for the avalanche activity. Additionally, wind drifts cracked when we walked on them (**photo**).

Weak snow near the ground is found throughout the southern ranges. Over the last 5 days it's been responsible for natural and human triggered avalanches, cracking and collapsing under a skier's weight and poor stability test scores. Fresh wind slabs will be easy to trigger today. Given the poor snowpack structure, more weight from new snow and wind-loading, human triggered avalanches are likely and the avalanche danger is rated **CONSIDERABLE**. Avoiding avalanche terrain would be a good idea today.

Bridger Range Northern Gallatin Range Northern Madison Range

There has been no new snow in the northern mountains since Friday, just wind. Yesterday, wind gusts of 40-60 mph created meaty wind slabs. Eric was ice climbing up Hyalite and watched plumes of snow and swirling spin drift pour off the ridges and down the gullies. Another climber watched a wind slab release naturally at the top of a climb on the Unnamed Wall. At Big Sky, the ski patrol easily ski cut these fresh slabs (**photo**). The ridgetop winds were mostly from the west to southwest, but lower down, swirly gusts loaded slopes of all aspects.

Weak snow at the ground is also a stability concern. Avalanches that start as a wind slab may step down to these weak, sugary facets. For today, avoid wind-loaded slopes. Avalanches yesterday followed by more wind last night means slopes, even small ones, are ripe to avalanche. All wind-loaded terrain has a **CONSIDERABLE** avalanche danger. All other slopes have a **MODERATE** 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 <u>mtavalanche@gmail.com</u> 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.