GNFAC Avalanche Forecast for Thu Dec 8, 2016

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

Mountain Weather

At 5 a.m. there's no new snow to report. Under clear skies and light winds, mountain temperatures are -6 to -15F. Tonight, a front from the southwest will bring warmer temperatures and snowfall as it collides with the colder air. Temperatures will reach the single digits today and high teens Friday. Snowfall will begin tonight and by morning there will be 2-3" in the north and 3-5" in the south with a bit more by Saturday. Winds will increase tonight and blow 30-40 mph out of the west-southwest.

Snowpack and Avalanche Discussion

Bridger Range Gallatin Range Madison Range

Lionhead area near West Yellowstone

There is one main avalanche concern in the northern mountains: weak, faceted snow on the ground or near the ground atop an ice crust. This sugary layer is easily seen in snowpits (**photo**) and is avalanching and also propagating in our stability tests (**video**). On Tuesday a skier in the Bridger Range triggered a loose snow avalanche that broke down to this layer and yesterday the Big Sky Ski Patrol used explosives to trigger a 3-4' deep and 1,200' wide hard slab avalanche on the south face of Lone Peak on these facets (**photo**).

The southern mountains have a similar structure of weak, faceted snow as a basal layer. The snowpack is thinner than the other ranges (< 3' deep) and is likely getting weaker in response to the sub-zero temperatures (video). If you get cracking and collapsing (audible whumphs) then stay out of avalanche terrain since these are tell-tale signs of dangerous conditions. For today, triggering avalanches is still possible and the danger is rated MODERATE.

Cooke City

Yesterday, Eric and is partner bundled up, turned the snowmobile hand warmers to "High" and throttled around the Cooke City area. He saw no new avalanche activity, only old crowns, and did not get collapsing or cracking when he shuffled around on his skis, but all is not well. In his 4' deep snowpits (northerly facing) he found two layers of concern: the interface between the old and new snow, and facets sitting on an ice crust 1½ feet off the ground. Both showed instability and are a concern today, but only the deeper one will linger into the weeks ahead. His <u>video</u> shows the situation succinctly. Given the buried instabilities and the possibility of triggering avalanches today, the danger is rated **MODERATE** on all slopes.

Eric will issue the next advisory tomorrow morning at 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

BOZEMAN

15 December, Avalanche Awareness and Beacon Practice, 6-8 p.m. at Beall Park.

HELENA

TONIGHT! 8 December, Avalanche Awareness, 6-7:30 p.m. at The Basecamp.

WEST YELLOWSTONE

15 and 16 December, **Snowmobile Introduction to Avalanches w/ Field Day**, West Yellowstone Holiday Inn Conference Hotel. More info and sign up **HERE**.

COOKE CITY

Every Friday and Saturday, **Weekly rescue training and snowpack update**, Super 8 on Friday 6-7:30 p.m. and field location TBA for Saturday.

BILLINGS

15 December, Snowmobiling In and Identifying Avalanche Terrain, 6-8 p.m., Big Horn Resort.