GNFAC Avalanche Advisory for Mon Nov 28, 2016

Good Morning. This is Doug Chabot with the Gallatin National Forest Avalanche Center's early season avalanche information issued on Monday, November 28 at 7:00 a.m. Today's bulletin is sponsored by **Spark R&D** and **World Boards**. We will update this information tomorrow morning.

Mountain Weather

At 6 a.m. it's snowing in the mountains. So far Big Sky and the Yellowstone Club have 7-10" with 5" outside West Yellowstone and 3" everywhere else. Mountain temperatures are in the low to mid-teens and winds are out of the southwest to northwest at 15-20 mph. Snowfall will continue and winds will increase today and tonight. By the time the storm will ends tomorrow I estimate another 10" will fall around Big Sky and 4" everywhere else.

Snowpack and Avalanche Discussion

Bridger Range Madison Range Gallatin Range

Lionhead area near West Yellowstone

Today's storm will increase the likelihood of triggering avalanches. Last night's snow is low density powder (5%) with .3-.5" of <u>SWE</u> falling so far. More will fall today and winds will continue to load a snowpack of variable depth and strength. At the upper elevations wind-loaded slopes will be easily triggered in the northern Madison Range where the most snow has fallen (10" and counting). On Saturday at lower elevations, ski tourers in Beehive Basin found a thin snow cover of weak, sugary snow capped by a denser slab (<u>photo</u>). Today's snowstorm will hide rocks as well as increase the avalanche potential. Small avalanches on a thin snowpack may not bury and kill a skier, but they can certainly injure and ruin a season.

I toured into the bowl south of Frazier Basin in the northern Bridger Range yesterday and found a mixed bag of conditions: fistfuls of sugary facets on slopes with less than 1 foot of snow and 2 ½ feet of stable snow on wind-loaded slopes (**photo**). Even on these deeper areas, layers of weak snow are present and need to be tested and watched as the snowpack deepens (**video**).

Cooke City

Alex just returned from a couple days in Cooke City where he set up the weather station at <u>Lulu Pass</u> and dug snowpits (video). He found 2 ½ feet of snow on the ground above 9,000 feet and could identify a couple of weak, faceted, sugary layers, but they did not break in his tests. Layers of facets should not be trusted which was illustrated when another skier reported large collapses, a sign of instability. Collapses trump a stability test every time. Cracking in the new, windblown snow and collapses on the facets point to avoiding wind-loaded terrain since triggering avalanches is a real possibility.

We will update this bulletin tomorrow morning and we will begin issuing daily advisories and danger ratings when we get more snow.

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

BOZEMAN

30 Nov. and 1 Dec., **Introduction to Avalanches with Field Course**, 7-9:30 p.m. at MSU Sub Ballroom B: Sign up **HERE**.

6 December, **Avalanche Awareness**, 6-7:30 p.m. at MSU with Backcountry Squatters Ski Club, SUB Procrastinator Theater.

7 December, Avalanche Awareness, 6-7:30 p.m. at REI.

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

HELENA

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 <u>HERE</u>.

COOKE CITY

9 Dec. and 10 Dec., **Weekly rescue training and snowpack update**, Cooke City Chamber of Commerce on Friday and field location TBA on Saturday.