GNFAC Avalanche Forecast for Fri Jan 29, 2016

Good morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Advisory issued on Friday, January 29, at 7:00 AM. Today's advisory is sponsored by **Spark 1** and **Bozeman Ski Guide**. This advisory does not apply to operating ski areas.

Mountain Weather

Last night the mountains received 2-3" of new snow. Winds were westerly at 20-30 mph with gusts up to 50 mph. Temperatures this morning are in the teens to low 20s F. Today, temperatures will reach the high 20s F. Wind will continue to blow 20-30 mph out of the west-southwest with speeds increasing up to 40 mph this evening. Snow showers will begin this afternoon and favor the southern mountains with 6-9" by tomorrow morning, while the northern mountains will get 3-5".

Snowpack and Avalanche Discussion

Bridger Range Madison Range Gallatin Range

Lionhead area near West Yellowstone Cooke City

Throughout our advisory area, two buried weak layers create a poor snowpack structure -- Sugary, depth hoar near the ground, and a layer of facets 1-2 feet below the surface. I found these layers in Beehive Basin on Wednesday (video), Doug found them on Mt. Ellis and in Hyalite this week (video), and Eric saw them at Bacon Rind last Sunday (video). Our stability tests showed it is difficult to initiate a fracture on the depth hoar, and the facets near the surface were not propagating. However, avalanches have failed on these layers in the past week, which proves the snowpack is unstable (photo page). Despite our stable test results, the poor snowpack structure has us sticking to low angle slopes.

Snowfall and strong winds will continue today, which will create wind slabs and add stress to the weak snowpack near ridgelines and on leeward slopes. Over the past week, natural avalanches that failed on weak faceted snow were observed in wind loaded terrain (**photo**, **photo**, **photo**). Wind slabs will be likely to trigger today and could bury or injure a person or initiate a larger avalanche deeper in the snowpack.

A poor snowpack structure, new snow, and wind will make human triggered avalanches likely. The avalanche danger today is **CONSIDERABLE** on wind loaded slopes and **MODERATE** on all other slopes. Cautious route finding and conservative decision making are essential.

Eric will issue the next advisory tomorrow morning by 7:30 a.m. If you have any snowpack or avalanche observations to share, drop us a line at mtavalanche@gmail.com or leave a message at 587-6984.

EVENTS and AVALANCHE EDUCATION

A complete calendar of classes can be found HERE.

TOMORROW!!! (Saturday, January 30th)

West Yellowstone: Ihr Avalanche Awareness, West Yellowstone Holiday Inn, 7-8:30 p.m.

<u>Cooke City:</u> *Companion Rescue Clinic for Snowmobilers*. Information and registration here: https://www.ticketriver.com/event/18078

<u>Lewistown:</u> 9:00 a.m., *Ihr Avalanche Awareness for Snowmobilers*, Lewiston Honda-Polaris. More information can be found <u>HERE</u>.

EVENT at BRIDGER BOWL: February 6, *King and Queen of the Ridge*. A day of hiking and skiing the Ridge as a fundraiser for the Friends of the Avalanche Center. Teams and individuals are welcome! More info here: http://bridgerbowl.com/event/king-and-queen-of-the-ridge