GNFAC Avalanche Advisory for Mon Jan 23, 2017

Good Morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Advisory issued on Monday, January 23rd at 6:30 a.m. Today's advisory is sponsored by **Bridger Bowl** and **Cooke City Motorsports.** This advisory does not apply to operating ski areas.

Mountain Weather

The southern ranges and mountains around Big Sky got 2-3" of new snow, and the mountains around Bozeman picked up a trace. SNOTEL sites in the southern areas have not reported since yesterday afternoon, so the mountains around West Yellowstone and Cooke City might have an additional 1-3". Temperatures this morning are in the teens F. Wind overnight was out of the west to southwest at 5-15 mph with gusts of 20-30 mph. Light snow showers will continue today with temperatures in the low 20s F and wind out of the north to northeast at 5-15 mph. Snow showers through tonight will deliver 1-2" to the northern mountains and 2-4" to the southern mountains.

Snowpack and Avalanche Discussion

Madison Range Southern Gallatin Range Cooke City

Lionhead area near West Yellowstone

In the mountains near Big Sky, West Yellowstone, and Cooke City 4-6" inches of snow over the weekend softened the riding conditions, but is not enough weight to greatly stress buried weak layers. Moderate southwest wind drifted recent snow into wind slabs, which are most likely near ridgelines. These slabs are up to a foot thick and easy to trigger today. Although small, these slabs have high consequences above terrain traps and have the potential to trigger a large avalanche on deeper weak layers.

Two buried persistent weak layers remain a concern. Sugary depth hoar near the ground and a layer of facets buried 2-3 feet below the surface. The last observed avalanche activity on these layers was over a week ago in Beehive Basin (**photo**, **video**). Stability tests have shown mostly stable results where the snowpack is deeper than about 4-5 feet. However, folks are still getting occasional unstable results where the snowpack is shallower. Avalanches on these weak layers are difficult to trigger today, but would be large and destructive. Shallow areas of the snowpack are the most likely place to trigger a large avalanche. Avoid rock outcrops and previously wind loaded slopes that have highly variable slab depth.

Surface hoar that formed last week is now buried by 4-6" of snow. Avalanches on this layer are not yet likely, but should be kept in mind as deeper slabs form above it. The distribution of this layer is uncertain. Dig about a foot down to look for feathery crystals below the new snow (**photo**). Let us know if you find it.

The avalanche danger today is **MODERATE**. Evaluate the snowpack and choose terrain carefully.

Bridger Range Northern Gallatin Range

The mountains around Bozeman received just 1-2" of snow over the last eleven days and the snowpack is mostly stable. Snow conditions range from 2-3 feet of unsupportable, sugary facets to wind packed and breakable sun crusts. Eric experienced these various conditions last week near Saddle Peak in the Bridger Range (video).

The avalanche danger today is <u>LOW</u>. Isolated areas of unstable snow still exist. Evaluate the snowpack and consider the consequences of even small slides before committing to steep slopes.

Doug 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

<u>Month of January</u>: Montana Ale Works has chosen the Friends of the Avalanche Center as January's "Round It Up America" recipient. Every time you round-up your bill the change gets donated to the Friends. Pennies equal dollars!

<u>King and Queen of the Ridge</u>, Saturday, February 4th. A Hike and Ski/Ride-a-Thon fundraising event to support the Friends of the Gallatin National Forest Avalanche Center. Register with Bridger Bowl <u>HERE</u>, make pledges <u>HERE</u>.

Beacon Training Park at Beall: Open and free to the public for avalanche beacon practice seven days a week from 9 a.m. to 8 p.m., southeast corner of Beall Park in Bozeman.

BOZEMAN

Advanced Avalanche Workshop w/Field Course, 7-9:30 p.m. Thursday and Friday, January 26 and 27 (MSU Sub Ballroom C); field day, Saturday 28th. Sign up **HERE**.

COOKE CITY

Weekly rescue training and snowpack update, 6-7:30 p.m., The Antlers Lodge on Friday, field location Saturday TBA.

DILLON

February 4 and 5, Intro to Avalanches with Field Day, More info and sign up **HERE**.