GNFAC Avalanche Forecast for Sun Jan 22, 2017

Good Morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Advisory issued on Sunday, January 22nd at 7:00 a.m. Today's advisory is dedicated to **Andrew Greicar** who was killed in an avalanche outside of Cooke City on this day fourteen years ago. This advisory does not apply to operating ski areas.

Mountain Weather

The mountains near Big Sky and the southern ranges got 1-2" of new snow overnight, and the mountains around Bozeman did not get any new snow. Temperatures are in the teens F this morning. Wind is out of the west to southwest at 10-15 mph with gusts in the 20s. Today will be partly cloudy with temperatures in the 20s F, wind out of the southwest at 15-25 mph, and light snow. Snow showers tonight will deliver 1-2" to the mountains around Bozeman and 2-4" to the southern ranges with more expected tomorrow.

Snowpack and Avalanche Discussion

Madison Range Southern Gallatin Range Cooke City

Lionhead area near West Yellowstone

The snowpack has had minimal stress with 2-3" of snow this weekend as the only snowfall over the past ten days. Buried weak layers have gained strength, but create a structure still capable of producing large avalanches. The last observed avalanche activity was a large natural avalanche in Beehive Basin last weekend (photo, video), which broke on sugary faceted snow near the ground. A weak layer of facets buried 2-3 feet below the snow surface also remain a concern. Stable results in stability tests and a lack of avalanche activity indicate a stronger snowpack. Avalanches are possible to trigger on these weak layers, but are less likely as time passes without heavy snowfall or wind-loading. Doug's video from his most recent trip to Lionhead outlines this situation.

Evaluate the snowpack and choose terrain carefully today. Large avalanches are more likely to be triggered from shallower areas of the snowpack. These areas may be found near the edges of slopes. Previously wind loaded slopes have greater variability in slab depth and could have the perfect recipe to trigger a large avalanche. Expose only one person at a time to steep slopes and watch partners from safe areas. The avalanche danger today is **MODERATE**.

A layer of surface hoar formed last week and is now buried by 2-3" of snow. The distribution of this layer is uncertain, but will be something to look for as new snow and wind form slabs above it over the next couple days. Look for this layer of feathery crystals below the new snow (**photo**).

Bridger Range Northern Gallatin Range

The snowpack in the Bridger Range and northern Gallatin Range is shallow and stable, for now. Variable riding conditions exist due to a mix of wind scoured breakable crust and unsupportable, weak snow (<u>video</u>). The biggest hazards are the variable snow surface and the potential to sink through weak facets and hit rocks and logs. The avalanche danger today is **LOW**.

Low danger does not mean no danger. Isolated areas of unstable snow exist and are most likely where supportable wind slabs rest over sugary facets. Practice safe travel protocol and continue to evaluate the

snowpack before committing to avalanche terrain. Communicate intended routes and objectives with your group and consider the consequences of even a small slide.

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 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>.

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.