GNFAC Avalanche Forecast for Mon Jan 16, 2017

Good Morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Advisory issued on Monday, January 16th at 7:00 a.m. Today's advisory is sponsored by Montana Ale Works and the Gallatin Valley Snowmobile Association. This advisory does not apply to operating ski areas.

Mountain Weather

At 4 a.m. temperatures are in the single digits to teens F. Wind overnight was out of the west to northwest at 10-15 mph with gusts of 30 mph. In the Bridger Range, wind is steady at 20-25 mph, and likely blowing downhill on the east side of the ridge. Today will have clear skies with temperatures in the 20s F and wind out of the west to northwest at 5-15 mph.

Snowpack and Avalanche Discussion

Cooke City Madison Range Southern Gallatin Range

Lionhead area near West Yellowstone

Since the storm four days ago avalanches have become less likely, but remain possible. The mountains near Big Sky, West Yellowstone, and Cooke City have two buried weak layers. A layer of sugary snow near the ground, and a layer of facets that formed near the surface before last week's storm. Large avalanches during the storm and through the weekend broke on facets below the storm snow (**photo**, **photo**, **video**).

An avalanche in Beehive Basin yesterday failed on weak facets below recent snow (**video**), and broke deeper into sugary snow near the ground (**photo**, **photo**). Other signs of instability reported since the storm include: A snowmobile triggered avalanche at Lionhead on Thursday (**photo**); An avalanche triggered on Sheep Mountain near Cooke City over the weekend (**photo**); Collapsing in Cabin Creek; and unstable test results in Beehive, Taylor Fork, and Lionhead (**video**, **photo**).

Stability tests highlight the tricky nature of the current snowpack. Stable results have been found more often than unstable results recently, yet avalanches still occur. I spoke with instructors from two level one avalanche courses over the weekend, one in Cooke City and one in Beehive. Each reported one unstable test result out of about twenty tests. This shows improved stability, but large avalanches are possible with the poor snowpack structure. Signs of instability are scarce. Most slopes are stable, but if you choose incorrect the consequences are fatal. Before riding in steep terrain dig a hole to look for weak layers and discuss a plan with your group (Pitstop article). Avoid steep slopes with a poor snowpack structure. Large avalanches are possible today and avalanche danger is MODERATE.

Bridger Range

Downhill winds were reported in the Bridger Range yesterday and are forecast to continue today. These winds fetch snow from previously loaded upper slopes and form slabs mid-slope below convex rolls and cliffs. Skiing has been 'sweet' in the Bridger Range due to a three-foot deep snowpack of sugary, weak facets. This sugar serves tasty powder skiing now, but will be an unstable overdose when deeper slabs form above it. The avalanche danger today is MODERATE on wind loaded slopes and LOW on all other slopes.

Northern Gallatin Range

The snowpack in the Northern Gallatin Range has been under minimal stress without recent snow and wind-loading. Skiers in Hyalite yesterday reported a deep and stable snowpack, similar to previous observations from that area. Avalanches are unlikely and the avalanche danger today is <u>LOW</u>. Isolated areas of unstable snow still exist, and are most likely where wind slabs formed over a weak snow surface. Small slides have high consequences above cliffs, trees, and confined gullies.

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>.

BOZEMAN

TOMORROW!!, January 17, **Avalanche Center Forecaster's Social** at Montana Ale Works. A small-plate fare and beer tasting fundraiser for the Friends: \$40.00/person; 2 seatings (5:30 p.m. and 7:00 p.m). Get your tickets **HERE**.

Evenings 18-19 January, field 21 or 22 January. **Introduction to Avalanches with Field Course**, 7-9:30 p.m. at MSU Sub Ballroom B. 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.

BIG TIMBER

TOMORROW, January 17, **Avalanche Awareness**, 6-7:30 p.m., Sweet Grass County High School.

WEST YELLOWSTONE

January 21, **Avalanche Awareness**, 6-7:30 p.m., West Yellowstone Holiday Inn.

DILLON

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