GNFAC Avalanche Advisory for Sat Jan 23, 2016

Good morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Advisory issued on Saturday, January 23, at 7:00 AM. Today's advisory is dedicated to Andrew Greicar who was killed in an avalanche outside of Cooke City thirteen years ago, yesterday. This advisory does not apply to operating ski areas.

Mountain Weather

Over the last 24 hours, mountain temperatures reached the mid-30s F and wind has been out of the west-southwest with average speeds above 20 mph and gusts up to 40-50 mph. Temperatures this morning are in the teens to low 20s F and will reach the high 20s to low 30s F today. Wind will remain out of the southwest at 10-15 mph with gusts up to 20 mph. Snowfall will begin this evening and the mountains will receive 2-4" of snow by tomorrow morning. More snow is expected through Sunday with up to 8" in the mountains south of Bozeman and near Big Sky.

Snowpack and Avalanche Discussion

Bridger Range Madison Range Gallatin Range

Lionhead area near West Yellowstone Cooke City

The mountains have not received any new snow in the past 48 hours. However, strong wind yesterday formed wind slabs and added load to the snowpack near ridgelines and on leeward slopes. These will be likely places to trigger an avalanche today.

Snowfall and wind in the past week were the first natural loading tests of our snowpack since widespread avalanches failed on depth hoar in late December. The snowpack proved to be weak and unstable with two buried weak layers – one at the ground and one near the surface. Human triggered avalanches failed on these layers. One avalanche killed a patroller who was working in uncontrolled backcountry terrain near the Yellowstone Club (video, photo, photo). In the Bridger Range, skiers had a close call on Tuesday when they triggered a large avalanche near Frazier Lake (photo, photo), and on Thursday two people were caught and unharmed in a large avalanche in Truman Gulch. Yesterday, a snowmobiler near Buck Ridge triggered an avalanche that failed on depth hoar (photo). Weight from the recent storm has stressed the weak snowpack and made it easier to trigger an avalanche on buried weak layers.

Buried persistent weak layers create a tricky situation. At times and places they are stubborn and convey a sense of stability, but they remain widespread and capable of producing an avalanche. Recent human triggered avalanches are evidence that more avalanches are possible. Don't let outlier data such as tracks on a slope or blue skies lure you into thinking a slope is safe. Today will be warm, skies will be clear, and slopes that harbor untracked snow will be tempting. Conservative decision making and cautious route finding are essential.

Recent snow and wind make human triggered avalanches likely today and large avalanches are possible due to buried weak layers. Today, the avalanche danger is **CONSIDERABLE** on all slopes.

Doug 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.

BEACON PARK

The Friends of the Avalanche Center and Bozeman Parks and Rec installed a Beacon Park at Beall Park. It is a great way to practice searching for single and multiple beacons. It is available 9am-8pm, seven days a week.

EVENTS and AVALANCHE EDUCATION

A complete calendar of classes can be found HERE.

<u>West Yellowstone</u>: Saturday, January 23, and 30, *1hr Avalanche* Awareness, West Yellowstone Holiday Inn, 7-8:30 p.m.

<u>Cooke City:</u> Saturday, January 30, *Companion Rescue Clinic for Snowmobilers*. Information and registration here: https://www.ticketriver.com/event/18078

<u>Lewistown:</u> Saturday, January 30, 9:00 a.m., *1hr Avalanche Awareness for Snowmobilers*, Lewiston Honda-Polaris. More information can be found **HERE**.

Advanced Avalanche Workshop w/ Field Course

January 27, 28, and 30: https://www.ticketriver.com/event/16862

Course content includes: snowpack metamorphism, the mechanics of avalanche failure and fracture, and decision-making. Different topics are covered each evening session. The field session includes snowpack analysis and avalanche rescue scenarios.

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