

## [GNFAC Avalanche Advisory for Fri Jan 22, 2016](#)

Good morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Advisory issued on Friday, January 22, at 7:00 AM. Today's advisory is sponsored by [Montana Ale Works](#), who hosted a successful fundraiser on Tuesday night for the Friends of the avalanche center. Thanks to all who came to support. This advisory does not apply to operating ski areas.

### Mountain Weather

Yesterday was the first day in the past week without measurable snowfall. At 4 a.m. temperatures are near or above 30 F in the northern mountains, and are in the high teens F in the southern mountains. Overnight, wind in the northern ranges was out of the southwest at 10-15 mph with gusts in the 20s. Wind in the southern ranges was out of the west-northwest at 5-10 mph. Today will be warm and windy. Temperatures will reach the high 30s F in the northern mountains and will be in the high 20s F in the southern mountains. Wind will remain out of the southwest and increase this afternoon to 20-30 mph with gusts up to 40 mph. The next round of snow will begin Saturday afternoon.

### Snowpack and Avalanche Discussion

[Bridger Range](#) [Madison Range](#) [Gallatin Range](#)

[Lionhead area near West Yellowstone](#) [Cooke City](#)

Avalanches are all about timing. Some days the danger is low, some days the danger is high. Some seasons the snowpack is strong, some seasons the snowpack is weak. This season the snowpack is weak and unstable. The snowpack throughout our advisory area has a poor structure with two buried weak layers -- Depth hoar at the ground, and facets near the surface ([video](#), [video](#)). Avalanches have been triggered on both of these layers in the past week. A ski patroller was killed in one of these avalanches on Tuesday while working in uncontrolled backcountry terrain near the Yellowstone Club ([video](#), [photo](#), [photo](#)). The same day, skiers in the northern Bridger Range had a close call when they triggered a large avalanche and were luckily not caught ([photo](#), [photo](#)). Yesterday, a skier and snowboarder triggered and were caught in an avalanche in Truman Gulch on the west side of the Bridger Range. This was another close call with a fortunate outcome.

Over a week ago, the snowpack was on vacation and free from stress. During that time, avalanches were less likely and less activity may have conveyed a sense of stability. In the past week over 1.5-2" of snow water equivalence ([SWE](#)) was added to the snowpack and created very unstable conditions. The gradual, as opposed to rapid, addition of weight over the last week is a sign that the snowpack is sensitive to small changes. Loading from snow and wind have put our weak snowpack on edge. There are now more areas across a slope that you could tip the scale and trigger an avalanche. The uncertainty is low -- human triggered avalanches are likely and have high potential to be large. Avalanche terrain should be avoided. Today, avalanche danger is [CONSIDERABLE](#) on all slopes throughout the advisory area. Danger may increase on wind loaded slopes this afternoon with forecasted strong winds.

Since Saturday there have been at least four avalanche fatalities, with two more unconfirmed, in Montana, Utah, Wyoming, Alaska, and Colorado. This season we need to dial it back and reserve objectives that involve avalanche terrain for later. Our condolences go out to the families and friends of the victims.

I 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](mailto: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, everyday.

## **EVENTS and AVALANCHE EDUCATION**

*A complete calendar of classes can be found [HERE](#).*

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

### *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.

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

**Lewistown:** Saturday, January 30, 9:00 a.m., *1hr Avalanche Awareness for Snowmobilers*, Lewiston Honda-Polaris. More information can be found [HERE](#).

**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>