

GNFAC Avalanche Advisory for Tue Jan 19, 2016

Good morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Tuesday, January 19, at 7:00 AM. Today's advisory is sponsored by [Montana Ale Works](#), host of tonight's *Avi Center Beer Social* ([tickets here](#)). This advisory does not apply to operating ski areas.

Mountain Weather

Snowfall yesterday totaled 5-7 inches in the Bridger and northern Gallatin Ranges and 3-5 inches everywhere else. In the last 24 hours winds have been west to southwest at 10-15 mph with gusts of 20 mph. This morning temperatures are in the low teens and will rise into the low 20s under mostly cloudy skies with winds forecasted to remain the same. Light snowfall will begin late tonight and drop 1-2 inches by morning. Scattered snow will continue into Wednesday.

Snowpack and Avalanche Discussion

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

[Lionhead area near West Yellowstone](#)

In the last three days the mountains around Bozeman to West Yellowstone have picked up over a foot of snow measuring 1-1.5" of snow water equivalency ([SWE](#)) with moderate westerly winds. Yesterday's snowfall was denser (14%) than the previous days (10%), which create an "upside-down" or inverted snowpack which is unstable. Eric saw this firsthand yesterday as he was skiing north of Bridger Bowl during the storm and triggered a small pocket in the new snow (20' wide x 1' deep). [He made a video](#) describing the current instabilities. Although filmed in the Bridger Range, his message is universal: new snow, inverted density, a weak layer of near-surface facets, and lingering instability in the depth hoar is on our minds.

On Sunday, a skier was flushed through the narrows of Wolverine Bowl in the Bridger Range when he triggered a powerful sluff in the new snow, and a skier in Beehive Basin triggered a small wind slab that same day. The weight of this new snow is also aiding propagation in the depth hoar in our extended column tests. In the last four days poor test scores in Hyalite, Mt. Ellis, Frazier Lake, and Beehive Basin point to an increased likelihood of triggering an avalanche. Eric said, "Right now I would not ski anything steep... It doesn't matter if it's wind-loaded or not." For today, slopes that are wind-loaded or steeper than 35 degrees have a [CONSIDERABLE](#) avalanche danger. All other slopes are rated [MODERATE](#).

Cooke City

I just got back from two days of investigating the snowpack around Cooke City. Well over two feet of snow has fallen since Thursday with SWE totals of 1.5". Winds have been swirling and loading many upper elevation slopes, but avalanche activity has been minimal. A skier on Sunday triggered a small slide in windblown snow near Lulu Pass ([photo](#)). I dug pits to the ground looking for instability in the depth hoar. I found the depth hoar but not the instability. This layer is hard to trigger now that it is buried under five feet of dense snow ([photo](#)). [I made a video](#) to show how this poor snowpack structure still spooks me. Although this layer is gaining strength, I don't trust it. Thinner areas (windblown or rocky) can be trigger points for large avalanches. [Alex explains this in his video](#) that he made during his days off of touring south Cooke City over the weekend.

For today, given the new snow and wind, the avalanche danger is rated **CONSIDERABLE** on wind-loaded slopes and **MODERATE** on all others.

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 or leave a message at 587-6984.

EVENTS and AVALANCHE EDUCATION

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

TONIGHT in Bozeman: January 19, 5:30-7 p.m. and 7:30-9 p.m., *Avi Center Beer Social at Montana Ale Works*. This event is a fundraiser for the Friends of the Avalanche Center, \$35. Tickets here: <https://www.ticketriver.com/event/18542>

TONIGHT in Dillon: January 19, *Ihr Avalanche Awareness*, UM Western Library, 6:30-8 p.m.

January 23 and 24, *Intro to Avalanches w/ Field Course*, <https://www.ticketriver.com/event/18441>

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

ASMSU Intro to Avalanches w/ Field Course

January 20, 21 and 23 or 24: <https://www.ticketriver.com/event/16861>

The workshops will be held on Wednesday and Thursday evenings, with a field course on either Saturday or Sunday. Different topics will be presented each evening. Topics include: avalanche terrain recognition, the effect weather has on avalanche hazard, the development of the mountain snowpack, decision making skills, and basic search and rescue procedures.

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>