

GNFAC Avalanche Advisory for Mon Jan 25, 2016

Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Monday, January 25, at 7:00 AM. Today's advisory is sponsored [Yellowstone Arctic Yamaha and Yamaha Motor Corp](#) in partnership with the **Friends of the Avalanche Center**. This advisory does not apply to operating ski areas.

CEDAR BASIN AVALANCHE FATALITY ACCIDENT REPORT

The accident report on Tuesday's avalanche fatality is complete and posted [on our website](#). For a quick synopsis you can [watch the video](#) of the site investigation.

Mountain Weather

A moist northwest flow delivered abundant snow to the northern ranges overnight. At 4 a.m. Shower Falls Snotel site in the northern Gallatin Range picked up ten inches of new snow, while the Bridger Range and mountains around Big Sky picked up 5-7 inches. The mountains around West Yellowstone squeezed out 1-2 inches while the mountains around Cooke City remained mostly dry. Currently, snow has tapered off and temperatures range from the single digits to mid-teens F. Winds are blowing 5-20 mph out of the W-NW. Today, a northwest flow will produce a slight chance of snow showers in the northern mountains, although no real accumulation is expected. Skies will clear throughout the day and some sun is expected by this afternoon. Temperatures will warm into the upper teens to mid-20s F and winds will remain light to moderate out of the W-NW.

Snowpack and Avalanche Discussion

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

[Northern Gallatin Range](#)

Over the past 24 hours [Shower Falls](#) Snotel site picked up close to a foot of snow totaling .5 inches of SWE. I wouldn't be surprised if snow totals were higher in upper elevation terrain of the northern Gallatin Range. The Bridger Range and mountains around Big Sky picked up 5-7 inches totaling .2 -.3 inches of SWE.

This isn't an overbearing load for the snowpack to support, but it does provide plenty of ammunition for fresh wind slabs, which will be today's primary avalanche concern. Although winds have not been overly strong, they are blowing hard enough out of the W-NW to transport snow onto leeward slopes. Areas directly below upper elevation ridgelines will be the most loaded, but I wouldn't be surprised to find areas of wind deposited snow on mid-elevation slopes as well.

Fresh wind slabs should be fairly soft in nature due to the low density snow, but they could produce enough volume to carry and potentially burry as skier or rider. Wind slabs also make good triggers for avalanches failing

on deeper layers in the pack. The slide that two skiers triggered on Mt Baldy with a cornice drop is a good example of this problem ([photo](#)).

Today, wind slabs will likely fail under the weight of a skier or rider, which makes the avalanche danger **CONSIDERABLE** on wind loaded slopes. Weak layers buried deeper in the pack make human triggered avalanches possible on non-wind loaded slopes which have **MODERATE** avalanche danger.

Southern Madison Range Southern Gallatin Range

Lionhead area near West Yellowstone Cooke City

The southern mountains did not get favored out of the recent storm, but there are still a few problems to look out for ([video](#)). Facets buried 1-2 feet deep exist on many slopes in the mountains around West Yellowstone, including the southern Madison Range. This layer has produced a few human triggered avalanches over the past week ([photo](#)). The second layer is depth hoar near the ground. This layer is widespread and has been the culprit for a majority of the avalanche activity around our advisory area ([photo](#)).

Yesterday, my partner and I skied at Bacon Rind in the southern Madison Range. The depth hoar layer was weak and produced unstable results in stability tests. In fact, our test scores were nearly identical to what they were ten days ago on the same slope, which indicates this layer has not gained much strength ([video](#)).

The easiest way to remain safe today will be to avoid avalanche terrain. If you do decide to venture onto steeper slopes, make an informed decision by digging and testing what's under your feet. While stability tests are helpful, recent avalanche activity is best indicator the snowpack is unstable. Visit our avalanche [incident page](#) to see an updated list of all the avalanche incidents in our area. Avalanche activity has not been confined to southwest Montana. Over the past eight days there have been nine avalanche fatalities in the western U.S., three of which occurred over the weekend.

While avalanches are becoming harder to trigger in the mountains around West Yellowstone and Cooke City, now is no time to let your guard down. Today, buried weak layers make human triggered avalanches possible and the avalanche danger is rated **MODERATE**. Keep in mind this is a 'scary' **MODERATE**. If you do trigger a slide it has the potential to be large and dangerous.

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 IS OPEN 7 DAYS A WEEK (9 a.m. to 8 p.m) at BEALL PARK, BOZEMAN and WEST YELLOWSTONE.

The Friends of the Avalanche Center and Bozeman Parks and Rec installed a Beacon Park at Beall Park while the USFS Snow Rangers installed one on the main trail to Two Top out of West Yellowstone. It is a great way to practice searching for single and multiple beacons.

EVENTS and AVALANCHE EDUCATION

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

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

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](#).

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>