

[GNFAC Avalanche Advisory for Tue Jan 10, 2017](#)

Good Morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Tuesday, January 10th at 7:30 a.m. Today's advisory is sponsored by [Bridger Bowl](#) and [Montana Ale Works](#). This advisory does not apply to operating ski areas.

AVALANCHE WARNING

The Gallatin National Forest Avalanche Center is continuing a Backcountry Avalanche Warning for the mountains around **Cooke City**. Heavy snowfall in the last 36 hours with strong westerly winds is adding weight to a weak and unstable snowpack. The avalanche danger is rated **HIGH** on all slopes. Natural and human triggered avalanches are likely today. Avalanche terrain and avalanche runout zones should be avoided.

Mountain Weather

Since yesterday morning the northern mountains, including the Big Sky area, picked up 2-4" while the southern mountains received 4+" around West Yellowstone and double that around Cooke City. The snowfall amounts in the south are not reliable. Around Cooke City weather stations are showing 4" but ski guides reported over a foot. West winds continue to blow 20-40 mph with gusts in the 50s. This morning mountain temperatures are 10-18F under cloudy skies. Flurries today and snowfall tonight will drop 3-4" in the north and 4-6" in the south by morning.

Snowpack and Avalanche Discussion

Cooke City

Cooke City has an Avalanche Warning. In the last 48 hours the mountains have gotten 2.5" of [snow water equivalent](#) (SWE), estimated to be over 2' of snowfall. Last week's cold weather formed a weak layer at the surface which is now buried and unstable from the weight of the new snow. Strong winds also formed thick wind drifts adding even more weight. Avalanches will occur naturally and it is possible to trigger slides from low on the slope. Avalanches may also break at the ground where another weak layer of sugary facets is under strain. The avalanche danger is rated **HIGH** and all avalanche terrain and runout zones should be avoided.

Madison Range Southern Gallatin Range Lionhead area near West Yellowstone

The mountains around Big Sky and West Yellowstone got .4-.7" SWE in the last 24 hours totaling 1.5-2" of SWE since Sunday morning. Strong winds at all elevations created wind slabs that will be easily triggered. This new snow fell onto a weak surface of faceted snow that formed during last week's subzero cold snap. Weak, sugary snow at the ground is also not trusted since it is still crumbly to the touch and will be unstable from the weight of the new snow. We found this weakness in Lionhead on Sunday ([video](#)) and around Buck Ridge on Friday ([video](#)). Yesterday, a snowmobile guide reported collapsing in Cabin Creek of the southern Madison Range, a sign of instability. New snow, strong winds and buried weak layers point to a **CONSIDERABLE** avalanche danger on all slopes today. *Human triggered avalanches are likely!*

Bridger Range Northern Gallatin Range

The Bridger Range and northern Gallatin Range have gotten 4-6" since Sunday along with strong west winds. The Bridger Bowl Ski Patrol did not easily trigger yesterday's wind drifts, but I would still give these zones a

wide berth. Weak, faceted snow at the ground is found on most slopes and triggering an avalanche on this layer is possible. Eric outlines this concern in his December 30th[video](#) which is still true today. It's always a good idea to dig and test this layer at the ground before playing on a steep slope. If you find fistfuls of sugary facets, I'd stick to shallow angled slopes. For today, the avalanche danger is rated **MODERATE** on all slopes since human triggered avalanches are possible.

Eric 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

Month of January: 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!

King and Queen of the Ridge: A Hike and Ski/Ride-a-Thon fundraising event to support the Friends of the Gallatin National Forest Avalanche Center. Sign up [HERE](#), make pledges [HERE](#).

BOZEMAN

TONIGHT! January 10, **Women's Avalanche Awareness and Beacon Practice**, 6-8 p.m., Beall Park.

TOMORROW! Wednesday, January 11, **Avalanche Conditions and Awareness for Snowmobilers**, 6:30-7:30 p.m., Gallatin Valley Snowmobile Association groomer shed at 4-corners.

Friday and Saturday, January 13 and 14, **Companion Rescue Clinic**, REI Friday 6 p.m., field Saturday TBA. Register here: <https://events.ticketprinting.com/event/21313>.

Tuesday, 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](#).

COOKE CITY

Weekly rescue training and snowpack update, 6-7:30 p.m., The Antlers Lodge on Friday, field location Saturday TBA.

DILLON

TONIGHT! Tuesday, January 10, **Avalanche Awareness**, 6-7:30 p.m., UM-Western Library.

BIG TIMBER

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