

[GNFAC Avalanche Advisory for Mon Jan 9, 2017](#)

Good Morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Advisory issued on Monday, January 9th at 7:00 a.m. Today's advisory is sponsored by [World Boards](#) and the [Pinhead Classic](#). This advisory does not apply to operating ski areas.

AVALANCHE WARNING

ISSUED ON JANUARY 9 2017 at 6 a.m.

The Gallatin National Forest Avalanche Center is issuing a Backcountry Avalanche Warning for the mountains around **Cooke City**. Heavy, wet snowfall overnight 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.

This warning will expire or be updated by 6:00 a.m. on January 10th, 2017.

Mountain Weather

Since yesterday morning the mountains received 2" of new snow near Bozeman, 4-7" near Big Sky and West Yellowstone, and 12" near Cooke City. At 4 a.m. temperatures are high 20s to low 30s F. It was cold enough that rain overnight was unlikely, but the new snow is heavy. Wind overnight was out of the west to southwest at 25-40 mph with gusts of 50-60 mph. Today, temperatures will reach the low 30s F and cool to the 20s F this evening. Wind will be westerly at 30-40 mph. By morning the mountains will get 2-4" of snow near Bozeman and Big Sky, 5-7" near West Yellowstone, and 8-10" near Cooke City.

Snowpack and Avalanche Discussion

Cooke City

The mountains near Cooke City got 1.4" of [snow water equivalent](#) (SWE) overnight, in addition to .4" of SWE the night before. This heavy snow fell on a faceted, weak snow surface, and strong winds formed deep drifts of snow over this weak layer. Avalanches breaking below the new snow and fresh wind slabs are likely and will run naturally today. Weak facets near the ground are also a concern and large avalanches on this layer are possible ([video](#)). The avalanche danger is [HIGH](#). Avoid all avalanche terrain and runout zones.

Madison Range Southern Gallatin Range

Lionhead area near West Yellowstone

The mountains near Big Sky and West Yellowstone got over 1" of SWE in the last 48 hours. Heavy snowfall and strong wind last night added a thicker slab and more weight over weak snow near the surface. Wind slabs and avalanches breaking below the new snow will be easy to trigger today, and smaller slides could trigger a larger avalanche near the ground. Doug and I were at Lionhead yesterday and found sugary, weak snow near the ground was gaining strength ([video](#)). However, this layer is weaker in some areas and not to be trusted. I was at Buck Ridge on Friday and found sugary weak snow near the ground, and near the surface ([video](#)). Yesterday, Big Sky ski patrol triggered wind slabs 6-12" thick. Wind loaded slopes are the most likely place to trigger an avalanche today, and a wind slab or avalanche in new snow could trigger a larger avalanche near the ground.

The avalanche danger is CONSIDERABLE.

Bridger Range Northern Gallatin Range

Snowfall totals are lower in the mountains near Bozeman, but fresh wind slabs are possible and weak layers near the base of the snowpack make large avalanches possible (video). Wind slabs formed over weak snow near the surface and are easy to trigger. Yesterday, ice climbers in Hyalite experienced collapsing and “whumphing” of slabs in a steep gully, and they retreated to climb in a less exposed area. Small slides have high consequences above cliffs, trees, or confined gullies, and could trigger a larger slide on weak snow near the ground. Avoid terrain traps and dig a hole to look for weak layers before committing to steep slopes. The avalanche danger today is MODERATE.

Doug 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!

BOZEMAN

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

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

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.

WEST YELLOWSTONE

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