

# **GNFAC Avalanche Advisory for Sun Jan 1, 2017**

Good Morning and happy New Year. This is Alex Marienthal with the Gallatin National Forest Avalanche Advisory issued on Sunday, January 1<sup>st</sup> at 7:00 a.m. Today's advisory is sponsored by [Cooke City Super 8/Bearclaw Bob's](#) and [Montana Ale Works](#). This advisory does not apply to operating ski areas.

## Mountain Weather

At the start of the New Year, skies are clear with temperatures in the single digits to low teens F. The mountains have not received any new snow over the past 24 hours. Wind overnight was out of the W-SW at 10-20 mph with gusts of 30-40 mph. Today, temperatures will reach the teens F and drop below zero F tonight. Wind will be out the SW at 15-25 mph, and snow showers this afternoon will deliver 2-4" of low density snow by tomorrow morning.

## Snowpack and Avalanche Discussion

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

### Lionhead area near West Yellowstone

Throughout the advisory area there are layers of weak faceted snow near the ground. These layers sit above thick ice crusts at the base of the snowpack on some slopes, and sit directly on the ground on other slopes. Either way, these sugary weak layers have the potential to cause an avalanche. I was in Cooke City the past three days and saw large natural avalanches on heavily wind loaded, east to north facing slopes ([photo](#), [photo](#), [photo](#)). These avalanches broke deep in the snowpack 4-5 days ago during snow and wind-loading. Without more recent heavy snowfall and wind-loading avalanches on these weak layers will be difficult to trigger, but will be large and destructive if they are triggered ([photo](#)).

Eric and Doug found weak faceted snow at the bottom of the snowpack near Beehive Basin ([video](#)), Hebgen, Taylor Fork ([video](#)), and on the Football Field near Saddle Peak ([video](#)). Many slopes in these areas lack a thick, cohesive slab above this weak snow to create an unstable structure. However, there are still slopes that have the perfect recipe to trigger a large avalanche. Wind loaded slopes are the most likely places to trigger an avalanche due to thicker slabs and more weight over weak facets near the ground.

Recent moderate winds have drifted low density snow into small wind slabs that will be possible to trigger today. These small slides can be deadly in high consequence terrain or could trigger a larger avalanche deeper in the snowpack. Use cautious route finding to avoid or minimize time on steep wind loaded slopes ([photo](#)), and carefully assess the snowpack if you plan to travel on slopes steeper than 35 degrees. The avalanche danger today is [MODERATE](#).

Have a safe and happy 2017!

I 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](mailto: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

Wednesday, January 4, **Avalanche Awareness**, 6-7:30 p.m. @ REI

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

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](#).

#### GREAT FALLS

Friday, January 6, **Avalanche Awareness**, 6-7:30 p.m., Hi-Line Climbing Center

#### WEST YELLOWSTONE

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

#### DILLON

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

#### COOKE CITY

**Weekly rescue training and snowpack update**, 6-7:30 p.m., Soda Butte Lodge on Friday, Field location Saturday TBA.