GNFAC Avalanche Forecast for Wed Jan 4, 2017

Good Morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Wednesday, January 4th at 6:45 a.m. Today's advisory is sponsored by <u>Cooke City Motorsports</u> and <u>Wisetail</u>. This advisory does not apply to operating ski areas.

Mountain Weather

Under partly cloudy skies mountain temperatures are -5F and ridgetop winds are 10-15 mph out of the west. Like yesterday, daytime temperatures will reach the positive single digits as winds remain light. Tonight will be the coldest of the week with -15F expected. By Friday temperatures will moderate to the teens and building high-pressure will push our next bout of snow to Sunday evening. We just got hit with a one-two sucker punch of cold weather and no snow.

Snowpack and Avalanche Discussion

Bridger Range Madison Range Gallatin Range

Lionhead area near West Yellowstone Cooke City

In the last 48 hours the likelihood of triggering an avalanche has decreased. Our last substantial snowfall was on Friday and winds have calmed since Sunday. In the absence of finding fresh avalanches or collapsing or cracking as we travel, we lean on snowpits and tests to gather stability data. Stability tests have not been breaking on many slopes. Although this does not directly point to safe conditions for a specific slope (tests prove instability, not stability), it is evidence that the weak layer of sugary depth hoar at the ground is not hair-trigger on a large scale. Red flags of instability are absent yet the poor snow structure cannot be ignored. Fist hardness snow at the ground (low density) supporting meaty, 1-finger slabs does not inspire confidence. Just peek at our **snowpits** to see what I mean (on the **graph**, think of the layers as teetering building blocks).

This week's frigid, subzero temperatures will weaken the basal layer even more. This eroding strength is like watering down an already weak cup of coffee; no good things will come of it.

Without new snow or wind-loading, slopes are trending towards stability. Although the likelihood of triggering an avalanche has lowered, the deadly consequences of an avalanche breaking at the ground has not. It's still possible to trigger steep slopes, especially from thinner areas. I discovered this in Cooke City on Sunday (video) when I found my stability tests propagating fractures that could easily extend under nearby wind slabs. For today the avalanche danger is rated MODERATE on all slopes steeper than 35 degrees. Shallower angled slopes have a LOW danger.

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

<u>Month of January</u>: 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

Tonight! 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.

COOKE CITY

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

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