

## **GNFAC Avalanche Advisory for Wed Dec 14, 2016**

Good Morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Wednesday, December 14<sup>th</sup> at 6:45 a.m. Today's advisory is sponsored by [Katabatic Brewery](#) and [Edward Jones](#). This advisory does not apply to operating ski areas.

### Mountain Weather

There's no new snow to report this morning. Winds are out of the west at 15-20 mph with gusts in the 30s and temperatures near 0F. Clouds will thicken today as a westerly flow of moist Pacific air brings snow tonight through tomorrow. By morning the mountains will have 5-7" with the storm continuing through Thursday. Today, mountain temperatures will rise to near 10F as winds continue out of the west at 20 mph.

### Snowpack and Avalanche Discussion

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

[Lionhead area near West Yellowstone](#) [Cooke City](#)

Today's avalanche concern revolves around the poor snowpack structure we are seeing throughout our advisory area. Sugary feeling facets, either sitting on the dirt or on an ice crust near the ground, are strong enough to hold just the load it has---no more. Natural avalanches are unlikely today, but the added weight of a skier or snowmobiler or the [impact of a cornice](#) (which are easy to break) could trigger a slope. The amount of snow on top of these facets...the slab...varies from 2' in the southern Gallatin and southern Madison Ranges and Lionhead area, to 4-5' in Cooke City and 3-4' elsewhere. The past 48 hours without snowfall and minimal wind-loading has given the mountains a reprieve, but the weak layer near the ground will be a problem in the coming days with the new snow.

Part of determining snow stability is digging snowpits and looking at the structure and strength of the layers, but it's also about being aware of what is happening around us. We have a lot of bulls-eye information pointing to weak and unstable snow. A snowmobiler was buried on Saturday at Buck Ridge ([photo](#)), a skier died in an avalanche outside Cooke City on Sunday ([video](#)), a large natural avalanche broke on the north face of Mt. Blackmore over the weekend ([photo](#)), avalanches at the ski areas are in zones that are representative of the backcountry, collapsing and cracking in the northern Bridger Range and also around Cooke City and lastly, thin snow cover with a poor structure in the southern Madison Range. That's a lot of information that all point to a cautious approach for backcountry travel.

My advice today is the same as yesterday: before you enter avalanche terrain, put your shovel in the snow to see if the slab is undermined by these weak facets. If so, stay away from steep slopes. To see what this layer looks like, check out [last week's videos](#) and [photos](#) on our website. For today, the avalanche danger is [CONSIDERABLE](#) on any slope steeper than 35 degrees and [MODERATE](#) on less steep slopes.

I will issue the next advisory tomorrow morning at 7:30 a.m.

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**December 11, 2016 Avalanche Fatality:**

A skier was killed in an avalanche on Henderson Mountain outside Cooke City on Sunday, December 11. The skier was in a party of 5 and his descent was the 7<sup>th</sup> track on the slope when it avalanched. He was carried into the trees and buried under 5' of snow. Another person was buried to his waist, uninjured, as he stood in the runout zone. The victim was found with avalanche transceivers and dug up in 15-20 minutes. CPR was initiated, but unsuccessful as trauma was a factor in his death. The slope was only 250 vertical feet, but steep, averaging 40 degrees. The crown was 3' deep and the path was 150' wide. The avalanche broke on a layer of weak, sugary facets sitting on an ice crust 1' above the ground.

We will issue a full report later in the week.

Here is a [video](#) and [7 photos](#) from our investigation.

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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.

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### Upcoming Events and Education

#### **BOZEMAN**

15 December, **Avalanche Awareness and Beacon Practice**, 6-8 p.m. at Beall Park.

#### **WEST YELLOWSTONE**

15 and 16 December, **Snowmobile Introduction to Avalanches w/ Field Day**, West Yellowstone Holiday Inn Conference Hotel. More info and sign up [HERE](#).

#### **COOKE CITY**

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

#### **BILLINGS**

15 December, **Snowmobiling In and Identifying Avalanche Terrain**, 6-8 p.m., Big Horn Resort.