

GNFAC Avalanche Advisory for Tue Nov 29, 2016

Good Morning. This is Doug Chabot with the Gallatin National Forest Avalanche Center's early season avalanche information issued on Tuesday, November 29 at 7:00 a.m. Today's bulletin is sponsored by [Bridger Bowl](#) and [Montana Ale Works](#). We will update this information tomorrow morning.

Mountain Weather

In the last 24 hours Hyalite and Big Sky picked up 5-6" of new snow with 3-4" falling in other areas. At 5 a.m. skies are cloudy and mountain temperatures are in the single digits to low teens. Ridgetop winds are blowing N-NW at 15-20 mph and gusting into the 40s around Cooke City. Snow showers this morning will drop another inch with temperatures climbing toward 20F and winds remaining NW at 20-30 mph.

Snowpack and Avalanche Discussion

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

Lionhead area near West Yellowstone

Storm totals in the mountains are 10-15" (.7-9" [SWE](#)) from the Big Sky area to the Bridger Range and 3-6" (.3-4" SWE) in the southern mountains. Winds are mostly out of the west to northwest at 20+ mph – strong enough to blow snow. On many slopes weak layers of faceted crystals underlie the wind slabs, which the Big Sky Ski Patrol was able to trigger yesterday. I found a variety of snowpack depths and layering in the northern Bridger Range on Sunday ([video](#)): new snow on rocks, new snow on facets on rocks, and a mixture of wind slabs and facets. That mish-mash is standard early-season fare and can be found in most mountain ranges.

New snow and wind are cornerstones of avalanche activity. Avoiding wind-loaded slopes would be wise. Weak layers of facets capped by denser slabs will be especially unstable and might even collapse or crack under a skier's weight, a sign of dangerous avalanche conditions.

Cooke City

Alex was in Cooke City over the weekend and found wind-loading, thinner snow at lower elevations and weak layers of facets sandwiched in between denser slabs ([video](#)). What separates Cooke City from the rest of the advisory area is a deeper snowpack (30+") and more widespread wind-loading. Northeast of Cooke City near Monument Peak (out of our forecast area but likely a similar snowpack structure), skiers experienced widespread cracking and collapsing as they toured. Weak, angular mid-pack facets are responsible for this instability ([snowpit profile](#)) which is found throughout the Cooke City area. This concerns me. Perhaps this layer will strengthen and handle the next large snowfall, but perhaps not. In the meantime, avoid wind-loaded slopes and heed the warning of "whumphs" and cracking.

We will update this bulletin tomorrow morning and we will begin issuing daily advisories and danger ratings when we get more snow.

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

BOZEMAN

TOMORROW! 30 Nov. and 1 Dec., **Introduction to Avalanches with Field Course**, 7-9:30 p.m. at MSU Sub Ballroom B. Sign up [HERE](#).

6 December, **Avalanche Awareness**, 6-7:30 p.m. at MSU with Backcountry Squatters Ski Club, SUB Procrastinator Theater.

7 December, **Avalanche Awareness**, 6-7:30 p.m. at REI.

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

BUTTE

1 December, **Snowmobiling In and Identifying Avalanche Terrain**, 6-7pm, Redline Sports

HELENA

8 December, **Avalanche Awareness**, 6-7:30 p.m. at The Basecamp.

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

2, 3 Dec. and 9, 10 Dec., **Weekly rescue training and snowpack update**, Cooke City Chamber of Commerce on Friday and field location TBA on Saturday.

BILLINGS

15 December, **Snowmobiling In and Identifying Avalanche Terrain**, 6-8pm Location TBA