

## [GNFAC Avalanche Advisory for Sat Nov 4, 2017](#)

Good morning. This is Eric Knoff with early season weather and avalanche information for the Gallatin National Forest Avalanche Center on Saturday, November 4<sup>th</sup> at 7:30 a.m. This bulletin is sponsored by [The Friends of the Avalanche Center](#) and [Mystery Ranch](#). We will update early season information as conditions warrant.

### Mountain Weather

A strong winter storm has delivered heavy snow to southwest Montana. Since yesterday morning the Bridger Range has received 8-10" of new snow totaling roughly 1" of SWE. The northern Gallatin and northern Madison Ranges picked up 5-8" of new snow totaling .5" of SWE, while the mountains around West Yellowstone and Cooke City received 6-8" of dense snow totaling 1 to 1.4" of SWE. This morning it's still snowing lightly and temperatures range from the upper teens to mid-20s F. Winds are blowing 10-20 mph out of the W-SW with gusts around Big Sky breaking 30 mph. Today, light snow will continue with an additional 1-3" possible. Highs will warm into the 20s to low 30s F and winds will continue to blow 10-20 mph out of the W-SW. Snow tapers off this afternoon and no major accumulation is expected tonight into tomorrow morning.

### Snowpack and Avalanche Discussion



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

The equation is fairly simple today – lots of new snow combined with moderate to strong winds out of the west-southwest will significantly increase the avalanche hazard. Wind loaded slopes will be the most prone to producing natural and human triggered slides, but non-wind loaded slopes also pose a threat. On Thursday, skiers on Mt Blackmore in the northern Gallatin Range observed natural avalanches in steep, rocky terrain. These slides appeared to be the result of heavy wind loading ([photo](#), [photo](#)). Today I expect both natural and human triggered avalanches to occur on similar slopes.

Despite heavy snow over the past few days, snow coverage and structure remains highly variable. On sun exposed slopes and lower elevation terrain, 1-2 feet of new snow is sitting on mostly bare ground. In these areas coverage is thin and the likelihood of triggering a larger slab avalanche is less likely. In higher elevation terrain, new snow is sitting over a variety of old snow surfaces. On some slopes, mainly those facing the north half of the compass, the new snow is poorly bonded to the old snow surface and has produced unstable results in stability tests ([photo](#), [photo](#), [video](#)). On other aspects, the new snow is well bonded to the old snow surface and stability is better.

Yesterday, Alex and his partner toured up Bridger Bowl and found relatively good stability near the top of the Bridger Lift. That story will likely be different today with another 8-10 inches of new snow overnight. **The bottom is** – all the necessary ingredients for avalanches exist in the mountains. Take the necessary time to assess each slope carefully before hiking up or skiing down and pay attention to the terrain above and below you. It will likely be busy in the backcountry, especially around Bridger Bowl, so use good protocol when traveling around other people.

If you get out and have any avalanche or snowpack observations to share, drop a line via our website, email ([mtavalanche@gmail.com](mailto:mtavalanche@gmail.com)), phone (406-587-6984), or Instagram ([#GNFACobs](#)).

## New Avalanche Education Video

Check it out! The Friends of the Avalanche Center present the first of 4 short films promoting avalanche education. Ben Goertzen explains why it's important to get avalanche education. [VIDEO](#)

## Upcoming Avalanche Education and Events

### [Events and Education Calendar](#)

#### Billings

7 November, **Avalanche Awareness**, 6-7:30 p.m. at Basecamp, Billings

#### BUTTE

17 November, **Avalanche Awareness**, 6-7:30 p.m., Butte, MT

#### HELENA

7 November, **Avalanche Awareness**, 6-7:30 p.m. at Carroll College, Helena

18 November, **Avalanche Awareness and Beacon Practice for Snowmobiles**, 9 a.m. at Montana Boat Center, Helena

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

#### BOZEMAN

1 November, **Avalanche Awareness**, 6-7:30 p.m. at REI Bozeman

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

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

Nov. 29, 30 and Dec. 2, 3 or 9, **Introduction to Avalanches w/ Field Day**, [Info and Register Here](#)

Jan. 12 and 13, **Companion Rescue Clinic**, [Info and Register](#)

Jan. 17, 18 and 20 or 21, **Introduction to Avalanches w/ Field Day**, [Info and Register Here](#)

Jan. 24, 25 and 27, **Advanced Avalanche Workshop w. Field Day**, [Info and Register Here](#)

Feb. 9 and 10, **Companion Rescue Clinic**, [Info and Register](#)

#### COOKE CITY

24 and 25 November, **Current Conditions and Avalanche Rescue**, 6:30-7:30 p.m. Friday and anytime between 10-2 on Saturday.