

## **GNFAC Avalanche Forecast for Mon Nov 22, 2021**

Good morning. This is Doug Chabot with pre-season avalanche, weather and event information for the Gallatin National Forest Avalanche Center on Monday, November 22nd. This information is sponsored by [Grizzly Outfitters](#) and [Blitz Motorsports and Yamaha](#). We will update this bulletin on Friday, November 26, unless conditions change before that.

### Mountain Weather

By Saturday morning 10" of snow fell in Hyalite with 4-7" everywhere else. It's been clear since then, but windy at the ridgetops, especially around Bozeman. Yesterday, gusts approached 50 mph from the west and blew 10-20 mph over the weekend. Temperatures were mostly below freezing during the day and teens at night.

This week will be mostly dry other than a chance of 1-2" of snow falling Tuesday night. Winds will remain gusty out of the west through the early week. Mountain temperature will reach into the 40s today and cool the rest of the week with highs near freezing and lows in the teens.

### Snowpack and Avalanche Discussion



**Bridger Range   Gallatin Range   Madison Range   Lionhead Range   Cooke City**

New snow that fell by Saturday morning was welcome, but mainly cosmetic. It was not enough to improve the skiing or snowmobiling, but it did cover up the rocks making them easier to hit. West wind was strong at the ridgetops and drifted snow. These wind slabs may avalanche and bury you, but will most likely bounce you over rocks and end your ski season. [A picture](#) of an avalanche powder cloud near Livingston (outside the forecast area) is proof of the lurking danger.

The winter is young and we have limited data which means we need to be extra cautious. [SNOTEL sites](#) are measuring only 10 to 20 inches of snow. At elevations lower than 7,500 feet dirt was seen before the storm, while above this elevation we have a layered snowpack of crusts, a dense icy mass at the ground and weak, sugary snow in between. This week's weather is favorable to grow large-grained sugary facets, the bane of stability. I'm an optimist at heart, but not with this snowpack. I anticipate it will continue to weaken and then avalanche when snow accumulates.

So what should someone hungry to get out and make turns do? Avoiding wind-loaded slopes is the first step. The second step is to not trust the snowpack. Trust takes time. Alex and his partner were faced with this on Friday when they ski toured south of Cooke City ([video](#)). They dug [3 snowpits](#), found weak snow that broke in their tests and were very careful to avoid avalanche terrain. As a general rule we go into avalanche terrain, but not right now. If the snowpack is deep enough to ski, then it's deep enough to have layers of ever weakening snow. Lacking a history of pit data and observations, Alex was rightfully concerned, and you should be too.

Public Safety Message 101: Treat your outing as you would any mid-winter day. Carry a beacon with fresh batteries, a shovel and probe. A helmet is a good idea, especially with rocks lurking, and if you carry an airbag mid-winter, you should carry it now too.

We will issue the next update on Friday morning. We are preparing for winter, teaching avalanche classes, and setting up weather stations. If you have avalanche, snowpack or weather observations to share please submit them via our [website](#), email ([mtavalanche@gmail.com](mailto:mtavalanche@gmail.com)), phone (406-587-6984), or Instagram (#gnfacobs).

## **Upcoming Education Opportunities:**

Get your avalanche brain ready for the season at one of the many classes listed on our [education calendar](#), and list of upcoming events below. Don't delay preparing and inspecting your avalanche gear. Get some tips from [Dave Zinn in this Pre-Season gear check video](#).

**November 18**, 7-8 pm, Online Free 1 hr Avalanche Awareness in partnership with The Yellowstone Club Community Foundation. [Link to Join Here](#).

**December 1**, 6-8 pm, Avalanche Awareness and Beacons at Beall Park. More info on our [education calendar](#).

Our popular [Avalanche Fundamentals with Field Course](#) is perfect as a refresher or an introduction to avalanches. We are introducing an exciting new format this year with the four lectures pre-recorded to watch at your convenience, a live question and answer session, and a choice of a snowmobile or ski/ board based field day occurring the following three weekends.

Our education calendar is full of awareness lectures and field courses: [Events and Education Calendar](#).

## **Friends of GNFAC Powder Blast Fund-raiser**

The Friends of the Avalanche Center are hosting the [Virtual Powder Blast](#) fundraiser. With only \$4,000 left to go, help us reach the \$65,000 goal. Your donations support *free and low-cost avalanche education, beacon checkers at trailheads, beacon parks, weather stations, and GNFAC programs!*