

# [GNFAC Avalanche Forecast for Thu Dec 31, 2020](#)

Good Morning. This is Doug Chabot with the Gallatin National Forest Avalanche Forecast on New Year's Eve, December 31st at 7:15 a.m. This forecast is sponsored by [Montana Backcountry Alliance](#) and [Upper Yellowstone Snowmobile Club](#). This forecast does not apply to operating ski areas.

## Mountain Weather

Hallelujah. Last night it finally snowed. At 6 a.m. the Bridger Range has 5", the mountains from Bozeman to West Yellowstone have 2-3" and Cooke City got 1-2". Winds are west to southwest averaging 15-20 mph and gusting to 35 mph. Skies are cloudy and temperatures are in the mid-teens. Scattered snowfall this morning will drop another 1-2" before skies clear. Ridgetop winds will continue to blow west to southwest at 20-35 mph and temperatures will rise into the low 20s.

## Snowpack and Avalanche Discussion



### Bridger Range

It is snowing hard at Bridger Bowl as I write this at 6:30 a.m. Already 5" has fallen with a [snow water equivalent](#) of .6". The snow will stop this morning, but the winds will not. The Bridger Range has very weak snow which will avalanche naturally today. Stay clear of avalanche terrain. Expect to get whumpfs and cracks on the flats which could trigger avalanches on connected slopes. This is not a nuanced danger. For today the avalanche danger is rated [HIGH](#) on all wind-loaded slopes and [CONSIDERABLE](#) on all others. Triggering avalanches is likely and I urge folks to be conservative in their travels.



### Gallatin Range Madison Range Lionhead Range Island Park

The snowpack south of Bozeman to Big Sky and West Yellowstone is weak. We have seen time and time again how just a little snow is enough to create unstable conditions. Two to 4" of snow is not much weight in a normal season on an average snowpack, and this year is neither. The foundation of our snowpack consists of weak, sugary snow that crumbles away. Winds are blowing this snow into drifts that will crack and likely avalanche. Expect to find these areas near ridgetops.

Collapses, or audible whumpfs, are an avalanche on flat terrain. It is when your weight fractured a weak layer that propagated some distance. Besides avalanches themselves, whumpfs are the next best sign that slopes are unstable. After a fresh load of snow I expect the snowpack will be "talking" to us, and we should listen to her warning.

Today, weak snow at the ground will be under stress on wind-loaded slopes, just as Ian and I saw on Buck Ridge ([details](#)) and Dave and I found at Lionhead ([video](#), [snowpit](#)). For today, the avalanche danger is rated [CONSIDERABLE](#) on wind-loaded slopes since avalanches are likely and the instability is widespread. All other slopes have a [MODERATE](#) danger.



Cooke City has a 5 foot deep snowpack that does not have widespread weak layers, however, not every single slope is stable. Yesterday morning a snowmobiler triggered an avalanche on Crown Butte that broke 1-2 feet deep and 150 feet wide. No one was caught. Dave and Ian took [pictures](#) and made a [video](#) at the crown (more [details](#)). This avalanche was in the midst of a sea of snowmobile tracks on big slopes; an isolated, yet serious event. Fortunately, this slide is in full view on the way to Daisy Pass and both riders and skiers can recalibrate their plans since the potential of triggering avalanches is not obvious when we are surrounded by wall-to-wall tracks. These are times when we need to adhere to our basic safety protocols of traveling with a partner, only exposing one person at a time on slope and carrying rescue gear. In other words, always be prepared for the worst, especially when avalanches are unlikely. For today the avalanche danger is rated [LOW](#) on all slopes.

## Upcoming Avalanche Education and Events

See our [education calendar](#) for an up to date list of all local classes. Here are a few select upcoming events and opportunities to check out:

**Every Saturday in Cooke City**, FREE snowpack update and rescue practice at the Round Lake Warming Hut between 10 a.m. and 3 p.m. [Poster with More Info.](#)

**Tuesday, January 5**, 6-7 p.m. The Friends of the Avalanche Center will offer a [FREE 1-hr Avalanche Awareness Talk](#) in partnership with The Basecamp and Alpine Orthopedics and Sports Medicine. The talk will be a live, ONLINE event. Join us [HERE](#):

<https://us02web.zoom.us/j/86838750943?pwd=TU8wczdxaGZyQ2tRNmtRZWlYcHBpQT09>

**Monday, January 11**, 6-7 p.m. The Friends of the Avalanche Center will offer a [FREE 1-hr Avalanche Awareness Talk](#) in partnership with Uphill Pursuits. The talk will be given via a live ZOOM session. Please click the link below to join the webinar:

<https://us02web.zoom.us/j/81605082929?pwd=ZDZEN0U3ditXUjNtMFh3c2lWQ1hZdz09>

**Tuesday, January 19**, 6-7 p.m. The Friends of the Avalanche Center will offer a [FREE 1-hr Avalanche Awareness Talk](#) in partnership with the University of Montana Western School of Outreach. The talk will be a live, ONLINE event. Join us [HERE](#):

<https://us02web.zoom.us/j/82995072428?pwd=YzNvL2RtdWNWZU1sNFYvRlFERnRFZz09>

**January 20 & 21** (plus field sessions the following weekends), **Avalanche Fundamentals with Field Course**. There are separate field sessions tailored for both skiers and splitboarders (Bridger Bowl) and snowmobilers (Buck Ridge). Register [here](#).