

GNFAC Avalanche Forecast for Tue Dec 21, 2021

Good morning. This is Dave Zinn with the Gallatin National Forest Avalanche Forecast on Tuesday, December 21st at 7:00 a.m. Welcome to winter! This information is sponsored by [**Suzy Hahn: Montana Mountain Real Estate Cooke City**](#), [**Chad Bunting-Financial Advisor-Edward Jones**](#) and [**BWAGs**](#). This forecast does not apply to operating ski areas.

Bridger Bowl is closed to uphill travel and opens to lift-served skiing today.

Mountain Weather

Yesterday, the mountains around Cooke City received 6-8" of new snow with 2" in the Bridger, Madison, and Southern Gallatin Ranges while the Northern Gallatin Range and Lionhead area remained dry. Temperatures this morning are in the 20s F and the wind is 25-35 mph from the west to northwest. Temperatures today will be in the mid 20s to low 30s F with 15-25 mph winds from the west to southwest. Cooke City will get a trace of new snow with nothing throughout the remainder of the advisory area.

Snowpack and Avalanche Discussion



Cooke City

Since Sunday, Cooke City received 13" of snow equal to 1.2" of [snow water equivalent](#) (SWE) with reports of double that in some areas. Winds gusting 45 mph are creating thick slabs sensitive to human triggers. Yesterday, skiers south of town saw multiple cracks shoot 30' in front of their skis and increasingly stiff slabs throughout the day. North of town, I was happy to see weak layers lower in the snowpack are handling the weight of the new snow well while noting that we would avoid wind-loaded slopes where the scales tip toward instability ([video](#), [photo](#)). Avoid drifted slopes where human-triggered avalanches failing beneath the new snow or deeper on buried weak layers are likely. Carefully assess the snowpack and routes of travel on non-wind-loaded terrain where avalanches are possible.

The danger is **CONSIDERABLE** on wind-loaded slopes and **MODERATE** on all others.



Southern Madison Southern Gallatin Lionhead Range Island Park

The Southern Madison and Southern Gallatin Ranges received 6" of snow since Sunday equal to 0.6" of SWE with 0" in the Lionhead area. Last week these ranges received nearly 3 feet of snow that fell on a weak layer of facets near the bottom of the snowpack. Doug explains in his [video](#) from Lionhead yesterday that we have a recipe for avalanches. Last week human and naturally occurring slides broke 1-3' deep at [Lionhead](#), in the [Taylor Fork](#) and [Bacon Rind](#). With ongoing wind-loading and a weak layer of snow in the lower part of the snowpack, it remains possible to trigger a large avalanche. The safest way to manage this hazard is to make conservative terrain choices while we wait for the snowpack to stabilize.

The danger is **MODERATE** on all slopes.



Bridger Range Northern Gallatin Northern Madison

The Northern Madison and Bridger Ranges got 7" of snow equal to 0.7" of SWE since Sunday with 1" in the Northern Gallatin Range. Expect drifts of unstable snow in unusual locations as strong southwest to northwest winds, gusting up to 75 mph ([Lone Peak Summit](#)), load slopes. In wind-loaded terrain, slides, similar to the human-triggered [avalanche in the Bridger Range](#) last week, are possible. Yesterday, the Bridger Bowl Ski Patrol performed full avalanche mitigation routes for the first time, testing the equivalent of a backcountry snowpack. They triggered several avalanches that broke down to weak layers on similarly wind-drifted slopes. Carefully assess the snowpack searching for isolated areas of instability like two groups of skiers in Hyalite this weekend, one of whom reported unstable results and wisely choose to ski lower angle terrain.

The danger is **MODERATE** on wind-loaded slopes and **LOW** on all others.

If you get out, please send us your observations no matter how brief. You can submit them via our [website](#), email (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](#).

Every Saturday near Cooke City, 10a.m.-3p.m. FREE snowpack update and transceiver/rescue training. Stop by for 20 minutes or more at the Round Lake Warming Hut.

Friends of GNFAC Powder Blast Fundraiser

The Friends of the Avalanche Center are hosting the [Virtual Powder Blast](#) fundraiser. With only \$1,000 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!*