

GNFAC Avalanche Forecast for Sun Dec 24, 2023

Good morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Forecast on Christmas Eve, Sunday, December 24th at 6:30 a.m. This information is sponsored by [Spark R&D](#) and [Avalanche Alliance](#). This forecast does not apply to operating ski areas.

Mountain Weather

Yesterday the Bridger Range got 6" of new snow and 2-4" fell elsewhere. West-northwest wind averaged 15-25 mph with gusts of 35-45 mph yesterday, and this morning wind has tapered to 5-15 mph. Temperatures are single digits to teens F. Today temperatures will reach high teens F and wind will be westerly at 5-10 mph. The next chance for a little snow is Tuesday.

Snowpack and Avalanche Discussion



Bridger
Range

Southern
Madison

Southern
Gallatin

Lionhead
Range

Island
Park

Yesterday's 6-8" of new snow (0.6-0.8" snow water equivalent) fell on a weak and unstable snowpack which makes human-triggered avalanches likely. Weak layers of sugary facets are buried 1-2 feet deep and struggle to support the overlying snow. The additional weight of a person could cause the snow to collapse and avalanche on slopes steeper than 30 degrees. Yesterday Doug and I rode in Island Park where we saw a poor snow structure that showed unstable, propagating results in our snowpack tests ([video](#), [observation](#)). Additionally, the new snow alone could avalanche, especially where it was drifted into thicker slabs by yesterday's northwest-west wind and where it fell on weak, feathery surface hoar ([photo](#)). Be extra cautious of steep slopes today. Carefully assess the snowpack and practice cautious route finding. Human-triggered avalanches are likely and avalanche danger is [CONSIDERABLE](#) in the Bridger Range, south of Big Sky, and near West Yellowstone and Island Park.



Northern Gallatin Northern Madison Cooke City

Yesterday's 2-5" of new snow (0.2-0.5" snow water equivalent) does not increase the avalanche danger, but heightened avalanche conditions persist due to a poor snowpack structure. Weak layers buried 1-2 feet deep have produced numerous avalanches and signs of instability over the last few weeks ([avalanche log](#)), and remain capable of causing large, dangerous avalanches. Yesterday a skier near Cooke City reported widespread collapses and "whumphs" (on each of the last two days), and one somewhat recent natural avalanche ([photo and observation](#)), clear signs a person can trigger an avalanche on buried persistent weak layers. Before traveling in avalanche terrain, carefully assess the snowpack for instability with a quick snowpit, adjust your plans if you see obvious signs of instability like collapsing or recent avalanches, and consider the consequences of being caught in an avalanche. Today, human-triggered avalanches are possible and avalanche danger is [MODERATE](#) near Big Sky, Hyalite and Cooke City.

Upcoming Avalanche Education and Events

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

Every weekend in Cooke City: Friday at The Antlers at 7pm, Free Avalanche Awareness and Current Conditions talk, and Saturday from 10am-2pm at Round Lake Warming Hut, Free Rescue Practice.

We offer *Avalanche Fundamentals with Field Session* courses targeted towards non-motorized travelers in [January](#) and one geared towards [motorized users](#). Sign up early before they fill up.

[*Loss in the Outdoors*](#) is a support group for those affected by loss and grief related to outdoor pursuits. Check out the link for more information.