

GNFAC Avalanche Forecast for Sun Jan 12, 2025

This is Alex Marienthal with the avalanche forecast for Sunday, January 12th, at 7:00 a.m. sponsored by [Upper Yellowstone Snowmobile Club](#), [Knoff Group Real Estate](#) and [Yellowstone Ski Tours](#). This forecast does not apply to operating ski areas.

Mountain Weather

Snowfall totals since yesterday morning are:

- 9-12" (0.7-0.9" [Snow Water Equivalent](#) (SWE)) in the Bridger Range and Hyalite.
- 3-12" (0.2" SWE) in Big Sky.
- 2-4" (0.2" SWE) in Cooke City.
- 0-1" (0-0.1" SWE) near Island Park, West Yellowstone, and Taylor Fork.

Wind has been out of the northwest at 10-15 mph with gusts to 20-35 mph. This morning wind is out of the northwest at 5-15 mph, and out of the east in the Bridgers. **Temperatures** are single digits and teens F. Today temperatures will be in the teens F with wind out of the northwest at 10-20 mph. **Snowfall will continue today and tonight** favoring mountains near Bozeman, Big Sky and Cooke City with 3-6", and 0-1" elsewhere.

Snowpack and Avalanche Discussion



Bridger Range Northern Gallatin Northern Madison

New snow and wind are creating dangerous avalanche conditions and human triggered avalanches are likely. One to two feet of low density snow fell since Friday and more is expected today. Moderate to strong wind out of the west and northwest the last couple days drifted this new snow, and snow from earlier in the week, into thick slabs that will be easy for a person to trigger. Wind decreased this morning, but it won't take much to drift the low density new snow and continue to build wind slabs and add weight over buried weak layers.

Wind slab avalanches are the primary concern, and they could break 1-3 feet deep and be large enough to bury or injure a person. Wind Slabs were already seen breaking naturally the last couple days ([observation and photos](#) from Friday, [observation and photo from yesterday](#) near Mt. Blackmore). Avalanches could break deeper on buried persistent weak layers near the bottom of the snowpack. These **persistent slab avalanches** could be very large and destructive. While we have not seen many of these avalanches yet in the mountains near Bozeman and Big Sky, the snow structure does exist and should not be trusted while the new snow and wind are stressing the snowpack ([observation of buried weak layers](#)).

Avoid slopes steeper than 30 degrees and the flatter runout zones below. Human-triggered avalanches are likely and the avalanche danger is [CONSIDERABLE](#).



Southern
Madison

Southern
Gallatin

Lionhead
Range

Cooke
City

Island
Park

Near Cooke City, West Yellowstone and Island Park the primary concern is avalanches breaking on weak layers near the bottom of the snowpack. Over the last week near Cooke City, **persistent slab avalanches** 4-6' deep broke naturally and some were possibly triggered from flat terrain a long distance away ([Mt. Abundance photo](#), [Henderson Mtn. photo](#), [Fisher Mtn. photo](#)). Snowfall rates decreased since earlier in the week, but the mountains have had snow nearly every day for over two weeks. **And, the winds increased the last few days which is usually what really pushes the snowpack to its breaking point.** These winds formed thick drifts which add weight to buried weak layers, and are a significant hazard on their own. **Wind slab avalanches** can be triggered where recent drifts formed and can be large enough to bury or injure a person ([photo of recent wind slab avalanche](#)).

With continued snow and wind, dangerous persistent slab or wind slab avalanches are likely for a person to trigger today, especially on wind-loaded slopes. On slopes without previous wind-loading, persistent slab avalanches are still possible, but the snowpack has started to get a break from stress without the weight of recent drifts.

Cautious route finding is key today. Find terrain sheltered from the wind that has minimal hazards like cliffs, trees and gullies, or keep it simple by staying on slopes less than 30 degrees, and avoiding runout zones below steep, wind-loaded slopes. The avalanche danger is [CONSIDERABLE](#) on windloaded slopes and [MODERATE](#) on all other slopes.

Upcoming Avalanche Education and Events

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

Avalanche Fundamentals with Field Session for non-motorized travelers during the [last weekend of January](#).

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