GNFAC Avalanche Forecast for Wed Jan 1, 2025

HAPPY NEW YEAR! This is Mark Staples with the avalanche forecast for Wednesday, January 1st, at 7:00 a.m. sponsored by the <u>Avalanche Alliance</u> and the <u>Idaho State Snowmobile Association - Avalanche Fund</u>. This forecast does not apply to operating ski areas.

Mountain Weather

Yesterday morning a bit more snow trickled into the Bridger Range and northern Gallatin and Madison Ranges. Higher elevations received 2-3 inches.

This morning it's cold with temperatures around 5 degrees F in most places. Winds picked up since yesterday averaging 15-25 mph gusting to 40 mph from the W and SW. Winds in the Bridger Range are surprisingly light blowing 5 mph gusting to 10 mph.

Today cloudy skies will deliver more snow and temperatures will struggle to pull out of the single digits into the low-mid teens F. Winds should continue from the W and SW mostly at the same speed but may increase some this afternoon.

Snowfall should start around late morning. Most areas will see some snow with 1-3 inches falling The mountains near Island Park and West Yellowstone should get the most snow and wind. By tomorrow morning, the Island Park area should have 5-7 inches of snow and the West Yellowstone area should have 2-4 inches.

Snowpack and Avalanche Discussion



3-day storm total for the Bridger Range is **34.75 inches of snow** (**2.45 inches of SWE**). There is simply a lot of new snow that added a lot of weight and STRESS to the snowpack which needs time to adjust to this rapid change. How much weight? The new snow over an area the size of a football field weighs over 600,000 pounds.

During the storm there were many storm slab avalanches breaking within the new snow including one that caught and carried a skier in <u>Bradleys Meadow on Monday</u>. There easily could have been bigger avalanches but they would have been hard to see due to heavy snowfall and poor visibility.

In the long run, the snowpack will become stronger (<u>Dave's video from yesterday</u>), but today I would not be surprised to hear of a **large persistent slab avalanche**. I'm unsure of the likelihood of triggering a slide, but I am sure that for today these are **dangerous avalanche conditions** and the danger is <u>CONSIDERABLE</u>.



Gallatin Range Madison Range Lionhead Range Cooke City Island Park

Storm Totals from the Last Week:

• Cooke City, Island Park and S. Madison Range: 22-25" of snow (2.5-2.9" SWE)

• Lionhead, Northern Madison and Northern Gallatin Range: 21-25" of snow (1.8-2.4" SWE)

Persistent slab avalanches failing on buried weak layers 1-3 feet deep (deeper on wind-loaded slopes) are the main problem today. Two good examples from Monday are a natural avalanche near West Yellowstone <u>above</u> <u>Quake Lake</u> and another on Henderson Mtn. near Cooke City (<u>initial report</u> and <u>crown profile</u>). Scroll through recent observations to see other avalanches and reports.

Heads up - Increased winds this morning transporting snow as well as possible heavy snowfall mostly near Island Park and West Yellowstone will add to the danger. The most dangerous conditions are often the result of winds more than snowfall alone.

What to do? Conditions aren't super sensitive which can lull you into a false sense of security because you may not immediately see signs of instability. I fell into this trap yesterday on Sawtelle Peak near Island Park, but then Ian and I walked across several southerly facing, low-angle slopes and triggered about 4 rumbling collapses. I'm optimistic about stability improving in the future but remain skeptical for now. The safest option is to ride slopes less than 30 degrees in steepness. The most dangerous choice and the most likely places to trigger an avalanche are slopes steeper than 30 degrees near and above treeline loaded by current or previous winds.

Be cautious and conservative today because avalanche conditions are dangerous and the danger is CONSIDERABLE.

Upcoming Avalanche Education and Events

Our education calendar is full of awareness lectures and field courses. Check it out: **Events and Education** Calendar

Wednesday, January 8, 2025, 7-9:30 p.m., Avy Savvy Night at the Colonial Theater, Idaho Falls. More information <u>HERE</u>.

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

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.