GNFAC Avalanche Forecast for Tue Dec 24, 2024

This is Dave Zinn with the avalanche forecast for Tuesday, December 24th, at 7:00 am. This information is sponsored by **Polaris** and **Uphill Pursuits**. This forecast does not apply to operating ski areas.

Mountain Weather

This morning, temperatures are in the upper teens to mid-20s F with 10-20 mph winds from the south through the west (5-10 mph in Cooke City). In the last 24 hours, the mountains across the advisory area received a trace to 1" of new snow.

Today, temperatures will be in the 20s to upper 30s F under partly cloudy skies. Winds will blow 5-15 mph from the south and west, and 1-3" of snow tonight will make Santa feel at home. A series of storms will impact the area between Christmas and New Year's Day, with Island Park, West Yellowstone, and Cooke City as the focal points for the most snow.

Snowpack and Avalanche Discussion



Heightened avalanche conditions exist. Human-triggered **persistent slab** and **wind slab avalanches** are possible. Over the last three days, light snowfall across the advisory area added up to 5" in Cooke City, with a trace to 3" elsewhere. Incremental loading gives us pause but is not likely to increase the avalanche danger outside of specific slopes where drifts of wind-loaded snow are thicker.

Persistent Slab Avalanches: Persistent weak layers of sugary facets and feathery surface hoar buried 1-2 feet deep (deeper on wind-loaded slopes) sit below a slab of more cohesive snow across much of the advisory area. Observations and recent field videos from **Bacon Rind**, **north of Bridger Bowl**, **Lionhead** and **Cooke City** all highlight this issue. Recent indicators of persistent slab instability include large collapses on low-angle slopes in Cooke City last weekend (**observation 1**, **observation 2**) and multiple natural avalanches that failed on persistent weak layers last week when new and wind-drifted snow loaded slopes. These included several larger slides in Cooke City, a natural avalanche on Saddle Peak and a chute north of Bridger Bowl (go to our **Avalanche Log** for a full list). Obvious signs of instability, such as avalanches, collapsing and shooting cracks won't be forthcoming today, but these, along with unstable test results and poor snowpack structure, direct us toward lower-angle terrain.

Recent drifting makes **wind slab avalanches** a hazard on specific terrain features and exacerbates persistent slab instability. Avoid steep, commonly wind-loaded slopes near ridgelines, below cornices and upper-elevation gullies to reduce the likelihood of triggering both wind slab and persistent slab avalanches (<u>photo 1</u>, <u>2</u>). Visual clues of recent drifting, a stiffening of snow surfaces and shooting cracks are signs of potential instability.

Appropriate terrain selection is the solution to today's avalanche problems. Selecting slopes less than 30 degrees steep without overhead hazard largely eliminates the risk of avalanches. Along with safe travel practices, good partners, and rescue gear, selecting lower-angle avalanche terrain sheltered from the wind with fewer terrain traps reduces the likelihood and consequences of a slide.

The danger is rated **MODERATE**.

Upcoming Avalanche Education and Events

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

Monday, December 30, 6-8 p.m., Free Avalanche Awareness and Conditions Update, MAP Brewing.

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.

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.

Friends of the Avalanche Center: Fall Fundraiser!

We're still counting on your support and the online Fall Powder Blast fundraiser is 79% of the way to our goal. Please consider making even a small donation <u>HERE</u> or via <u>Venmo</u>