GNFAC Avalanche Forecast for Tue Dec 10, 2024

Good morning. This is Dave Zinn with the Gallatin National Forest Avalanche Forecast on Tuesday, December 10th at 6:45 am. This information is sponsored by **Spark R&D** and **Klim**. This forecast does not apply to operating ski areas.

Mountain Weather

This morning, mountain temperatures are in the single digits to teens F. Winds are blowing 15-25 mph from the west to northwest in the mountains around Bozeman and Big Sky, and 5 to 15 mph elsewhere.

24 Hour Snow Totals:

- Bridger and N. Gallatin Ranges: 2-3” (0.1” snow water equivalent - SWE)
- Big Sky, West Yellowstone, Island Park and Cooke City: Trace to 1” (0-0.1” SWE)

Today, high temperatures will be in the teens to 20s F with 5-15 mph winds from the west to southwest. Stronger winds will continue near Bozeman. The mountains will get a trace of snow by tomorrow morning.

Snowpack and Avalanche Discussion

Bridger Range Northern Gallatin Northern Madison

The mountains around Bozeman and Big Sky received 5-12” of new snow with 0.4-0.9” of SWE, with the most falling in the Northern Gallatin Range. Winds picked up last night, especially in the Bridger Range, with gusts up to 45 mph. Avoid steep slopes with fresh slabs of wind-drifted snow where triggering an avalanche is likely.

Wind slab avalanches are the primary concern today. Slides will be large enough to bury or injure a skier or rider. Avoid steep slopes where you observe signs of instability, active wind-loading or evidence of fresh drifts. These might include recent avalanches, shooting cracks, plumes of snow blowing over ridgelines or across terrain features, or a stiffening of the snow surface. Mark described the new snow from Hyalite Canyon as light and fluffy, just waiting for the wind to whip it around, creating more of a slab and more problems (**Hyalite video**). The wind arrived.

Recent snow fell on weak layers. There is not enough to result in widespread, **persistent slab instability**. However, avoid steep terrain if you note avalanche activity, collapsing (whumphing) and propagating test results.

Reduce your exposure to avalanches when possible (**video**). Choose slopes sheltered from the wind, and test the snowpack for instability before considering travel in avalanche terrain. The danger is CONSIDERABLE on wind-loaded slopes and MODERATE on all others.

Southern Madison Southern Gallatin Lionhead Range Cooke City Island Park

The southern portions of the advisory area received 2-4” of snow over the past three days. With less wind and less snow, human-triggered avalanches are unlikely. Isolated instability in steep terrain may result in small avalanches.

Today's primary concern is thin **wind slab avalanches** breaking up to 6” deep. These are limited to terrain subject to more wind, generally upper elevations. Recognize the consequences of a small avalanche in the presence of terrain traps and adjust your route if you notice shooting cracks or signs of instability. See the photos of a small avalanche from Sunday south of Cooke City for an example (**details**).

Weak layers of sugary facets and feathery surface hoar are now capped by a few inches of recent snow (**video from Island Park**). While there's not enough snow on these weak layers to cause issues, keep this in mind for future forecasts.

Follow avalanche safety basics every day. The avalanche danger is LOW.

Upcoming Avalanche Education and Events

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

For an intro class with a field day, Register for our **Avalanche Fundamentals** course.

Bridger Bowl has backcountry conditions and there are no ski patrol services. Please steer clear of snowmaking equipment, chairlifts and snowmobiles, and respect posted signage while they set up for the season.

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 **HERE** or via **Venmo**