GNFAC Avalanche Forecast for Mon Dec 9, 2024

Good morning. This is Dave Zinn with the Gallatin National Forest Avalanche Forecast on Monday, December 9th at 7:00 am. This information is sponsored by the **BWAGs**, **Alpine Orthopedics & Sports Medicine** and **Cooke City Motorsports**. This forecast does not apply to operating ski areas.

Mountain Weather

This morning, mountain temperatures are in the single digits to teens F with 5-15 mph winds from the north to the west.

24-Hour Snow Totals:

- North Gallatin Range: 10" with 0.8 of snow water equivalent (SWE)
- Bridger and N. Madison Ranges: 3-4" (0.2-0.3" SWE)
- West Yellowstone, Island Park, and Cooke City: 0-1" (up to 0.1" SWE)

Today, temperatures will reach the teens to low 20s F with 10-15 mph winds from the northwest to the southwest. The mountains around Bozeman and Big Sky will receive an additional 1-4" of snow, with Hyalite Canyon remaining in the spotlight. The mountains around Cooke City, West Yellowstone and Island Park will get up to an inch.

0800 UPDATE: It is snowing hard in the Bridger Range. Since publishing the forecast 1 hour ago, 2-3" of light snow fell. Stay heads up for evolving conditions if intense snowfall continues.

Snowpack and Avalanche Discussion



The mountains south of Bozeman in the Northern Gallatin Range received more snow than the rest of the forecast area, with 10" falling in the last 24 hours and storm totals likely reaching 12" today (1" of SWE). This storm is loading weak layers of faceted snow and wind is drifting snow into unstable wind slabs, making human-triggered avalanches likely on steep slopes.

Wind-slab avalanches could break 1-2 feet deep and are today's primary danger. Avoid steep slopes with active wind-loading or signs of fresh drifts, such as shooting cracks, collapsing (whumphs), or stiffening of the snow surface. Recent avalanche activity is the number one sign of instability. Wind slab instability will likely be confined to upper-elevation slopes near ridgelines and gullies. Ice climbers in town for the <u>Bozeman Ice Festival</u> should note spindrift and wind-loading in gullies and avoid these areas.

The fresh snow fell on a thin snowpack with persistent weak layers throughout. Look for indicators of **persistent slab** instability, including avalanches and collapsing. Maintain a high index of suspicion for instability as the snowpack gets its first real test.

Careful snowpack evaluation, cautious route-finding and conservative decision-making are essential for a safe day in and around avalanche terrain. The danger is CONSIDERABLE.



Madison Range Southern Gallatin

Lionhead Range

Cooke City Island Park

In the mountains north of Bozeman and near Big Sky, West Yellowstone, Island Park, and Cooke City, human-triggered avalanches are possible on wind-loaded slopes near ridgelines and in steep gullies. Storm totals range from 2-4." Continued snowfall near Bozeman and Big Sky will add 1-2 inches today, potentially increasing avalanche size if snow exceeds predictions.

0800 UPDATE: It is snowing hard in the Bridger Range. Since publishing the forecast 1 hour ago, 2-3" of light snow fell. Stay heads up for evolving conditions if intense snowfall continues.

New snow is falling on weak layers formed during high pressure, making fresh drifts unstable (recent videos from <u>Lionhead</u>, <u>Buck Ridge</u>, <u>Taylor Fork</u> and <u>Cooke City</u>). Wind slab avalanches are today's primary concern and could break 4-8" deep on steep slopes. Indicators of instability include shooting cracks and recent avalanche activity. A small avalanche can cause significant problems on steep or technical slopes for a skier or rider who impacts trees, gullies, cliffs, and rocks.

Seek out slopes sheltered from recent wind-loading where human-triggered avalanches are unlikely. Carry rescue equipment, assess for instability related to buried weak layers before committing to steep slopes, and travel one at a time with someone in a safe position for rescue.

The avalanche danger is MODERATE on wind-loaded slopes and LOW on non-wind-loaded slopes.

Upcoming Avalanche Education and Events

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

Tuesday, December 10, 9 a.m.-3 p.m., West Yellowstone Avalanche Fundamentals: Motorized Guide Cert Course, Pre-registration required.

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**