### **GNFAC** Avalanche Forecast for Tue Jan 21, 2025

This is Dave Zinn with the avalanche forecast for Tuesday, January 21st, at 6:30 a.m. sponsored by **World Boards** and the **Avalanche Alliance**. This forecast does not apply to operating ski areas.

Mountain Weather

**This morning,** mountain temperatures range from -11 F on Lionhead Ridge to a balmy +13 F on Flanders Mountain in the Northern Gallatin Range. Winds are 15-30 mph from the southwest through the northwest, and there is no new snow.

**Today,** high temperatures will be 5-10 degrees F near Island Park, West Yellowstone and Cooke City, with teens to low 20s F across the rest of the forecast area. Winds will be 10-25 mph from the west and southwest. Snowfall overnight will bring a trace to 1" to the mountains near West Yellowstone, Big Sky and Bozeman and 2" to the mountains near Cooke City.

Snowpack and Avalanche Discussion



# Southern Madison Southern Gallatin Lionhead Range Cooke City

Human-triggered avalanches failing on weak layers of faceted snow in the lowest 1-2 feet of the snowpack are possible in the mountains around West Yellowstone and Cooke City and in the Southern Gallatin and Southern Madison Ranges.

Large **persistent slab avalanches** are becoming less likely and the most recent known slides occurred one week ago (**Red Mountain**, **Woody Ridge 1**, **Woody Ridge 2**). However, a rider near Cabin Creek sent in a video of knee-deep, shooting cracks propagating across the slope on Sunday (**photos**). Do not ignore these signs of persistent slab instability. Avalanches are most likely on slopes with significant variations in snow depth where a skier or rider impacts weak layers that fail in shallow areas around rocks or wind-scoured terrain and propagate across a slope. Conversely, avalanches are less likely on slopes with a uniformly deep snowpack.

**Wind slab avalanches** are possible where snow drifts onto steep slopes. Yesterday, riders in Cooke City noted a natural avalanche within the wind-drifted snow on Henderson Mountain that broke up to two feet deep (**details**).

If you consider traveling on slopes steeper than 30 degrees, choose non-wind-loaded terrain with relatively deep and consistent snow cover. Follow safe travel practices, ensuring all party members carry a beacon, shovel, and probe and only expose one person at a time to hazardous slopes.

The avalanche danger is MODERATE.



## Bridger Range Northern Gallatin Northern Madison Island Park

In the mountains near Bozeman, Big Sky and Island Park, **wind slab avalanches** are possible on steep slopes with recent drifts of wind-loaded snow. Avalanches are unlikely in non-wind-loaded terrain.

Strong winds are drifting snow into slabs several inches to a few feet thick. On Sunday, Alex and Haylee toured north of Bridger Bowl, triggering thin wind slabs on small test slopes (video, observation). Local ski patrols triggered avalanches on wind-loaded slopes during frosty avalanche mitigation work, and backcountry travelers reported "reactive wind slabs up to 30 inches deep" in the Bridger Range (observations 1, 2). Use visual clues of drifting and signs of instability, such as cracking or a stiffening of the snow surface, to identify and avoid problem areas (photo, photo). Even a small wind slab may have significant consequences in steep or extreme terrain.

**Persistent Slab Avalanches** breaking on weak layers near the bottom of the snowpack are unlikely. However, isolated areas of instability exist. On Sunday, skiers found a poor snowpack structure and experienced multiple collapses in a shallow snowpack near Fairy Lake (**observation**).

While following safe travel practices, seek out slopes *sheltered from the effects of the wind* with a *uniformly deep* snowpack, as these will be the safest. The avalanche danger is <u>MODERATE</u> on wind-loaded slopes and LOW on other slopes.

#### KING AND QUEEN OF THE RIDGE

Do you like to hike? Do you like to ski/ride? Then the King & Queen of the Ridge on 2/1 is for you. Hike, ride and raise money for the Friends of the Avalanche Center at Bridger Bowl this year! Join this fun event to promote and support avalanche safety and awareness! Fundraising prizes for the top 5 individuals who raise over \$500. *No racing is necessary to compete for the fundraising prizes.* Info to fundraise is HERE or donate here.

\*\*\*Race participants for the King and Queen of the Ridge must register separately with Bridger Bowl here\*\*\*

#### **Upcoming Avalanche Education and Events**

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

**TONIGHT, January 21, 6-7:30 p.m.,** Women and Girls Avalanche Awareness + Beacon Drills. Story Mill Community Center.

**January 23, 6-8 p.m. & January 25, 10 a.m.-2 p.m.,** Women's Companion Rescue w/ Sisters of Snow. Required pre-registration and more information **HERE**.

**January 25 or 26, 9 a.m.-3 p.m.** Avalanche Fundamentals Field Course. Required pre-registration and more information **HERE**.

**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.