GNFAC Avalanche Forecast for Mon Jan 20, 2025

This is Alex Marienthal with the avalanche forecast for Monday, January 20th, at 7:00 a.m. Today's forecast is dedicated to **Tyler Stetson**. Tyler was killed in an avalanche in Beehive Basin on this day in 2008. This forecast does not apply to operating ski areas.

Mountain Weather

Yesterday the Bridger Range got 3-4" of snow with 1" in Hyalite and none elsewhere. This morning, temperatures are -25 to -15 F, and wind is out of the west, northwest and north at 15-25 mph with gusts of 30-40 mph. Today, under mostly clear skies, temperatures will reach single digits above zero F, and wind will be from the west and northwest at 5-15 mph with gusts of 20-25 mph. The next chance for noteable snowfall is at the end of the week.

Snowpack and Avalanche Discussion



Southern Madison Southern Gallatin Lionhead Range Cooke City

Avalanches that break 2-4 deep on weak snow near the bottom of the snowpack are possible for a person to trigger. These **persistent slab avalanches** are slowly becoming less likely, but can break hundreds of feet wide and have big consequences. Yesterday a rider in the southern Madison Range triggered long shooting cracks across a slope (**photos**) which shows this problem is still out there.

You are more likely to trigger persistent slab avalanches on slopes with snow depths less than 3-4 ft deep. On slopes where snow depth varies you can trigger one of these slides from a thinner area and it can break wide into a deeper part of the slope. A few persistent slab avalanches from last week show some types of terrain where these are more likely to occur (**Red Mountain**, **Woody Ridge 1**, **Woody Ridge 2**).

Additionally, **wind slab avalanches** up to 1-2 feet deep can be triggered where recent snow was drifted into stiffer or thicker slabs.

Choose slopes that are non-wind-loaded and with a relatively deep and more uniform snow depth, or stay on slopes less than 30 degrees steep to keep it simple. Human-triggered avalanches are possible and the avalanche danger is MODERATE in Cooke City, West Yellowstone and the southern Madison and southern Gallatin Ranges.



Bridger Range Northern Gallatin Northern Madison Island Park

Near Bozeman, Big Sky and Island Park **wind slab avalanches** can be triggered where recent snow was drifted into slabs a few inches to a couple feet deep. Yesterday, we toured in the Bridger Range and triggered a thin, 3-4" deep, soft wind slab on a small test slope (<u>video</u>, <u>observation</u>), and the Big Sky and Bridger ski patrols reported triggering recently formed soft and hard slabs.

Many of the recent slabs formed on either a thin layer of facets, low density snow, or a firm crust which can make them easy to trigger for a couple more days (or more). Winds increased overnight and will easily drift recent snow and grow larger slabs. Older drifts that formed at the end of last week will be more stubborn, but worth watching out for. Note that strong winds last week formed some drifts in less typical locations like lower elevations.

Watch for cracking across the snow surface (**photo**, **photo**) as a sign of potential unstable wind-slabs, and look for rounded pillows of snow or a wavy textured snow surface to identify drifts. Steer clear of drifts on steep slopes, and keep in mind that any size slide can be hazardous on slopes with terrain traps like trees, cliffs or confined gullies.

Persistent Slab Avalanches breaking on weak layers near the bottom of the snowpack are unlikely in these parts of our forecast area. However, buried weak layers do exist, so it is worth choosing slopes with a deeper, more uniform snow depth. Yesterday, in the northern Bridger Range, skiers found a poor snowpack structure and had multiple collapses in a relatively shallower snowpack (less than 3 feet deep)(**observation**).

Before committing to steep slopes, carefully assess the snowpack for buried weak layers and unstable drifts. In the mountains around Bozeman, Big Sky, and Island Park the avalanche danger is MODERATE 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

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.