GNFAC Avalanche Forecast for Wed Dec 11, 2024

Good morning. This is Mark Staples with the Gallatin National Forest Avalanche Center Forecast on Wednesday, December 11th at 7:00 am. This information is sponsored by <u>World Boards</u> and <u>Uphill Pursuits</u>. This forecast does not apply to operating ski areas.

*Bridger Bowl is now closed to uphill travel

Mountain Weather

Yesterday, strong winds blew from the W and NW. No snow fell but winds easily moved the snow that fell on Monday.

This morning, winds increased in most areas blowing 15-20 mph and gusting 25-40 from the W and SW. Winds in the Bridger Range remain similar at the ridge, but low elevation winds decreased significantly from yesterday. Temperatures in the Bridger Range are mostly in the 20s F, near Hyalite and Big Sky they are in the mid-teens F, and near Cooke City and West Yellowstone they are in the single digits F.

Today, clouds will increase throughout the day, and winds will slowly decrease. Temperatures may only rise by about five degrees from where they are this morning. A few snowflakes may dance in the air with no accumulations.

The rest of the week will have somewhat similar weather until a storm rolls over the area Sunday and Monday. Snowfall from this storm should favor mountains near West Yellowstone and Island Park.

Snowpack and Avalanche Discussion



Bridger Range Northern Gallatin Northern Madison Cooke City

Across the entire forecast area, there is a weak layer under Monday's new snow, and the most likely places to trigger avalanches are where winds blew that snow into drifts and formed wind slabs.

The most snow fell in the mountains near Bozeman and Big Sky (5-12 inches snow/0.4-0.9 inches water) with closer to 15 inches of snow in upper parts of Hyalite Canyon. Strong winds definitely transported snow yesterday mostly at upper elevation ridgelines, but it was easy to find many slopes untouched by winds. In the Bridgers, winds were transporting snow at low elevations as well.

Fresh wind slabs are the primary avalanche problem. These wind slabs are likely resting on weak, faceted snow that formed on the snow surface prior to Monday's snowfall. On sunny slopes this weak layer is just below an ice crust. Near Cooke City, <u>Alex found this weak layer</u> combined with a layer of buried surface hoar evident as a stripe in his snowpit wall (<u>see photo</u>).

With this widespread weak layer, we are inching closer to a persistent slab avalanche problem as Ian describes in this <u>video from Mt Blackmore</u> near Hyalite yesterday. In most areas, there just isn't enough snow on top of the weak layer for this to be an issue yet, and in the Bridger Range this weak layer is much less developed. However, I'd be especially cautious in the Hyalite area which received so much new snow or near Cooke City which has less new snow but a notorious weak layer of buried surface hoar.



Southern Madison Southern Gallatin Lionhead Range Island Park

Further south in the forecast area near West Yellowstone and Island Park, there is a similar weak layer of facets and surface hoar that formed on the snow surface prior to Monday's snowfall. Dave describes it in this video from Island Park. However there is only 2-4 inches of new snow on top of this weak layer which isn't really enough to cause an avalanche.

Watch out for isolated areas that may have received a little more snow on Monday and any slope with some wind-blown snow where there may be just enough new snow for an avalanche. Overall avalanches are unlikely except in these isolated areas and 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**

Tomorrow, Thursday Dec 12, attend a free 1-hr avalanche awareness talk at 6:00 PM at REI Bozeman.

Friday, Dec 13, attend a free motorized avalanche awareness talk at Basecamp Gallatin in Four Corners from 6:30 to 8 pm from Six Points Avalanche Education.

This Friday, Saturday, or Sunday - Take an intro class with a field day. Register for our **Avalanche Fundamentals** course.

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**