GNFAC Avalanche Forecast for Mon Dec 30, 2024

This is Alex Marienthal with the avalanche forecast for Monday, December 30th, at 7:30 a.m. This forecast is sponsored by <u>Beartooth Powder Guides</u>, <u>Ride Rasmussen Style</u> and <u>Upper Yellowstone Snowmobile Club</u>. This forecast does not apply to operating ski areas.

AVALANCHE WARNING

We are issuing an avalanche warning for the Bridger Range. Heavy snowfall is rapidly adding weight to the snowpack and creating very dangerous avalanche conditions. Avoid travel on and below slopes steeper than 30 degrees. This warning will expire or be updated tomorrow morning at 5am.

Mountain Weather

Snowfall was steady through yesterday, with heavy snow continuing to add up in the Bridgers this morning. 24 hr Storm totals are:

- 8'' = 1.2'' SWE in the Bridgers
- 6'' = 0.6'' SWE in Hyalite
- 6'' = 0.6'' SWE in Big Sky
- 7" = 0.9" SWE Taylor Fork
- 5" = 1.0" SWE West Yellowstone
- 8" = 1.4" SWE Island Park
- 11" = 1.4" SWE Cooke City

Yesterday wind was strong out of the west and southwest at 15-30 mph with gusts of 35-60 mph. This morning, wind is out of the northwest-north at 5-15 mph with gusts of 20-30 mph, and temperatures are teens to low 20s F.

Today, temperatures will be high teens to low 20s F, wind will be out of the northwest at 5-10 mph with gusts to 20 mph. Snowfall will be light in the southern mountains with 1-2" possible by tomorrow. Near Bozeman and Big Sky, snowfall will increase this morning with 6-10" of snow possible during the day and a 2-3" more tonight.

Cooke

City

Island

Park

Snowpack and Avalanche Discussion



Avalanche Warning

4	Southern	Southern	Lionhead
X	Madison	Gallatin	Range

Large, human-triggered avalanches are likely today, especially on wind-loaded slopes. Yesterday's heavy snowfall equaled 0.9"-1.4" snow water equivalent (SWE), and strong southwest winds drifted this snow into thicker slabs and rapidly added weight to a snowpack with buried weak layers.

In the Bridger Range heavy snowfall continued overnight and this morning, and danger will rise through the day. Avoid travel on and below slopes steeper than 30 degrees.

You can easily trigger **wind slab avalanches** large enough to bury a person which break below thick drifts of yesterday's snow, and you can trigger potentially larger **persistent slab avalanches** that break on weak layers deeper in the snowpack.

Near West Yellowstone and Island Park avalanches were breaking on a sugary weak layer 1-2' deep over the weekend. A snowmobiler triggered a slide in Cabin Creek yesterday (**photos**) and we saw a couple slides on Saturday on Lionhead Ridge (**obs and photo**).

Near Cooke City the weak layers are slightly deeper and more stubborn (<u>Mark's video from Saturday</u>). However, yesterday skiers north of town had collapses (<u>observation</u>), and the snowpack cannot be trusted after the large amount of weight that was just added (<u>Sunday video</u>).

Persistent slab avalanches can break hundreds of feet wide and can be triggered from lower angle terrain connected to slopes steeper than 30 degrees. Your safest choice is terrain that is less than 30 degrees steep, and not connected to or below anything steeper.

The avalanche danger is <u>HIGH</u> on wind-loaded slopes and <u>CONSIDERABLE</u> on other slopes near Cooke City, Island Park, West Yellowstone, the southern Madison and Gallatin Ranges and the Bridger Range.



Steady snowfall today will maintain dangerous avalanche conditions and make large, human-triggered avalanches likely. Near Big Sky and Hyalite got less snow yesterday with 6" = 0.6" SWE. Wind slab avalanches that break within drifts that formed yesterday and today are the most likely hazard, and could be large enough to bury a person. The snowpack in these areas has buried weak layers that have shown minimal signs of instability lately (Hyalite media and observation), but heavy snow continuing today will put the snowpack's strength to the test and persistent slab avalanches breaking on 1-3' deep on buried weak layers are possible.

A conservative approach to backcountry travel is required. Practice conservative decision making today, and choose routes that avoid wind-loaded slopes steeper than 30 degrees. The avalanche danger is CONSIDERABLE.

Upcoming Avalanche Education and Events

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

Monday, December 30, 6-8 p.m., Free Avalanche Awareness and Conditions Update, MAP Brewing.

Wednesday, January 8, 2025, 7-9:30 p.m., Avy Savvy Night at the Colonial Theater, Idaho Falls. More information HERE.

We offer *Avalanche Fundamentals with Field Session* courses targeted towards non-motorized travelers in **January** and one geared towards **motorized users**. Sign up early before they fill up.

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.

Friends of the Avalanche Center: Fall Fundraiser!

We're still counting on your support and the online Fall Powder Blast fundraiser is 80% of the way to our goal. Please consider making even a small donation **HERE** or via **Venmo**