GNFAC Avalanche Forecast for Sun Jan 5, 2025

This is Alex Marienthal with the avalanche forecast for Sunday, January 5th, at 7:00 a.m. sponsored by <u>Gallatin</u> <u>Valley Snowmobile Association</u>, <u>BWAGs</u> and <u>Beartooth Powder Guides</u>. This forecast does not apply to operating ski areas.

Mountain Weather

Totals from **snow that fell during the day yesterday** are:

- 7" (0.7" snow water equivalent (SWE)) in Hyalite.
- 3-5" (0.3-0.5" SWE) in Big Sky.
- 4" (0.4" SWE) Cooke City.
- 3" (0.3" SWE) Bridgers and Taylor Fork.
- 2" (0.2" SWE) West Yellowstone and Island Park.

Temperatures are teens to low 20s F this morning, and will be teens and 20s F today. Yesterday **winds** increased to moderate out of the northwest at 10-20 mph with gusts to 25-40 mph. This morning winds are from the southwest at 5-15 mph, and today wind will remain light out of the west.

Snowfall is forecast this afternoon through tonight, favoring the mountains near Bozeman and Big Sky with 4-8" by morning, and 1-3" near Cooke City, West Yellowstone and Island Park.

Snowpack and Avalanche Discussion



Dangerous avalanche conditions exist and large human-triggered avalanches are likely. Yesterday on Lionhead Ridge near West Yellowstone, snowmobilers triggered a large persistent slab avalanche from flat terrain a safe distance away (**photo and details**), and another group reported a second similar sized avalanche nearby (**photo**). Through the last week near Cooke City there were multiple large natural persistent slab avalanches that broke 3-4'+ deep (**Sheep Mtn.**, **Henderson Mountain**, **Sunset Peak**). These types of **persistent slab avalanches** are our biggest concern, due to the potential size and possibility to trigger from flatter terrain below or connected to steep slopes.

For nearly two weeks the mountains have received steady snowfall. This snow has gradually added weight and built thick slabs over weak layers now buried 2-4 feet deep. The gradual loading, and relatively minimal wind, has inhibited widespread avalanches all at once. However, over the last week we have seen avalanches almost daily as the snowpack reaches a breaking point on individual slopes at different times (avalanche log).

During yesterday's snow, winds increased to moderate out of the northwest and west and drifted snow into thicker, stiffer slabs. These **wind slabs**, up to a foot deep, are possible to trigger today and make deeper avalanches more likely on wind-loaded slopes.

On Friday, snow fell as temperatures warmed which caused heavier snow to form slabs over lower density snow. **Storm slab avalanches** broke 8-10" deep within the "upside down" new snow on Friday (**Bridgers observation**) and remained easy to trigger yesterday (**N. Gallatin observation**). While new snow instabilities typically stabilize quickly, the recent observations of instability make it worth watching out for today. Cracking across the snow surface is a sign you could trigger slabs of new or wind-drifted snow. Enjoy the new snow while staying on slopes less than 30 degrees, and away from flatter terrain below these steep slopes (**Ian's video**). Recent winds, new snow and buried weak layers make human-triggered avalanches likely today, and the avalanche danger is <u>CONSIDERABLE</u>.

Upcoming Avalanche Education and Events

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

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

We offer *Avalanche Fundamentals with Field Session* courses targeted towards non-motorized travelers **VERY SOON** 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.

THANK YOU - Fall fundraiser

On behalf of the Friends of the Avalanche Center, we would like to extend our heartfelt thanks for your generous support of the Powder Blast fundraiser. This is our largest fundraiser of the year. We are thrilled to share that, **thanks to your contributions and the incredible generosity of an anonymous donor**, we have successfully met our fall fundraising goal.