GNFAC Avalanche Forecast for Mon Dec 23, 2024

This is Alex Marienthal with the avalanche forecast for Monday, December 23rd at 7:00 am. This information is sponsored by <u>Gallatin Valley Snowmobile Association</u>, <u>Beartooth Powder Guides</u> and <u>Bridger Bowl</u>. This forecast does not apply to operating ski areas.

Mountain Weather

Since yesterday morning, 2" of snow fell near Cooke City with none elsewhere, and winds were out of the west and southwest at 10-25 mph with gusts of 25-45 mph. This morning temperatures are high teens to high 20s F. Today, under mostly cloudy and snowy skies, temperatures will reach high 20s to low 30s F with wind out of the west at 5-15 mph with gusts to 25 mph. Snow could be heavy as it starts, this morning in the southern mountains and in the north by this afternoon, with 1-3" possible by tonight.

Snowpack and Avalanche Discussion



Near Cooke City, 4" of new snow (equal to 0.4" snow water equivalent) and moderate to strong wind yesterday increased the likelihood for a person to trigger a large **persistent slab avalanche**. While 4" of new snow is fairly small, signs point to a snowpack that should not be trusted with even small changes, and buried weak layers remain easy to collapse in the shallow early season snowpack.

Over the weekend, skiers north of Cooke City reported large collapses on low angle slopes and poor scores in snowpack tests (observation 1, observation 2). Last Wednesday, when strong winds followed steady snowfall, multiple natural avalanches broke on weak snow near the ground and in the middle of the snowpack (video, Henderson photo, Fisher photo). Similar slides can be triggered today, especially on wind-loaded slopes. These persistent slabs can be triggered from low angle terrain connected to steeper slopes.

Be extra cautious of slopes steeper than 30 degrees and their runout zones below. Fresh wind slabs are an additional small hazard to keep in mind, but the larger persistent slab problem should already steer you away from steep, wind-loaded slopes. Avalanche danger is CONSIDERABLE near Cooke City.



Bridger Range Gallatin Range Madison Range Lionhead Range Island Park

Through the rest of the forecast area **large persistent slab avalanches** have become less likely with only 1-2" of snow since last Tuesday, but the potential size and consequences remain large. A few inches of new snow today could increase the chances of triggering one of these slides. Fresh drifts formed yesterday, and more might form today with new snow. These drifts make **wind slab avalanches** a small hazard on their own and increase the chances of triggering a persistent slab avalanche on wind-loaded slopes.

A few avalanches from the last week that highlight current instability include:

- Saturday on Buck Ridge a snowmobiler triggered a 12" deep wind slab (photo).
- An avalanche on Saddle Peak broke 1-3 feet deep (photos) last Wednesday.
- Last Tuesday Ian triggered an avalanche remotely (from lower angle terrain nearby) on Buck Ridge near Big Sky (details).
- On Friday a skier had a large collapse in the Bridger Range (observation).
- An avalanche triggered by a cornice drop in the Hourglass couloir north of Bridger (photo and info).

Carefully evaluate the snowpack for recently formed fresh wind slabs and buried weak layers. To minimize the consequences of any size slide, choose simple, non-wind-loaded slopes with few hazards like rocks, trees or cliffs. If you have any doubts about snow stability avoid slopes steeper than 30 degrees and be cautious of runout zones below. The avalanche danger is MODERATE.

Upcoming Avalanche Education and Events

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

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**