GNFAC Avalanche Forecast for Mon Jan 15, 2024

Good morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Forecast on Monday, January 15th at 7:00 a.m. This information is sponsored by **Beartooth Powder Guides**, **BWAGs** and **Bozeman Splitfest**. This forecast does not apply to operating ski areas.

Mountain Weather

Overnight the mountains got 1-2" of low density snow. Arctic air is tightening its grip for one more day and temperatures are -5 to -25 F this morning. Wind increased overnight out of the west-northwest at 15-20 mph with gusts of 25-50 mph, and this morning wind decreased to 5-15 mph from the northwest-north. Today, temperatures will reach single digits below zero F with a few places rising slightly above zero, and wind will be north-northwest at 5-15 mph. The next chance for snow is tomorrow night.

Snowpack and Avalanche Discussion



Gallatin Range Madison Range Lionhead Range Cooke City Island Park

Snow that fell last week was drifted into stiffer slabs on top of a very weak snowpack, and these slabs remain easy for a person to trigger (snowpack photo, photo, video of weak layers). Last week there were natural and human triggered avalanches mid-week during the peak of snowfall and wind (Cooke City photos, photos, Big Sky photos), and skiers and riders triggered avalanches on Thursday and Friday (Taylor Fork video, Cooke City photos). On Saturday skiers near West Yellowstone observed large collapses with shooting cracks (photo), and yesterday a rider south of there saw a recent human-triggered avalanche (photo).

A couple inches of new snow and increased wind overnight added weight to unstable slabs. Although this was a small loading event, everything counts with the current very weak snowpack. On wind-loaded slopes human triggered avalanches are likely. Many recent avalanches were triggered remotely, from a distance (avalanche activity list), meaning you could trigger a slope from lower angle terrain adjacent to or below steeper slopes. Persistent weak layers are tricky, especially as stability improves with time since a larger loading event. A slope might allow multiple tracks before it breaks, and stability test results will be more variable. Any slope with a cohesive, supportable slab on top of weak, sugary snow has the potential to avalanche.

On slopes that do not have previous wind-loading, slabs of snow are softer and less likely to break wide, but a few slopes could have just enough structure to be unstable. On sustained, steep slopes dry loose avalanches can become large due to entraining the very weak snowpack as a "facet slough" (**Buck Ridge video**).

Careful snowpack evaluation and cautious route finding are required today. Be cautious of travel on or below slopes steeper than 30 degrees, especially previously wind-loaded slopes. Avalanche danger is CONSIDERABLE on wind-loaded slopes and MODERATE on non-wind loaded slopes.



In the Bridger Range avalanches are possible to trigger where recent snow was drifted into slabs on top of a very weak snowpack (**Bridger Range video**). Watch and feel for signs of wind drifting, such as cracking across the snow surface, cornices, or smooth rounded pillows of snow. Avoid steep slopes that have these signs. The weak snowpack can also cause facet sluffs that gouge deep into the snowpack and run long distances (**Buck Ridge video**). Be cautious of long, sustained steep slopes where these may occur, especially if there are consequences like rocks, trees or cliffs. Carefully evaluate the snowpack and consequences of an avalanche before traveling on or below steep slopes. The avalanche danger is MODERATE.

The cold temperatures create higher consequences of an accident, and any bad situation can quickly become worse.

Upcoming Avalanche Education and Events

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

<u>Every weekend in Cooke City</u>: 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.

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.

January 16, at 4 p.m., **Darren Johnson Avalanche Education Memorial Fund - Movie Night**, The Waypoint, Big Sky. Information **HERE**.

January 18, 4 p.m., **Darren Johnson Avalanche Education Memorial Fund - Pint Night**, Beehive Basin Brewery, Big Sky. Information **HERE**.

<u>King & Queen 2024</u>, 3 February 2024. Form a team or sign up individually to hike laps on the Bridger Bowl ridge to fundraise for the Friends of the Avalanche Center.

<u>Loss in the Outdoors</u> is a support group for those affected by loss and grief related to outdoor pursuits. Check out the link for more information.

KING AND QUEEN OF THE RIDGE, FEBRUARY 3rd

Do you like to hike? Do you like to ski? Then the King & Queen of the Ridge is for you. Hike, ski and raise money for the Friends of the Avalanche Center in their 2nd biggest fundraiser of the year. Join the effort 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 is HERE. Race participants for the February 4th event must register separately with Bridger Bowl HERE.