GNFAC Avalanche Forecast for Tue Jan 23, 2024

Good morning. This is Dave Zinn with the Gallatin National Forest Avalanche Forecast on Tuesday, January 23rd at 7:00 a.m. Today's forecast is sponsored by <u>Stronghold Fabrication</u>, <u>Bridger Bowl</u> and <u>Cooke City</u> <u>Motorsports</u>. This forecast does not apply to operating ski areas.

Mountain Weather

Mountain temperatures are in the 20s F this morning with 5-20 mph winds from the west to the south. The Centennial Mountains received 5" of heavy snow, with a trace to 1" in the mountains around West Yellowstone and Big Sky. Today, temperatures will be in the 20s to 30s F with 5-15 mph winds from the southwest. The mountains around Big Sky, West Yellowstone, and Island Park will get a trace to 1" of new snow by tomorrow morning.

AVALANCHE WARNING

The Gallatin National Forest Avalanche Center is issuing a Backcountry Avalanche Warning for the Centennial Mountains in Island Park. New snow is overloading an exceptionally weak snowpack, creating very dangerous avalanche conditions. Human-triggered avalanches are very likely on all steep slopes. Avoid avalanche terrain and avalanche runout zones. The avalanche danger is rated **HCH** on all slopes. Contact the Gallatin National Forest Avalanche Center for more detailed information.

This warning will expire or be updated by 6:00 a.m. on Wednesday, January 24th.

Snowpack and Avalanche Discussion



Avalanche Warning

Human-triggered avalanches are very likely on all steep slopes in Island Park. New snow is overloading an exceptionally weak snowpack. Avoid avalanche terrain and avalanche runout zones.

The Centennial Mountains have received a foot or more of snow since Saturday, equal to 1.2" of snow water equivalent. While this is a *normal amount of snow*, it fell onto an *abnormally weak snowpack*. Riders and skiers are triggering avalanches from long distances away from flat terrain and seeing shooting cracks extend hundreds of feet ahead (observations). As the director of the Utah Avalanche Center said last week from Island Park, "Head's up. We're seeing avalanches. It is a good sign that there will be more" (video).

Today, give yourself a wide margin for error and avoid recreating on slopes close to the 30-degree threshold we use to describe avalanche terrain. The avalanche danger is rated <u>HIGH</u> on all slopes.



The loading from new snow has slowed south of Big Sky and near West Yellowstone and Cooke City. However, human-triggered avalanches breaking 1-2 feet deep are very likely, especially on slopes loaded by wind-drifted snow. *Stability will improve unusually slowly* in the absence of additional snow and wind-loading *due to unusually fragile persistent weak layers* buried within the snowpack.

Backcountry travelers submitted dozens of reports of avalanches, shooting cracks and collapsing (**avalanche activity log**). On Sunday in the Lionhead area, Alex and I barely stepped off our sleds when we triggered our first collapse, shooting cracks and saw a natural avalanche (**video**). Ian and his partner triggered an avalanche from a low-angle slope 800 feet away in Cooke City last week (**video**).

Signs of instability do not get clearer. Give yourself wide margins for safety by recreating in terrain less than 30 degrees steepness and avoiding avalanche terrain. The avalanche danger is <u>HIGH</u> on wind-loaded slopes and <u>CONSIDERABLE</u> on all others.



Human-triggered avalanches breaking 1-2 feet deep are likely in the mountains around Bozeman and Big Sky. Conservative terrain selection answers the problem of dangerous avalanche conditions stemming from persistent weak layers. Slopes under 30 degrees steepness are unlikely to slide if not connected to steeper terrain.

Yesterday, in the mountains near Big Sky, I triggered an avalanche that failed on a steep slope while I was 750 feet away in a flat meadow (video). We received reports of similar experiences on Flanders Mountain and Hyalite Peak. On Sunday, a skier descending Saddle Peak triggered a slab that broke 2-3 feet deep, ultimately propagating 500 feet wide and running over 1000 vertical feet (details and photos). The avalanche activity log is packed with recent slides. Thankfully, no one has been caught or injured. Let's keep it that way.

The avalanche danger is rated <u>CONSIDERABLE</u>. Cautious route-finding, thorough snowpack assessment and conservative decision-making are essential.

Upcoming Avalanche Education and Events

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

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.

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.

King & Queen 2024, 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.

Loss in the Outdoors 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 <u>HERE</u>. Race participants for the February 4th event must register separately with Bridger Bowl <u>HERE</u>.