GNFAC Avalanche Forecast for Tue Mar 21, 2023

Good morning. This is Dave Zinn with the Gallatin National Forest Avalanche Forecast on Tuesday, March 21st at 7:00 a.m. This information is sponsored by **onX** and **Mystery Ranch**. This forecast does not apply to operating ski areas.

Mountain Weather

This morning, mountain temperatures are in the teens F. The mountains near Cooke City received 7” of snow in the last 24 hours, with 3-5” across the rest of the advisory area. Winds at Lionhead Ridge are 15-25 mph from the southwest. Winds are 5-15 mph elsewhere. Today, temperatures will be in the 20s F with 5-15 mph winds from the southwest, and 1-3” of snow will fall.

Snowpack and Avalanche Discussion

Lionhead Range Cooke City

Human-triggered avalanches are likely in the mountains around Cooke City and West Yellowstone where 4-7” of new snow fell, and moderate winds are drifting snow at Lionhead Ridge.

The primary concern is large avalanches breaking on persistent weak layers deep within the snowpack. Like a recent snowmobiler-triggered avalanche north of Cooke City, these could break 2-6+ feet deep and fail widely across slopes (**details and photos**). In the last month, we have been lucky that a large avalanche has not injured or killed a skier or rider in the many close calls and large avalanche cycles (**Avalanche Incidents**, **Lionhead avalanche cycle**). We have used up our nine lives, and getting caught and carried in an avalanche of this magnitude could easily be unsurvivable. Choose smaller, lower-angle runs sheltered from the wind. Avoid steep wind-loaded slopes and complex terrain with traps like rocks, cliffs, and gullies. Be cautious about crossing underneath steep slopes. If there are any questions, avoid all terrain steeper than 30 degrees.

Our secondary concern is smaller avalanches breaking within the new and wind-drifted snow. While smaller, these can be big enough to bury or injure a skier or rider on slopes where terrain features worsen the consequences of getting caught.

The danger is CONSIDERABLE.

Bridger Range Gallatin Range Madison Range

The mountains around Bozeman and Big Sky received 2-4” of new snow. The primary concern is large avalanches breaking deep within the snowpack on persistent weak layers. Alex and I rode in the Taylor Fork area on Sunday, where we saw several deep slab avalanches that failed last week (**video**, **observation and photos**). Deep slab avalanches have also occurred in the northern ranges of the advisory area, albeit with lesser frequency (**Hyalite Peak slide**, **Northern Bridgers slide**). Manage this problem with conservative terrain choices. Pick smaller slopes with less exposure to the wind and without complicating factors like cliffs and rocks

or stay in terrain less than 30 degrees.

Yesterday in Frazier Basin, we found a weak snowpack structure in one of our pits and observed five loose snow avalanches on a steep face. These slides were only an inch or two deep, but they ran a long way and highlighted that the new snow might bond poorly to a melt-freeze crust that formed on many slopes (**video**, **observations**). Watch for signs of instability like shooting cracks and recent avalanche activity within the new snow if you plan to enter avalanche terrain.

Heightened avalanche conditions exist, and danger is MODERATE.

Please share avalanche, snowpack or weather observations via our **website**, email (**mtavalanche@gmail.com**), phone (406-587-6984), or Instagram (#gnfacobs).

Island Park

Human-triggered avalanches are likely in the mountains of Island Park, where 5-7” of new snow fell, and moderate winds are drifting snow. Avalanches within the new and wind-drifted snow will be large enough to carry and bury a rider or skier. Larger slides are possible on heavily wind-loaded slopes or where there are underlying weak layers. Choose smaller, lower-angle slopes that are sheltered from the wind and avoid steep wind-loaded terrain and complex slopes.

See Doug’s video for a rundown on the aftermath of last week’s avalanche warning. Snow bikers in the bowl of Mount Jefferson saw further evidence of a large avalanche cycle noting a 6’+ deep crown on a heavily wind-loaded slope (**photo**).

Upcoming Avalanche Education and Events

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

Sunday, March 26, **Avalanche Alliance Sweepstakes**! Win a custom 2022 Ford 350 Super-Duty truck or many other items. Proceeds help support avalanche centers. Use code LASTCHANCE to receive 40% more tickets. Winners will be chosen at the Jackson Hole Hill Climb.

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