GNFAC Avalanche Forecast for Sun Dec 25, 2022

Good morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Forecast on Sunday, Christmas Day, December 25th at 7:00 a.m. This information is sponsored by **Upper Yellowstone Snowmobile Club**, **Bridger Bowl**, and **Yellowstone Ski Tours**. This forecast does not apply to operating ski areas.

Mountain Weather

Since yesterday morning the mountains near Cooke City received 3” of new snow and 1” fell in the southern Madison Range with none elsewhere. Wind has been strong out of the west-southwest, averaging 15-30 mph with gusts to 55 mph. This morning temperatures are 20s F to low 30s F, and up to low 40s F in the Bridger Range. Today, temperatures will cool slightly with snow showers throughout the day, and wind will be out of the west-northwest at 20-30 mph with gusts to 40 mph. The mountains will receive 3-7” of new snow by late tonight.

Snowpack and Avalanche Discussion

All Regions

For Christmas we might get the best gift of new snow in the mountains, but it arrives with dangerous avalanche conditions on wind-loaded slopes. Strong westerly wind overnight has drifted recent snow into thick slabs that can break under the weight of a person and avalanche on steep slopes. Today’s new snow will also be drifted by moderate winds and continue to add weight and depth to wind slabs. Additionally, weak layers buried 1-4 feet deep may cause avalanches to break deeper and wider, potentially very large. Avoid slopes where the wind has recently deposited thick drifts of snow. If you travel across non-wind loaded steep slopes, first dig to look for and assess stability of buried weak layers.

Doug and I rode at Lionhead Ridge yesterday, and we found a weak layer of sugary facets buried 1 foot deep which produced unstable results in our snowpack test (**video**, **observation**). Riders at Buck Ridge near Big Sky found a similar layer around 1 foot down, as well as a crust below yesterday’s 3-4” of new snow (**observation**).

Weak layers near the bottom of the snowpack also remain a concern, especially where the snowpack is relatively shallower, around 3 feet deep, like in the Bridger Range, Big Sky, Hyalite, Bacon Rind and Hebgen (**Hebgen Lake video**). We have not seen recent avalanches breaking on these weak layers, but the potentially major consequences require conservative decision making. Do not forget about these deeper weak layers, especially as today’s fresh drifts and new snow continue to add weight.

Today the avalanche danger is CONSIDERABLE on wind-loaded slopes and MODERATE on all other slopes.

Roof Avalanches: With above freezing temperatures and rain possible at lower elevations, be cautious of roof avalanches for the next few days. The last two months of snow and cold temperatures have allowed thick slabs to build which may slide off of metal roofs. Look up to see if this hazard exists above where children play or where you park, walk or stand around buildings.

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

Upcoming Avalanche Education and Events

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

Thursday, December 29, 6:30 p.m., ***Avalanche Presentation and Raffle*** *(great odds of winning!)* at MAP Brewing in Bozeman. Free.

January 4 + field day on January 7 or 8, ***Avalanche Fundamentals for Snowmobilers***, Information and pre-registration **HERE.**

January 4 + field day, ***Avalanche Fundamentals for Skiers and Snowboarders***, Information and pre-registration **HERE.**

Every Saturday, 10 a.m. - 2:00 p.m. ***Avalanche Rescue Training***, drop in for any amount of time. Round Lake Warming Hut, Cooke City. Free.

Please consider donating to the Friends of GNFAC **Annual Fundraiser**.