

## **GNFAC Avalanche Forecast for Sat Dec 24, 2022**

Good morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Forecast on Christmas Eve, Saturday, December 24th at 7:00 a.m. This information is sponsored by [\*\*Gallatin County Sheriff Search and Rescue\*\*](#) and [\*\*Uphill Pursuits\*\*](#). This forecast does not apply to operating ski areas.

### Mountain Weather

At 6am, the mountains have 3-6" of new snow, temperatures are teens to low 30s F and wind is westerly at 10-25 mph with gusts of 25-45 mph. Today, temperatures will reach high 20s to low 30s F, and wind will be westerly at 10-25 mph with gusts to 35 mph. Snow showers will break this morning, then are forecast to return briefly tonight with more snow tomorrow night and through the week.

### Snowpack and Avalanche Discussion



#### Cooke City

Near Cooke City more than 20" of snow fell earlier this week. Strong winds blew the new snow into thick drifts that avalanched naturally during and after the storm ([\*\*Republic Mtn., near/in YNP, north of Cooke\*\*](#)). These drifts are over 2 feet thick and remain possible for a person to trigger today. Today's new snow will also be blown into fresh drifts which will be smaller, but still potentially hazardous. Watch for cracking across the snow surface around your feet, skis or sled as a sign drifts are unstable and should be avoided on steep slopes.

It has been two weeks since the last avalanche broke on weak layers near the bottom of the snowpack ([\*\*details, details\*\*](#)). The possibility is small for triggering one of these deeper avalanches, but consequences are major and require conservative decision making to ensure avoidance. Human-triggered avalanches are possible and avalanche danger is [\*\*MODERATE\*\*](#).



#### Bridger Range   Gallatin Range   Madison Range   Lionhead Range   Island Park

New snow will be drifted by westerly wind into fresh wind slabs which are the main avalanche concern today. Today's new snow and fresh drifts may sit over lower density snow, due to temperatures warming since snow started falling yesterday. This "upside-down" setup will make fresh slabs more unstable. Wind slabs that formed over the last few days are also possible for a person to trigger. Be cautious of slopes where the wind has recently deposited thick drifts of snow, and watch for cracking across the snow surface as a sign drifts are unstable and should be avoided on steep slopes.

Additionally, avalanches can break deeper and wider on weak layers buried 2-4 feet deep. We have not seen recent avalanches on these layers, but we continue to find them in snow pits and they show the potential to avalanche ([\*\*Hebgen Lake video\*\*](#)). Before traveling across steep slopes, dig to assess the presence and stability of these weak layers. Watch Ian's [\*\*video\*\*](#) from Taylor Fork yesterday for a great discussion about creating wider margins for error. New snow, wind and buried weak layers make avalanches possible and the avalanche danger is [\*\*MODERATE\*\*](#).

Please share avalanche, snowpack or weather observations via our [website](#), email ([mtavalanche@gmail.com](mailto: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](#).