

GNFAC Avalanche Forecast for Fri Apr 22, 2022

Good morning. This is Dave Zinn with a spring weather and snowpack update on Friday, April 22nd. The Gallatin National Forest Avalanche Center has stopped issuing daily avalanche forecasts for the season. We will issue weather and snowpack updates on Monday and Friday mornings through April.

Mountain Weather

We are at the leading edge of a significant spring storm. Temperatures on Friday morning are in the 20s F with 5-15 mph winds from the west to southeast. Overnight, the mountains received 2-5" of snow except in the West Yellowstone area where precipitation began as rain. Snow and wintery weather will persist through Saturday night with high temperatures in the 30s F and 5-20 mph winds from the north to northwest. By Saturday night the mountains will receive 10-20" of new snow with areas like the Northern Gallatin Range potentially getting more. The sun will come out on Sunday with slightly warmer temperatures.

Snowpack and Avalanche Discussion



All Regions

The avalanche equation is not complicated this weekend. On Friday morning, a major spring storm is beginning to impact the area with 10-20+" of snow likely by Saturday night. This will create dangerous avalanche conditions. Winds will increase Saturday and drift snow into deeper and more cohesive slabs that could break over wide areas. Avalanches are likely within the new and wind drifted snow and will be large enough to injure or kill riders and skiers.

Last weekend a similar spring storm resulted in natural avalanches in the Bridger Range ([photo](#)) and Cooke City ([photo](#)). Outside of the advisory area in the East Rosebud drainage, five skiers from two separate groups were caught and partially buried by a natural loose snow avalanche while they were ascending a steep couloir. Luckily, no one was injured ([details](#)). Expect similar or larger avalanches this weekend.

On Sunday, temperatures will rise into the mid to upper 30s F and the powerful spring sun will come out. This will result in an increasing wet snow avalanche danger on slopes where the snow surface gets moist ([video](#)). Move to shadier slopes or stay out of steep terrain if you notice the snow surface getting wet.

Indicators of instability such as recent avalanches, cracking and collapsing provide all the information you need about the snowpack and should keep you in lower angle terrain. Without these obvious signs, a careful assessment that tests for instabilities in the upper 3' of the snowpack is necessary if you plan to go into terrain steeper than 30 degrees. Always follow safe travel protocols by skiing and riding with a partner, carrying a beacon, shovel and probe and exposing only one person at a time to avalanche terrain.

We will issue spring snowpack and weather updates each Monday and Friday through April, or as needed, and we will share relevant avalanche and snowpack information on our website and social media. If you get out, please send us your observations no matter how brief. You can submit them via our [website](#), email (mtavalanche@gmail.com), phone (406-587-6984), or Instagram (#gnfacobs).

Announcements, Avalanche Education and Events

Bridger Bowl is closed, and backcountry conditions exist. There is no avalanche mitigation or ski patrol rescue. In case of emergency, call 911. Please stay clear of work areas, snowmobiles, chair lifts and other equipment. Without the daily avalanche mitigation efforts of the ski patrol, backcountry conditions now exist within the boundaries of Bridger Bowl ([video](#)). Commonly traveled routes such as the North Bowl Road and any slope steeper than 30 degrees are avalanche terrain (i.e. most of the Ridge and Schlasman's terrain). Other groups above and below you may complicate the principles of safe travel.

See our [education calendar](#) for an up-to-date list of all local classes.

GENERAL SPRING SNOWPACK AND TRAVEL ADVICE

Spring weather can be highly variable and create a mix of avalanche problems. Snow conditions and [stability](#) can change drastically from day to day or hour to hour. Anticipate rapid change and plan accordingly. Abundant snowfall over the winter with more spring snow to come makes avalanches possible into summer.

NEW SNOW AND WIND LOADED SLOPES

Spring storms are notorious for depositing heavy amounts of snow in the mountains. Even with a deep and generally stable snowpack throughout the advisory area, heavy and rapid loads of new snow will decrease [stability](#). The main problems to look out for are avalanches breaking within the new snow, wind slabs, and loose snow avalanches. The likelihood of triggering an avalanche spikes during and immediately after snowstorms. New snow instabilities tend to stabilize quickly, but it's a good idea to give fresh snow a day to adjust before hitting big terrain. New snow instabilities can be challenging to assess, and spring storms bond to old snow differently across aspects and elevations. Conservative terrain selection is essential during and immediately following storms. Avoid wind-loaded slopes and slopes steeper than 35 degrees for 24-48 hours after new snow and wind.

New snow can quickly change from dry to wet on a spring day, and [stability](#) can decrease rapidly with above freezing temperatures or brief sunshine. New snow may bond well early in the morning and then easily [slide](#) later. Wet loose slides are likely during the first above freezing temperatures or sunshine immediately after a storm. Anticipate changes in snow [stability](#) as you change [aspect](#) or elevation and over the course of the day. An early start is always an advantage. Be ready to change plans or move to safer terrain at the first signs of decreasing [stability](#).

WET SNOW AVALANCHES

Spring and wet snow avalanches go hand-in-hand. Above freezing temperatures, rain, and/or intense sunshine cause the snow to become wet and weak and make wet avalanches easy to [trigger](#) or release naturally. Conditions tend to become most unstable when temperatures stay above freezing for multiple days and nights in a row. Avoid steep terrain, and be aware of the potential for natural wet avalanches in steep terrain above you, if you see:

- ? Heavy rain,
- ? Above freezing temperatures for more than 24 hours,
- ? Natural wet avalanches,
- ? Rollerballs or pinwheels indicating a moist or wet snow surface,

? Or if you sink to your boot top in wet snow.

In general, if the snow surface freezes solid overnight, the snowpack will be stable in the morning and [stability](#) will decrease through the day as snow warms up. The snow surface hardness, rate of warming, duration of sunshine, [aspect](#) and elevation determine how fast [stability](#) will decrease through the day. Be aware that sunny aspects may have a [wet snow avalanche](#) danger while shadier slopes still have a [dry snow avalanche](#) danger. Getting off of steep slopes should be considered when, or before, the above signs of instability are present. Wet snow avalanches, whether loose snow or slabs, can be powerful, destructive and very dangerous. Conservative terrain choices, starting early in the day, and careful observations can keep you safe. See Alex's recent video, and this article for more spring travel advice.

CORNICES

Cornices along ridgelines are massive and can break under the weight of a person (photo). Prolonged above freezing temperatures and rain make them weaker and possible to break naturally. They can break off suddenly and farther back than one might expect. [Cornice](#) falls can also entrain large amounts of loose snow or [trigger slab](#) avalanches. Stay far back from the edge of ridgelines and minimize exposure to slopes directly below cornices. Regardless of whether a [cornice](#) triggers a [slide](#) or not, a falling [cornice](#) is dangerous to anyone in its path.

DISCLAIMER

It does not matter if new snow falls or not, avalanches will continue to occur until the existing snowpack is mostly gone. Always assess the slope you plan to ride with diligence and safety in mind. Do not let your guard down. Travel with a partner, carry rescue gear and only expose one person at a time in avalanche terrain.

Have a safe and enjoyable spring and summer!

Doug, Alex, Ian and Dave

For more spring travel advice see this [article](#) from our GNFAC forecaster blog.