GNFAC Avalanche Forecast for Mon Apr 26, 2021

Good Morning. This is Alex Marienthal with a spring weather and snowpack update on Monday, April 26th. 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

Since Saturday evening the mountains got 14-16" of snow near Cooke City and the southern Madison Range, 10-12" in the Bridger Range, 9" near Big Sky and 4-5" in Hyalite and West Yellowstone. Wind has been west-southwest at 10-20 mph with gusts of 20-35 mph. This morning temperatures are mid-20s to low 30s F. A few more hours of precipitation today will deliver 1" of snow near Bozeman and Big Sky with 2-4" near Cooke City by tonight.

Tomorrow and Wednesday, temperatures will reach low 40s F under clear skies with wind shifting to the north at 5-10 mph. On Thursday and Friday, temperatures will reach highs in the 50s with overnight lows in the 30s and 40s F. Next weekend will remain warm and sunny before another round of colder temperatures and possible snow to start next week.

Snowpack and Avalanche Discussion

All Regions

Heavy new snow creates potential for dangerous avalanche conditions the next few days. The Bridger Range, Cooke City and southern Madison Range got 10-16" of snow equal to 1.3-1.7" of snow water equivalent (SWE), near Big Sky got 9" of snow equal to 0.9" of SWE, and Hyalite and West Yellowstone got 4-5" equal to 0.4-0.5" of SWE.

Today, large avalanches can be triggered by skiers, snowmobilers, climbers or hikers traveling on steep, snow-covered slopes. Avalanches will involve the new snow and could break as slabs, wide across or up slopes. Loose snow avalanches could run far and become large, especially where more snow fell. Carefully and continuously assess the stability of the new snow if you travel in avalanche terrain.

Through the week, anticipate avalanche danger to rise each day with sun and warm temperatures. The new snow will quickly get wet from the sun the next couple days, and wet snow avalanches will be easy to trigger and occur naturally. Later in the week, above freezing temperatures at night will prevent the snowpack from freezing and create potential for deeper, destructive wet snow avalanches. On some slopes there is still weak, sugary snow at the base of the snowpack that could produce large wet slabs (**photo**, **season snowpack summary video**). Plan to start your adventures early in the day and be off and out from underneath steep slopes before they have a wet, unsupportive snow surface. See below for additional general spring snowpack and travel advice.

We will issue our final snowpack and weather update on Friday. We will continue to share relevant avalanche and snowpack information on our website and social media when available. 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 (**video**). There is no avalanche mitigation or ski patrol rescue. Please stay clear of work areas, snowmobiles, chair lifts and other equipment.

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