GNFAC Avalanche Forecast for Fri Apr 26, 2024

Good morning. This is Alex Marienthal with a spring weather and snowpack update on Friday, April 26th. The Gallatin National Forest Avalanche Center has stopped issuing daily avalanche forecasts for the season. We will issue weather and snowpack updates through April on Monday and Friday mornings. This information does not apply to operating ski areas.

Mountain Weather

Prior to yesterday, the mountains had not received any snow since last Thursday. This week was mostly sunny with daytime temperatures reaching 40s and 50s F the last few days, and cooler cloudy weather arrived yesterday. This morning the mountains near Big Sky, Cooke City, and Hyalite have 4-6” of new snow with 2-3” near Island Park and none elsewhere. Temperatures are high 20s to mid-30s F, and wind is out of the west-northwest at 5-10 mph.

This weekend, daytime high temperatures will reach high 30s to low 40s F, and overnight lows will be high 20s to low 30s F. Wind will be northeast-east at 5-15 mph today, then shift to east at 15-25 mph tomorrow morning, and back to northwest-west on Sunday. Through the weekend snow is expected at higher elevations with the rain/snow line somewhere between 6500’ and 8000’. Showers later today and tonight will favor Big Sky and Cooke City with 5-8”, and elsewhere could get 2-3” by tomorrow morning, with a few more inches possible through the weekend.

Snowpack and Avalanche Discussion

All Regions

New snow will create the main avalanche hazards this weekend. Avalanches could show a range of characteristics, from slabs of wind-drifted snow to wet-loose avalanches that run long distances. Where more snow falls, slab avalanches could break within or below the new snow, even where not drifted.

If you travel on or below steep slopes, carefully assess the new snow for instability. Continuously reassess snow stability throughout the day, and as you move through different aspects and elevations. Watch for snow blowing across ridgelines and cracking across the snow surface as a sign that fresh, unstable drifts exist. Dig down to assess stability within and below the new snow. With above freezing daytime temperatures, expect wet snow stability to decrease through the day and plan to be off of steep slopes before the snow surface becomes sticky or wet.

Wet snow avalanches breaking deeper than the new snow are possible on slopes that have wet, unfrozen snow below the new snow, or where a lot of precipitation falls as rain on a wet and unsupportable snowpack. Wet slab avalanches were triggered last week by riders in the Taylor Fork (**photos and details**) and the Northern Gallatin Range (**photos and details**), and similar slides broke naturally on Mt. Abundance near Cooke City (**details and photos**) and in the Bridger Range north of Wolverine (**photo**).

Remain diligent with snowpack assessments and careful route-finding, and be ready to adapt your travel plan to changing conditions.

Give Big Gallatin Valley is May 2-3, 2024.

On May 2-3, please support the excellent non-profits of Gallatin County, including the Friends of the Avalanche Center (**GNFAC Giving Page HERE**). Your support goes toward offering free and low-cost avalanche education, weather stations, and avalanche center operations. This season, the education program reached over 5,000 students, including school-age youth and motorized and human-powered users. 6,500 people read our daily avalanche forecasts and more followed along on social media.

Upcoming Avalanche Education and Events

Hyalite Road Closure: Hyalite road is closed to ALL MOTORIZED VEHICLES until the morning of May 16. This is a regular annual road closure to reduce road damage during the spring thaw. Bicycle and foot traffic are allowed. Contact the Bozeman FS Ranger District for more info.

Events and Education Calendar.

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

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.