GNFAC Avalanche Forecast for Fri Apr 24, 2020

Good Morning. This is Ian Hoyer with a spring weather and snowpack update on Friday, April 24th. The Gallatin National Forest Avalanche Center has stopped issuing daily avalanche forecasts for the season. We will issue our final scheduled weather and snowpack next Monday, April 27th.

Mountain Weather

Since yesterday morning, the mountains near Bozeman and Big Sky got 2-4" of dense new snow with rain at lower elevations. There was no significant precipitation around West Yellowstone or Cooke City. This morning temperatures are 20s to low 30s F. Winds are northwest at 15-30 mph. Snow (and low elevation rain) showers will continue today. Tomorrow will be mostly sunny with light snow and rain returning on Sunday. High temperatures today will be in the 30s and 40s F with temps reaching into the 40s and 50s over the weekend. Winds will be generally westerly at 15-30 mph.

Snowpack and Avalanche Discussion

All Regions

A couple inches of new snow combined with moderate winds means you'll want to look out for wind drifts today, particularly on higher elevation slopes near ridgelines. You can trigger an avalanche in dry snow this morning or as the temperature rises and the new snow becomes wet. At low elevations the snowpack is already wet this morning. With above freezing temperatures each day, the snowpack will loose strength as the snow surface melts. The strong late April sun will accelerate the melting once it pops out.

Wet snow avalanches are the primary concern through the weekend. Widespread small wet loose avalanches were seen across the Bridger Range and around Big Sky this week with some slides breaking larger as well (**photo**, **photo**, **photo**). Similar slides will be easily triggered as the new snow gets wet for the first time.

Destructive wet slabs are also a possibility as meltwater drains deeper into the snowpack, particularly if we end up seeing more than a sprinkling of rain at upper elevations.

Wet snow can't be trusted. If you're sinking deeper than your ankles into unconsolidated slush, avoid steep slopes.

Read **this season's snowpack summary** for a review of the poor snowpack structure that could still produce big wet slabs.

Please continue to send us your observations. You can fill out an observation form, email us (mtavalanche@gmail.com), leave a VM at 406-587-6984, or Instagram (#gnfacobs). We greatly appreciate your support.

Give Big Gallatin Valley

Give Big Gallatin Valley is April 30th - May 1st. The Friends of the Avalanche Center are participating again this year and want to thank all of you for your support.

Closures and Stay-At-Home Order

A **Stay at Home order** is still in effect until Sunday for the State of Montana due to COVID-19. This order specifically discourages "outdoor recreation activities that pose enhanced risks of injury or could otherwise stress the ability of local first responders to address the COVID-19 emergency (e.g., backcountry skiing in a manner inconsistent with avalanche recommendations or in closed terrain)".

Bridger Bowl is closed and advises against uphill travel which could place first responders at risk. Backcountry conditions exist. There is no avalanche control or ski patrol rescue. Please do not loiter or congregate in the parking lots.

Park County is requesting anyone who is not a permanent resident or provider of essential service to avoid travel to Cooke City/ Silvergate. This includes both single day and overnight visitors.

Hyalite Canyon is closed to vehicle traffic and will reopen on May 16th. This is the regular spring use closure.

GENERAL SPRING SNOWPACK AND TRAVEL ADVICE

Spring weather can be highly variable and create a mix of avalanche problems to watch out for. 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 new snow a day to adjust before hitting big terrain. New snow instabilities can be difficult to assess, and spring storms bond to old snow differently across aspects and elevations. Conservative terrain selection is essential during and immediately following storms. Wind loaded slopes and slopes steeper than 35 degrees should be avoided 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 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,
- Roller balls or pin wheels 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.