GNFAC Avalanche Forecast for Mon Apr 6, 2020

Good Morning. This is Alex Marienthal with a spring weather and snowpack update on Monday, April 6th. 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

This morning the mountains near West Yellowstone and Cooke City have 1-2” of snow with none near Bozeman and Big Sky. Temperatures are high 20s F and wind is southwest at 10-25 mph. Today temperatures will be high 30s to low 40s F with west-southwest wind at 10-20 mph. Snow showers will continue this morning in the southern half of the advisory area with 1-3” today and a couple more tonight. Near Bozeman and Big Sky could get 1-2” of snow in the mountains with rain in the valley, and rain possible at higher elevations this afternoon.

Tomorrow skies will clear through the day. Wind will shift westerly this evening, and increase to 20-35 mph tomorrow afternoon. The middle to end of the week will be mostly sunny with temperatures overnight in the high 20s F and daytime temperatures reaching 30s to 40s F. There is a chance for snow next weekend.

Snowpack and Avalanche Discussion

All Regions

There is a full bag of avalanche concerns to watch for which is common this time of year. Over the weekend avalanches involved wet snow, wind-drifted snow, buried persistent weak layers and cornices (**details**, **photo**, **photo**, **details**). Today’s weather forecast has relatively high uncertainty, so conditions may change unexpectedly (also common during spring). If there is more snow than expected, fresh drifts could grow large. If there is more rain at higher elevations, wet loose and wet slab avalanches will be possible. Any brief sunshine will make wet avalanches possible, and above freezing temperatures will weaken large cornices (**photo**).

Just a few inches of new snow will create minimal hazard, but more than a drizzle of rain will increase wet avalanche hazard. If it rains hard, or if you see roller balls, pinwheels or natural wet slides avoid steep slopes. Where you find dry snow (higher elevation, northerly aspects), avoid fresh drifts and slopes where you find or suspect buried weak layers (**photo**, **photo**, **photo**). Also stay far back from the edge along ridgelines and avoid slopes below large cornices.

Through the middle of the week sunny skies and above freezing temperatures will make wet avalanches the main concern. Freezing overnight temperature will minimize large wet slab activity, but expect stability to decrease through each day for possible wet loose and shallow wet slabs. Start early when the snow is frozen or dry and be off and out from underneath steep terrain before the snow becomes wet. If you sink past your boot top into wet snow then it’s passed the right time to turn around, but not too late. See this **article** or info below for general spring snowpack and travel advice.

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.

SKI AND RIDE SAFE

Since Wednesday there were two tragic avalanche fatalities in Wyoming and Idaho (**report**, **report**), and in the last two weeks two avalanche accidents in Colorado required heli-evac for life-threatening injuries (**report**, **report**). **All of these accidents occurred during moderate avalanche danger.** A lot of people are out skiing and riding, and distancing themselves into new and untracked terrain. Please make conservative choices. Choose terrain where a slide will not carry you through rocks, over cliffs or into trees, no matter how certain you are of stability. Avoid avalanche terrain entirely to greatly reduce your risk of being injured or killed. Please consider the greater risk to rescuers, EMS resources and yourself at this time.

CLOSURES AND STAY-AT-HOME ORDER

A **Stay at Home order** is in effect 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