GNFAC Avalanche Forecast for Fri Apr 10, 2020

Good Morning. This is Ian Hoyer with a spring weather and snowpack update on Friday, April 10th. 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

There is no new snow this morning. Temperatures are in the high 20s to low 40s with winds 5-15 mph out of the west. Today will start off mostly sunny. High temperatures will be in the high 30s and 40s F. Winds will be westerly at 10-20 mph. Clouds will move in this afternoon ahead of an approaching cold front. Some rain and snow showers are possible this afternoon before snowfall ramps up tonight and tomorrow.

This weekend will remind us that we live in Montana and winter isn't through with us just yet. Low temps will drop down to the single digits F with highs in the 20s F. By Sunday, expect 6-12" of new snow in the northern ranges and around Cooke City, with 2-4" falling near West Yellowstone. The bulk of the snow will fall during the day on Saturday. Skies may clear again by Sunday afternoon. A warming trend will return next week.

Snowpack and Avalanche Discussion

All Regions

A big swing in the weather means we'll be worried about just about every type of avalanche at some point over the next three days.

Today will start off sunny and warm. Many slopes only lightly refroze overnight. Crusts will break down quickly this morning. If you're sinking more than ankle deep into wet snow it is time to get off sunny slopes or out of steep terrain entirely because the conditions for wet slides are developing. These could be wet loose avalanches or more dangerously, wet slabs. A number of natural and human triggered wet slabs broke over the last few days and they are a possibility once again today (**details**, **details**, **details**). Cornices have also been breaking, so give them a wide berth and minimize your time beneath them (**photo**).

Spring storms usually come with some degree of uncertainty and this one is no different. If the storm really delivers, expect to trigger avalanches within the new snow, especially on wind-loaded slopes where the new snow is drifted into deeper drifts. The faster the new snow falls and the more that it piles up the more dangerous conditions will become. The new snow will also add a (potentially rapid) load to the rest of the snowpack. If new snow starts to really accumulate before the wet snow in the snowpack has a chance to refreeze we may see more wet slab activity tomorrow. The new snow will also add stress to the buried weak layers that are still lurking on high elevation shady slopes and we may see avalanches on these layers as well (**photo**, **photo**, **photo**).

Don't push it this weekend. Most avalanches occur during and immediately after a storm. Instability will rise as snow accumulates. You may have been wearing flip-flops yesterday, but it is still avalanche season in the mountains and you'll need to bring your A-game if you're headed out.

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.

GNFAC Forecaster Chat

Monday, April 13, GNFAC Forecaster Chat: Spring snowpack and travel advice, Live Online w/ Uphill Pursuits @ 6-7 p.m. Link here for details and to join the discussion.

SKI AND RIDE SAFE

Last week there were two avalanche fatalities in Wyoming and Idaho. All fatalities are tragic and we try to objectively learn from them to avoid future accidents. In these recent accidents both victims had avalanche beacons, but they were not turned on. Both accidents occurred during moderate avalanche danger.

Always practice safe travel protocol (beacon checks, one at a time through avalanche terrain, watch from safe zones...). No matter what the danger is seek terrain where a slide will not carry you through rocks, over cliffs or into trees. Avoid avalanche terrain entirely to greatly reduce your risk of being injured or killed. Preliminary information on the recent accidents here:

http://www.jhavalanche.org/eventDetail/event/39526

https://avalanche.state.co.us/caic/acc/acc_report.php…

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

For more spring travel advice see this **article** from our GNFAC forecaster blog.