GNFAC Avalanche Forecast for Mon Apr 27, 2020

Good Morning. This is Alex Marienthal on Monday, April 27th with the Gallatin National Forest Avalanche Center's final weather and snowpack update for the season.

Avalanches will continue until the snow has melted. Remain diligent with careful snowpack assessment and cautious terrain selection. Please continue to share your avalanche observations. We will post them on our website/media to help each other stay safe. Thank you for your support and see you next fall.

Mountain Weather

Over the weekend temperatures reached high 40s to 50s F with overnight lows in the mid to high 30s F. The mountains did not get any snow since Thursday night, and wind has been west-southwest at 5-15 mph with gusts to 30 mph. Today will be mostly cloudy with light showers, temperatures in the 40s F and thunderstorms this afternoon. Skies will clear the next couple days followed by scattered rain and snow showers through next weekend. Daytime temperatures will reach 50s to 60s F with overnight lows in the high 20s to mid-30s F.

Snowpack and Avalanche Discussion

All Regions

Above freezing temperatures and rain this week make large wet avalanches likely. Temperatures were above freezing the last couple days and nights which caused the snowpack to lose strength and become unstable. Yesterday skiers reported large natural wet slides and a snowpack that had not frozen the previous night (**photo**). Expect similar conditions today and through this week. Wet slabs and wet loose avalanches will occur naturally and be easy to trigger. Either type of slide can run a long distance, entrain tons of snow and carry deadly force.

If the snowpack did not freeze solid overnight, travel in low angle terrain and be cautious of terrain above you where natural avalanches might initiate. Some mornings the snowpack might be frozen and stable, then lose strength through the day. Begin your travels as early as possible, and anticipate changes that will occur through the day and as you travel across different elevations and aspects.

See below for more detailed spring snowpack and travel advice. 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

The **Governor's phased reopening** still requests us to limit non-essential activities and continue to follow precautions to limit the spread of COVID-19. This 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.