GNFAC Avalanche Forecast for Mon Apr 29, 2019

Good Morning. This is Alex Marienthal with spring weather and snowpack information on Monday, April 29th at 7:00 a.m. The Gallatin National Forest Avalanche Center has stopped issuing daily avalanche forecasts for the season. This is our final spring weather and snowpack bulletin for this season. We will continue to share observations on our photos page, avalanche log and social media if we get out or receive any reports of avalanches.

Mountain Weather

Since Friday the mountains got 10-15" of snow (0.8-1.5" SWE). Yesterday wind was gusty out of the northwest to north at 10-20 mph with gusts of 30-40 mph. This morning temperatures are single digits to low teens F and wind is northeast at 5-15 mph. Today through Wednesday temperatures will reach mid-20s F during the day with low temperatures overnight in the teens F, and wind will be easterly increasing to 20-30 mph tonight. Skies will be mostly clear with increasing clouds this afternoon and 1-2" of snow possible tonight and 3-5" possible Tuesday. The second half of the week will be warmer, drier and mostly sunny. High temperatures will reach 40s F by Thursday with overnight low temperatures in the high 20s to low 30s F next weekend.

Snowpack and Avalanche Discussion

 All Regions

Recent new snow creates the main avalanche hazard this week. Avalanches breaking deeper than recent snow are unlikely until above freezing temperatures return for multiple days. On Saturday near Big Sky skiers found wind slabs that were easy to trigger (**photo**), and at Bridger Bowl skiers triggered loose new snow avalanches (**photo**). Similar avalanches are likely the next couple days (larger avalanches are possible) where wind drifts snow into thick cohesive slabs, or when the new snow gets wet with the first glimpse of sunshine or above freezing temperatures.

Thick drifts were formed by northwesterly wind yesterday, and today east wind will form fresh drifts where you might not usually find them. Avoid steep wind loaded slopes if you see cracking of fresh drifts or natural avalanches. Stability can change quickly when the sun comes out or temperatures get above freezing. Dry snow, drifted or not, will go from stable to unstable within minutes when it gets moist or wet. Wet slides are likely when the new snow warms up, and they can run long distances on firm snow underneath (**photo**). These could be either wet loose or wet slabs, and either one will be forceful and potentially destructive.

Spring weather can quickly change between snow, sun, rain, and temperatures above and below freezing. Snow stability changes rapidly from day to day and hour to hour. Now is just as important as ever to be diligent with snowpack assessment and choose terrain carefully (**video**). See below for more spring snowpack and travel advice.

GIVE BIG GALLATIN VALLEY

May 2-3 from 6pm-6pm. Give Big Gallatin Valley is a 24-hour online and live celebration of giving created to connect generous community members with the causes they care about most. Here is the link for more info and to support the Friends of the Avalanche Center during this event.

SHARE YOUR AVALANCHE OBSERVATIONS

We will update our weather and avalanche log daily through April. It is a valuable resource for backcountry travelers through winter and spring. If you have any avalanche observations, please share them with us to include in this database. Contact us via our website, email (mtavalanche@gmail.com), phone (406-587-6984), or Instagram (#gnfacobs).

INFO AND ANNOUNCEMENTS

Bridger Bowl is closed for the season. Backcountry conditions exist and there is no avalanche hazard reduction or ski patrol services.

The Hyalite road is closed to motorized travel until May 16th. Bike and foot traffic is allowed.

Sledders, mark your calendar for May 18, **the 3rd Annual Sled Fest in Cooke City**. It's a fundraiser for the Friends of the Avalanche Center with a DJ, raffle prizes and BBQ on the mountain.

Events and Education Calendar.

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, Eric, Alex, and Ian

If you get out and have any avalanche or snowpack observations to share, contact us via our website, email (mtavalanche@gmail.com), phone (406-587-6984), or Instagram (#gnfacobs).