GNFAC Avalanche Advisory for Mon Apr 30, 2018

Good Morning. This is Alex Marienthal with spring snowpack and weather information on Monday, April 30th at 7:15 a.m. The Gallatin National Forest Avalanche Center has stopped issuing daily avalanche advisories for the season. This is our final spring weather and snowpack update for the season. Our website will be updated on Wednesday with a general spring travel and snowpack statement.

Mountain Weather

On Friday and Saturday, temperatures in the mountains reached 60 F under mostly clear skies and overnight lows were mid to high 30s F. Over the past 24 hours the mountains received scattered rain showers and an inch or two of snow last night. Wind has been southwest to southeast at 5-10 mph and temperatures this morning are mid-20s to low 30s F. Colder and cloudier weather is forecast through the first half of the week. Temperatures will be high 20s to mid-30s F with light to moderate northerly wind. Scattered snow showers are expected daily in the mountains with 1-3” of snow possible each day through Wednesday.

Snowpack and Avalanche Discussion

 Bridger Range Gallatin Range Madison Range Lionhead Range Cooke City

The snowpack has finally taken a leap into spring conditions. Well above freezing temperatures this weekend melted water through the snowpack on all slopes except the highest, shady aspects (due north, above ~9,500'). Cold temperatures overnight refroze the snowpack solid and stable this morning. During the melt over the weekend, large natural wet loose avalanches and a few wet slabs occurred (**photo**, **photo**, **photo**). Colder temperatures and less sunshine the next few days will keep the snowpack mostly frozen and minimize larger wet slides like those observed over the weekend. Avalanche activity will mostly be confined to new snow that falls, or shallow wet slides if there is sunshine, rain or above freezing temperatures. See our general spring travel advice and avalanche information below.

Give Big Gallatin Valley this Thursday and Friday!!!

May 3-4th, **Give Big** online fundraising campaign! A 24-hour fund-raising campaign for the Friends of the Avalanche Center and other local nonprofits.

Share your observations with us on Instagram! #gnfacobs

Posting your snowpack and avalanche observations on Instagram (#gnfacobs) is a great way to share avalanche and weather information with us and everyone else this spring.

You can also drop a line via our website or email (mtavalanche@gmail.com) and we will share pertinent avalanche, weather and snowpack info as timely as possible.

Info and Announcements

Hyalite Canyon road is closed to vehicles and reopens May 16th.

Bridger Bowl is closed for the season and backcountry avalanche conditions exist.

Sledders, mark your calendar for May 19, the **2nd Annual Sled Fest** in Cooke City. It's a fundraiser for the Friends of the Avalanche Center and there will be a DJ, raffle prizes and BBQ on the mountain.

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 (**graphic**) with more spring snow to come will make avalanches possible well 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 terrain 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 Eric'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, and Alex