GNFAC Avalanche Advisory for Sat Apr 14, 2018

Good Morning. This is Doug Chabot with spring snowpack and weather information on Saturday, April 14th at 6:45 a.m. The Gallatin National Forest Avalanche Center has stopped issuing daily avalanche advisories for the season. We will update weather and snowpack information every Monday and Friday for most of April. Eric will update this information Monday morning. This bulletin does not apply to operating ski areas.

Mountain Weather

Another 1-2” of snow fell yesterday. At 5 a.m. skies are partly cloudy, temperatures are in the high teens to low 20s F, and winds are westerly at 15-30 mph. The weekend will be mostly cloudy with daytime highs reaching the 40s today and near 50 F tomorrow. Scattered snow showers will drop another 2-4” by Monday morning as winds shift southwest at 20 mph.

Winter will keep us hostage through next week, maybe longer, as Spring negotiates our release. Below average temperatures and above average precipitation remains on track for the rest of April.

Snowpack and Avalanche Discussion

Bridger Range Gallatin Range Madison Range Lionhead Range Cooke City

Yesterday we issued an Avalanche Warning in the Bridger Range after 30” of snow fell. The Bridger Bowl ski patrol reported many large slides breaking trees and running long distances. At Big Sky large avalanches were triggered by ski patrol in the 1-2’ of new snow. The patrol also noted a large natural slide on the NE face of Fan Mountain that was likely triggered by a cornice fall. Avalanche debris from new snow slides will be seen around Cooke City, West Yellowstone and the southern ranges from the 16-24” of snow that fell since Wednesday. The new snow will stabilize quickly, but triggering sluffs or wind slabs are possible through the weekend.

Winds have died down and temperatures will warm into the 40s F. Complicating matters, the new snow will provide ammunition for wet avalanches. Direct sunshine will turn dry snow wet head-spinning fast. Roller balls, pinwheels and loose snow avalanches are signs that the avalanche danger is getting worse.

The weekend will be much safer than Friday, but avalanches are still possible. Expect dry, new snow avalanches in the morning and possibly wet avalanches in the afternoon. Stability changes rapidly in the spring. You made it this far, so don’t blow it now. See our general spring travel advice below.

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.

Spring Weather Information

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 snow storms. 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

Info and Announcements

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.

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

On April 12, 2018, **Fisher Creek SNOTEL** reached its most SWE on record for one season!!!

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.