GNFAC Avalanche Forecast for Tue Dec 17, 2019

Good Morning. This is Dave Zinn with the Gallatin National Forest Avalanche Forecast on Tuesday, December 17th at 7:00 a.m. Today's forecast is sponsored by **Mystery Ranch** and **Yellowstone Ski Tours**. This forecast does not apply to operating ski areas.

Mountain Weather

35 mph winds blew from the west in the Bridger Range for the last 24 hours with gusts into the 40s mph. Elsewhere, 10-25 mph west winds were calm by comparison. Temperatures across the advisory area were in the single digits to low teens F and there was no new snow. Today, moderate to strong south to southwest winds will blow 15-30 mph, skies will be mostly clear, and temperatures will warm into the 20s F.

Snowpack and Avalanche Discussion

Cooke City

Last week Cooke City received 2 feet of snow with 2.5" of snow water equivalent (SWE). This snow fell on buried weak layers and over the weekend riders triggered several large avalanches with close calls on Mount Abundance (**photos and details**) and Crown Butte (**photos and details**). Yesterday, Doug and Ian rode north of Cooke City and found an icy crust with weak facets under two to three feet of snow (**video**). This crust is not everywhere so you have two options to stay safe if you want to ride in avalanche terrain. You can dig a snowpit on slopes where you are considering playing to look for this weak layer or you can give it a few more days without snow before venturing into avalanche terrain. Today it will still be possible to trigger large, consequential avalanches and the danger is rated **MODERATE**.

Madison Range Southern Gallatin Lionhead Range Island Park

Storms last week added 12-20" of snow with 1.7" of snow water equivalent (SWE) to a weak snowpack in the Madison, Southern Gallatin, and Lionhead Ranges. Two days ago riders in Taylor Fork found three avalanches, two released naturally and one looked to be snowmobile triggered (**photos and details**). Yesterday skiers in Northern Madison Range had a large collapse that extended 100' uphill of them (**photo**). In the last five days, we visited Buck Ridge (**video**), the Taylor Fork (**video**), and Lionhead (**video**) and found a weak structure capable of producing avalanches.

Avalanches are becoming harder to trigger as time passes since the last snowfall, but it remains possible to trigger large, consequential slides on weak snow near the ground. Only consider riding in avalanche terrain after thorough snowpack analysis and consideration of the consequences. The avalanche danger is rated **MODERATE.**

Bridger Range Northern Gallatin

In the last 24 hours moderate to strong winds in the Bridger Range transported snow creating fresh drifts and last night winds increased in Hyalite Canyon. Yesterday, the Bridger Bowl Ski Patrol triggered avalanches up to 18" deep and 150' wide during mitigation work. With winds forecast to continue today, I am concerned about wind-loading especially in higher elevation and exposed areas (**video**). In non-wind-loaded terrain, the structure of the snowpack is much better. While out climbing over the weekend Doug only found isolated instabilities related to the wind (**video**), I was encouraged by what I found on Mount Blackmore yesterday (**video**), and Alex liked what he saw on the Ramp two days ago.

With continued moderate to strong winds creating fresh wind slabs the avalanche danger is rated **MODERATE** on wind-loaded slopes and **LOW** everywhere else. Assess the consequences of these instabilities and the terrain before getting onto steep slopes.

If you get out, please send us your observations no matter how brief. You can fill out an **observation form**, email us (**mtavalanche@gmail.com**), leave a VM at 406-587-6984, or Instagram (#gnfacobs).

Upcoming Avalanche Education and Events

Our education calendar is full of awareness lectures and field courses. Check it out and plan to attend one or two: Events and Education Calendar.

BOZEMAN

December 18, **1-hr Avalanche Awareness**, 6-7 p.m. at Uphill Pursuits.

COOKE CITY

Every Friday and Saturday, **Snowpack Update and Rescue Training**. Friday, 6:30-7:30 p.m. at the Soda Butte Lodge. Saturday anytime between 10-2 @ Round Lake.

BILLINGS

December 17, **1-hr Avalanche Awareness**, 6-7 p.m. Elevated Powersports.

CHOTEAU

December 19, **1-hr Avalanche Awareness**, 7-8 p.m. at Choteau High School.