## **GNFAC Avalanche Forecast for Sun Feb 20, 2022**

Good morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Forecast on Sunday, February 20th, at 7:00 a.m. This information is sponsored by <u>Montana State Parks</u> and <u>Grizzly Outfitters</u>. This forecast does not apply to operating ski areas.

## AVALANCHE FATALITY NEAR COOKE CITY

We are sad to report that yesterday, February 19th, around 5 p.m. a snow biker (motorized) triggered and was killed in an avalanche on Miller Mountain in the Sheep Creek drainage north of Cooke City. The rider was carried through cliffs and partially buried with their hand and airbag visible, and sadly they did not survive. Doug will be in Cooke City today to gather more information, and we will release more details when they are available. Our sincerest condolences go to the family and friends of the rider.

## Mountain Weather

Since yesterday morning the mountains near Cooke City got 2" of new snow and elsewhere got zero. Wind has been west-southwest at 15-30 mph with gusts of 35-60 mph. Temperatures are teens to 20s F this morning and will decrease through the day to single digits F by tonight. Wind will be west-southwest at 15-30 mph, then back to 10-20 mph as snow starts to fall this morning. Snow is falling near Cooke City and will start elsewhere by mid-day. By this evening the mountains near Cooke City and Big Sky could have 3-6" with 1-3" elsewhere, and a total of 5-10" possible throughout the forecast area by morning.

Snowpack and Avalanche Discussion



Today near Cooke City dangerous avalanche conditions will develop. More new snow will add weight to an already unstable snowpack and make large human triggered avalanches likely. A weak layer of snow is buried 1.5-2 feet deep, and since Tuesday these mountains received steady snowfall adding up to more than a foot which was drifted into thicker slabs by strong west winds. Today these slabs will grow larger and be easy to trigger. They can be deadly on their own or break deeper and much larger on buried weak layers. The avalanche that killed a snowbike rider yesterday is unfortunate, clear evidence that the snowpack has become dangerously unstable (limited details). In addition, yesterday a skier intentionally triggered a medium sized avalanche on a wind-loaded slope near town (photo and details). These types of avalanches will be more likely today. Avoid travel on and below slopes steeper than 30 degrees, especially if they are wind-loaded. The avalanche danger is CONSIDERABLE.



Near Bozeman and Big Sky it is possible to trigger avalanches in the 8-17" of snow that fell since Tuesday. Be especially cautious of wind-loaded slopes where this snow was drifted into thicker slabs. On Thursday and Friday we visited Hyalite (video), Buck Ridge (video), and the Bridger Range (video) where we saw natural

avalanches that broke in the new snow on wind-loaded slopes (Buck photo, Divide photo, Bridgers details), and we intentionally triggered a couple small drifts from the ridgeline of Divide Peak (photos and details). These types of slides are possible today, and there is a chance they could break larger on buried weak layers. More snow today could add weight to recent drifts or form fresh drifts that could be small, but easier to trigger. Carefully assess the stability of recent drifts and new snow before riding steep slopes. Avalanche danger is MODERATE.



In the southern Madison, southern Gallatin and near West Yellowstone a layer of weak faceted snow is buried 6-12" deep which makes avalanches possible where wind has drifted recent snow into a thicker slab on top. On non-wind loaded slopes large avalanches are unlikely, but a shallow, small slab could break wide on the buried weak layer and be hazardous in consequential terrain. Ian rode in Taylor Fork yesterday and found unstable snowpack test results on this layer for the first time in weeks (video). It needs a little more load on top to create a widespread instability, but you should dig to look for it and test it before riding steep slopes and carefully assess slopes for recent wind-loading. If more snow falls today than is expected danger will rise. Today the avalanche danger is MODERATE on wind-loaded slopes, and LOW on all other slopes.

If you get out, please send us your observations no matter how brief. You can submit them via our <u>website</u>, email (<u>mtavalanche@gmail.com</u>), phone (406-587-6984), or Instagram (#gnfacobs).

## **Upcoming Education Opportunities**

See our education calendar for an up-to-date list of all local classes. Here are a few select upcoming events.

March 4, Companion Rescue Clinic with the Bozeman Splitfest. Information and registration HERE.

**Every Saturday near Cooke City**, 10 a.m.-3 p.m. FREE snowpack update and transceiver/rescue training. Stop by for 20 minutes or more at the Round Lake Warming Hut.