# **GNFAC Avalanche Forecast for Sun Dec 15, 2019**

Good Morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Forecast on Sunday, December 15<sup>th</sup> at 7:00 a.m. Today's forecast is sponsored by <u>Uphill Pursuits</u> and <u>Montana State Parks</u>. This forecast does not apply to operating ski areas.

#### Mountain Weather

Since yesterday the mountains near Bozeman got 2-4" of new snow, near Big Sky got an inch, and elsewhere did not get any. Overnight, wind was westerly at 10-20 mph with gusts to 25 mph. This morning temperatures are single digits to low teens F. Today temperatures will reach mid-teens F or less. Wind will be westerly at 15-25 mph in the northern mountains and 5-15 mph in the southern mountains. Today there is a chance for 2-3" of snow before skies clear for the next few days.

Snowpack and Avalanche Discussion



Yesterday near Cooke City a snowmobiler triggered and was caught in a 2-4 foot deep hard slab avalanche. He was luckily unharmed, while his sled was trashed (**photos and details**). Three other avalanches were triggered yesterday near Cooke City (**photo**), and another was triggered two days ago (**photo and details**). These large avalanches broke on weak layers below a couple feet of snow that fell last week (**video, photo**). Similar slides can be triggered today, especially on heavily wind loaded slopes where thicker slabs push weak layers closer to breaking. Avoid riding on and underneath steep slopes. Today the avalanche danger is **CONSIDERABLE**.

# Madison Range Southern Gallatin Lionhead Range Island Park

Near West Yellowstone and Big Sky, buried weak layers create an unstable snowpack and make large avalanches easy to trigger. Yesterday Dave was at Buck Ridge teaching a class, and he found the weak, sugary facets on the ground continue to be unstable (video). He also talked to some riders that reported triggering several avalanches. Over the last week we found this poor snowpack structure accompanied by signs of instability in Taylor Fork (video), Lionhead near West Yellowstone (video), and Buck Ridge near Big Sky (video). Without new snow the snowpack will slowly stabilize, but the fragile snowpack structure will make large avalanches a possibility for weeks or months. Today, large avalanches are easy to trigger and can be triggered from low angle terrain adjacent to steep slopes. Avalanche danger is CONSIDERABLE.



In the Bridger Range and Hyalite 2-4" inches of new snow and moderate wind make fresh slabs possible to trigger. The last couple days Doug found fresh wind slabs as the main concern on ice climbs. He explains how to

assess this hazard in his <u>video</u> from Thursday. Larger avalanches are possible if they break on deeper buried weak layers, such as what I found on Saddle Peak last week (<u>video</u>) or the layers that produced unstable test results for skiers in the northern Bridgers (<u>photo</u>). Yesterday in Hyalite, four separate groups dialed back their plans after digging and getting stability tests to break on weak layers 8" to 1.5' deep.

Watch for cracking of the snow surface as a sign that the new snow is unstable. Avoid slopes that are suspect of having buried weak layers, and dig to look for unstable buried weak layers before riding on steep slopes. Avalanche danger is <u>MODERATE</u>.

If you get out, please send us your observations no matter how brief. You can fill out an **<u>observation form</u>**, email us (<u>**mtavalanche@gmail.com**</u>), 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.