

## **GNFAC Avalanche Forecast for Thu Mar 2, 2017**

Good Morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Thursday, March 2<sup>nd</sup> at 6:45 a.m. Today's advisory is sponsored by [Gallatin County Search and Rescue](#) and [Excel Physical Therapy](#). This advisory does not apply to operating ski areas.

### Mountain Weather

Over the past 24 hours the mountains around Cooke City picked up 2-3" of new snow. The mountains around Big Sky and West Yellowstone picked up 1" while the mountains around Bozeman remained dry. At 5 a.m. temps range from the single digits to low teens F and winds are blowing 10-30 mph out of the W-SW. Today, there is little chance for accumulating snowfall and skies will be partly to mostly cloudy. Temps will warm into the mid-teens to upper 20s F and winds will continue to blow 10-30 mph out of the W-SW. No significant snowfall is expected over the next 24 hours.

### Snowpack and Avalanche Discussion

#### Cooke City

The mountains around Cooke City have picked up measurable snowfall every day for the past six days. Fisher Creek Snotel site is recording 1.1" of **snow water equivalent** since last Saturday. This incremental loading has started to produce unstable conditions. Yesterday, a skier south of town triggered two avalanches in non-wind loaded terrain, one remotely. These slides were breaking 12-16" deep and appeared to be failing on a facet-crust combination beneath the new snow (**photo**). This experienced skier mentioned that he did not find this instability on every slope. This warrants a quick snowpit a stability test to assess the snowpack structure before committing to steeper terrain.

An additional problem around Cooke City will be wind slabs. Strong winds out of the W-SW hammered this area the past few days. Although winds calmed overnight, I expect wind loaded slopes to be touchy to human triggers today.

In the mountain around Cooke City, human triggered avalanches are likely on wind loaded slopes which have a **CONSIDERABLE** avalanche danger. Non-wind loaded slopes have a **MODERATE** avalanche danger.

#### Madison Range Southern Gallatin Range

#### Lionhead area near West Yellowstone

The snowpack in the mountains around Big Sky and West Yellowstone has a buried weak layer 1.5-3' feet deep. This layer is tricky since it has gradually gotten stronger and does not exist on every slope. Yesterday, a skier near Hebgen Lake got two collapses on this layer on an E-NE facing slope. Collapsing and cracking are obvious signs of instability. On the contrary, I not find any concerning weak layers in my snowpits yesterday in Tepee Basin only a few miles north of Heben Lake.

We did observe a few small natural avalanches in wind loaded terrain. These slides stayed confined to the new snow and occurred on steep, upper elevation slopes (**photo**). Today, wind loaded slopes will continue to hold the potential to produce human triggered avalanches.

Today, the presence of wind slabs and weak layers make human triggered avalanches possible on all slopes and the avalanche danger is rated **MODERATE**.

Strong winds out of the W-SW over the past few days created thick wind drifts on leeward slopes. Yesterday, the Bridger Bowl Ski Patrol found wind loaded slopes to be more stubborn than expected, but they did produce the occasional avalanche with ski cuts and explosives. Watch for this problem below ridgelines and on the leeward side of exposed terrain features. Today, avoiding wind loaded slopes will be the best way to avoid triggering an avalanche.

Outside of wind loaded slopes the snowpack is mostly stable. On Tuesday, Doug and I skied Saddle Peak and found the deep snow from last weekend to be well bonded to the old snow surface ([video](#)). We also agreed that avalanches breaking on layers deeper in the pack are unlikely.

Today, human triggered avalanches are possible on wind loaded slopes which have a **MODERATE** avalanche danger. Non-wind loaded slopes have a **LOW** avalanche danger.

I will issue the next advisory tomorrow morning by 7:30 a.m.

**Note:** Cornices have grown with recent snow and wind. These monsters hang far off ridgelines and can be easily broken free by simply skiing nearby. Give them a wide berth. Many skiers and climbers have been injured or killed when a cornice breaks underfoot.

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We rely on your field observations. Send us an email with simple weather and snowpack information along the lines of what you might share with your friends: How much new snow? Was the skiing/riding any good? Did you see any avalanches or signs of instability? Was snow blowing at the ridgelines? If you have snowpit or test data we'll take that too, but this core info is super helpful! Email us at [mtavalanche@gmail.com](mailto:mtavalanche@gmail.com) or leave a message at 406-587-6984.

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### [Upcoming Events and Education](#)

**Beacon Training Park at Beall:** Open and free to the public for avalanche beacon practice seven days a week from 9 a.m. to 8 p.m., southeast corner of Beall Park in Bozeman ([photo](#)).

### **COOKE CITY**

**Weekly rescue training and snowpack update,** 6:30-7:30 p.m., Soda Butte Lodge on Friday, Lulu Pass Road for field location Saturday (Look for the [yellow sign](#)).

### **Bozeman**

March 4, **Pinhead Classic**, Proceeds to benefit Friends of GNFAC. More info [here](#).