

## [GNFAC Avalanche Advisory for Fri Feb 3, 2017](#)

Good Morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Friday, February 3<sup>rd</sup> at 7:00 a.m. Today's advisory is sponsored by [Gallatin County Search and Rescue](#) and [Montana Ale Works](#). This advisory does not apply to operating ski areas.

### Mountain Weather

Yesterday, the [groundhog](#) saw his shadow, which means six more weeks of winter. Hopefully an active and snowy weather pattern continues during this time. Over the past 24 hours, the mountains around Cooke City picked up 3-5" of low density snow while the mountains around Big Sky and West Yellowstone picked up 1-2". This morning, mountain temps are in the single digits to low teens F under partly to mostly cloudy skies. Winds are blowing 15-25 mph out of the W-SW with ridgetop gusts in Hyalite and Big Sky hitting close to 40 mph. Today, temps will warm into the teens to low 20s and winds will steadily increase out of the W-SW. A storm system will move into the area this evening producing light to moderate snowfall in the southern mountains. Cooke City, West Yellowstone and Big Sky will see 4-6" by tomorrow morning while the mountains around Bozeman will see 1-3".

### Snowpack and Avalanche Discussion

#### Cooke City

The mountains around Cooke City picked up 3-5" of low density snow over the past 24 hours. This puts the four-day total at close to 3 feet. Light wind the past few days combined with a good bond between the new snow and old snow surface has kept avalanche activity to a minimum ([video](#)). This could all change as winds are forecasted to increase throughout the day.

With an abundance of snow available for transport, wind slabs will grow in size and distribution as the winds increase ([photo](#)). Pay close attention to changing conditions and avoid being on or underneath steep slopes that are being heavily wind loaded. Given the sheer volume of new snow on the ground, avalanches are also possible on steeper, non-wind loaded slopes.

Today, dangerous avalanche conditions exist on wind-loaded slopes which have a **CONSIDERABLE** avalanche danger. Non-wind loaded slopes have a **MODERATE** avalanche danger.

#### Bridger Range Madison Range Gallatin Range

#### Lionhead area near West Yellowstone

Yesterday, Doug and his partners found buried surface hoar on Mt Ellis. They got easy propagation in stability tests and backed off their main objective. The tricky part about this layer is it does not exist everywhere. Doug did not find this layer until his third snowpit ([video](#)). Given the presence of buried surface hoar in the snowpack, it's always worth digging a quick snowpit to assess this layer before committing to steeper terrain ([photo](#), [photo](#)). Today, buried surface hoar will be one of a few different avalanche problems to contend with.

Moderate to strong winds out of the W-SW will be transporting snow and forming fresh wind slabs. These slabs will be resting over lower density snow or surface hoar, which will make them sensitive to human triggers. Watch for blowing and drifting snow and avoid slopes that are being actively loaded.

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

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

**Correction:** On Tuesday's Advisory we wrote that three climbers fell down a couloir on Abiathar Peak when the cornice they were standing on broke. This is incorrect. They were only feet away from the ridgeline when they triggered a very small (6" thick by 5' wide) wind slab that knocked them off balance and sent them tumbling 800' down the couloir.

### **King and Queen of the Ridge, Tomorrow!**

Hike this Saturday to support the Friends of the Avalanche Center and avalanche education. If you don't feel like hiking, you can sponsor a hiker with a dollar amount per hike or flat pledge. Need a hiker to sponsor? Alex and Eric will be hiking so consider making a pledge for them. Register with Bridger Bowl **HERE**, make pledges **HERE**. Thanks for your support.

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.

### **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.

#### **BOZEMAN**

February 7, **Sidecountry and Avalanche Awareness**, 6-7:30 p.m., Beall Park.

February 8, **1-hr Avalanche Awareness**, 7-8 p.m., Roskie Hall, Montana State University.

February 10 and 11, **Companion Rescue Clinic**, REI and field day, more info and register **here**.

#### **WEST YELLOWSTONE**

February 4 and 11, **1-hr Avalanche Awareness**, 7-8 p.m., West Yellowstone Holiday Inn.

#### **COOKE CITY**

**Weekly rescue training and snowpack update**, 6:30-7:30 p.m., Cooke City Super 8 on Friday, Lulu Pass Road for field location Saturday (Look for the **yellow sign**).

#### **DILLON**

February 4 and 5, **Intro to Avalanches with Field Day**, More info and sign up **HERE**.

#### **ENNIS**

February 17, **1-hr Avalanche Awareness**, 6-7 p.m.