

## [GNFAC Avalanche Forecast for Sun Feb 21, 2016](#)

Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Sunday, February 21, at 7:00 AM. Today's advisory is sponsored by [Spark R&D](#) and [Beartooth Powder Guides](#). This advisory does not apply to operating ski areas.

### Mountain Weather

Clear skies overnight allowed temperatures to drop into the single digits to low teens F. At 5 a.m. winds are blowing 10-20 mph out of the W-SW. Today, a ridge high pressure will produce clear skies and calm conditions during the morning hours. Highs will warm into the mid-20s to low 30s F and winds will continue to blow 10-20 mph out of the W-SW. The ridge begins to break down this afternoon as a weak storm system approaches the area. Skies will become partly to mostly cloudy by this evening and winds will increase and shift to the W-NW. Light snow is expected during the day tomorrow with 2-4 inches possible by Tuesday.

### Snowpack and Avalanche Discussion

[Southern Madison Range](#) [Southern Gallatin Range](#)

[Lionhead area near West Yellowstone](#) [Cooke City](#)

The mountains around Cooke City and West Yellowstone have one major avalanche problem – buried surface hoar ([video](#), [video](#)). This layer exists 1-2 feet deep and has produced a string of human triggered avalanches over the past few days. Yesterday, a Forest Service snow ranger working in Cooke City observed a recent snowmobile triggered slide on Sheep Mountain that broke 150 ft. wide on a northeast facing slope. Snowmobilers also triggered a slide yesterday on an east facing slope near Mt Abundance ([photo](#), [photo](#)). This slide failed on a slope that was 32 degrees at the steepest. This is a good example of how touchy conditions can be on buried surface hoar.

A snow ranger outside of West Yellowstone also observed a snowmobile triggered slide yesterday in Cabin Creek ([photo](#)). Other riders in that area observed cracking and collapsing. A majority of the avalanche activity around Cooke City and West Yellowstone is occurring on slopes facing north through east. These slopes were more protected from the strong west-southwest winds that accompanied Thursday night's storm. These slopes are also more wind loaded, which is adding additional stress to the buried surface hoar layer. On Friday, snowmobilers outside of Cooke City remotely triggered a large slide that initiated on buried surface hoar, but stepped down to depth hoar near the ground. This slide occurred on a heavily wind loaded slope.

Today, conditions will remain touchy in the mountains around Cooke City and West Yellowstone and the avalanche danger is rated [CONSIDERABLE](#).

[Bridger Range](#) [Northern Madison Range](#)

[Northern Gallatin Range](#)

The lack of new snow combined with the absence of freshly buried weak layers has created a mostly stable snowpack in the mountains around Bozeman and Big Sky ([video](#)). The snowpack structure remains poor on some slopes, but triggering a slide on weak layers buried mid pack and near the ground is unlikely. On Friday, my partner and I skied Mt Ellis, which has plenty of weak snow and a poor structure. However, we felt

comfortable skiing the steepest part of the slope due the lack of any recent loading event.

Today, it will be possible to find pockets of unstable snow on steep, wind loaded slopes. These areas will be most common in upper elevation terrain leeward to west-southwest winds. Wind slabs will likely be firm and stubborn today, but they have the potential to fail under the weight of a skier or rider.

For this reason, the avalanche danger is rated **MODERATE** on wind loaded slopes steeper than 35 degrees. All other slopes have a **LOW** avalanche danger.

I will issue the next advisory tomorrow morning by 7:30 a.m. If you have any snowpack or avalanche observations to share, drop us a line at [mtavalanche@gmail.com](mailto:mtavalanche@gmail.com) or leave a message at 587-6984.

## **EVENTS and AVALANCHE EDUCATION**

*A complete calendar of classes can be found [HERE](#).*

**Bozeman:** Wednesday, February 24, 6-7 p.m. ***1-hr Avalanche Awareness***, Roskie Hall, MSU.