

## **GNFAC Avalanche Forecast for Sun Feb 1, 2015**

Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Sunday, February 1, at 7:30 a.m. [Bozeman Ski Guide](#) and [Edward Jones](#) sponsors today's advisory. This advisory does not apply to operating ski areas.

### Mountain Weather

Overnight 1-2 inches of snow fell in the mountains around Cooke City. The rest of the advisory area remained dry. This morning, temperatures range from the single digits to low teens F and winds are blowing 10-25 mph out of the W-NW. Today, temperatures will warm into the mid to upper 20s F under partly cloudy skies and winds will continue to blow 10-25 mph out of the W-NW. A more potent storm system will begin to impact the area this evening. Mountains near Bozeman and Big Sky could see 1-3 inches by tomorrow morning while the southern Mountains could pick up 3-6 inches.

### Snowpack and Avalanche Discussion

#### Cooke City

A period of strong winds out of the west-northwest yesterday formed fresh wind slabs in upper elevation terrain. Skiers outside of Silver Gate triggered a wind slab that broke 50 feet wide and ran 500 vertical feet. They also observed a recent natural avalanche on Mt. Republic that appeared to be the result of recent wind loading. Today, wind slabs will continue to be the primary avalanche concern. Skiers and riders should be especially aware of this problem when traveling in steep, high consequence terrain. With more snow and wind in the forecast, wind slabs will continue to be a growing concern.

Aside from wind loaded slopes the snowpack is generally strong and stable. There is a layer of surface hoar at or just below the snow surface that will likely become a future problem ([photo](#)). Keep this layer in mind as a snowy weather pattern moves in over the next few days.

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.

#### Bridger Range Madison Range Gallatin Range

#### Lionhead area near West Yellowstone

It may sound like a broken record, but the snowpack continues to be locked up with no new snow. Good news for stability but bad news for riding conditions. In a few isolated areas, skiers or riders may find old, stubborn windslabs in exposed terrain or buried weak layers 6-12 inches deep that could produce small avalanches. Aside from these minor problems, the snowpack is generally stable.

We'll continue to pay close attention to a growing crop of [surface hoar](#) that has been observed in the mountains near Big Sky and West Yellowstone ([photos](#)). With snow in the forecast, this weak surface layer could become our next significant avalanche problem.

For today avalanches are unlikely and the avalanche danger is rated **LOW**.

For more details on past weather and avalanche events, check out the “[What’s Been Happening](#)” page, a new resource this season.

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

## **KING AND QUEEN OF THE RIDGE**

Saturday, February 14<sup>th</sup> is the **13<sup>th</sup> Annual King and Queen of the Ridge** Hike/Ski-a-thon fundraiser to support avalanche education in southwest Montana. Collect pledges for one, two or the most ridge hikes you can do in the five hours of competition. 100% of the proceeds go to the Friends of Gallatin National Forest Avalanche Center. Kids and families are encouraged to hike too! Hike as an Individual or Team. [Make a Pledge](#). [Sign Up and More Info](#).

## **RESEARCH PROJECT ON UNDERSTANDING TRAVEL BEHAVIOR IN AVALANCHE TERRAIN NEEDS YOU!!**

Scientists from the Snow and Avalanche Lab at Montana State University are seeking more participants for their project examining decision making and travel in avalanche terrain. Their project aims to collect GPS information (from your smartphone) and survey responses from backcountry skiers and riders to better understand what types of terrain are used, and how decisions are made. Their focus is on backcountry skiers and riders of all abilities and experience. You need not be an expert backcountry skier to participate in this research.

To Participate or get more information: [www.montana.edu/snowscience/tracks](http://www.montana.edu/snowscience/tracks) or their companion site directed toward snowmobilers at: [www.montana.edu/snowscience/sleds](http://www.montana.edu/snowscience/sleds)

## **AVALANCHE EDUCATION and EVENTS**

Take a look at our [Education Calendar](#) for all classes being offered.

**1-hour Avalanche Awareness**, Bozeman, REI, 6:30 p.m., Wednesday, February 4.

**1-hour Avalanche Awareness**, Great Falls, Back Alley Pub, Thursday, February 5.

**Woman's Specific Avalanche Awareness**, Bozeman, REI, 6:30 p.m., Wednesday, February 11.

**Companion Rescue Clinic Part 1**, Bozeman, REI, 6-8 p.m., Friday, February 20.

**Companion Rescue Clinic Part 2**, Field Location TBD, 10 a.m. - 2 p.m., Saturday, February 21.

**1-hour Avalanche Awareness**, West Yellowstone, Holiday Inn, 7 p.m., Saturday, February 21.