

## **GNFAC Avalanche Advisory for Sat Feb 1, 2014**

Good morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Saturday, February 1 at 7:30 a.m. The [Bountiful Table](#) and [406 Brewery](#) sponsor today's advisory. This advisory does not apply to operating ski areas.

### Mountain Weather

Since yesterday the mountains around Bozeman received 6 inches of cold snow. The mountains near Big Sky and Cooke City received 4 inches, and the mountains near West Yellowstone received 2 inches. Temperatures this morning were near 0 F, a little below at ridgetops and a little above in valleys. Winds were blowing 10-15 mph gusting to 20 mph from the WNW with a few places seeing winds from the SW. Today temperatures will struggle to reach 10 F as cloudy skies slowly give way to a little sunshine. Fortunately winds should remain light and blow 5-10 mph mostly from the WNW with gusts of 15 mph. The next round of snow should come Monday following a decisive win by the Broncos Sunday night.

### Snowpack and Avalanche Discussion

#### Gallatin Range Madison Range

#### Lionhead area near West Yellowstone

About a foot of snow fell Wednesday followed by a little more Thursday and Friday. Over the last 3 days the total water weight in most places is 1.5 inches of [snow water equivalent \(SWE\)](#). Without much wind recently I do not expect many natural avalanches but human triggered avalanches are likely.

There are three avalanche problems. Because of them, I would avoid avalanche terrain.

1. Most slopes have a faceted layer about a foot above the ground that has produced many avalanches this season. It gained a little strength during 2 weeks of warm and dry weather, but not nearly enough for me to trust it. This layer exists on most slopes.
2. A layer of small facets exists just under the new snow mainly on slopes sheltered from winds during the two weeks of dry weather.
3. While winds have been light in many areas during the last few days, the new snow has been light enough and winds have been strong enough at ridgetops to form fresh wind slabs that can easily be triggered today.

Signs of instability like recent avalanches or shooting cracks may or may not be obvious, but buried weak layers and plenty of new snow have made dangerous avalanche conditions. Today, human triggered avalanches are likely and the avalanche danger is rated [\*\*CONSIDERABLE\*\*](#).

#### Bridger Range Cooke City

The main avalanche problems in the Bridger Range and the mountains near Cooke City are fresh wind slabs and a thin layer of weak facets just under the new snow ([photo](#)). This layer of facets exists on some slopes but not all. Eric was riding near Cooke City yesterday and found this layer mostly on W and S aspects near an ice crust just under the new snow ([video](#)). He spoke with a group that had triggered a few small slides on this layer on S aspects near Round Lake. Additionally a skier on W aspects just south of Cooke City experienced much cracking

in the new snow on this thin layer of facets.

During the last 3 days the Bridger Range has received over 2 inches of [snow water equivalent \(SWE\)](#) which is a heavy load. Yesterday while riding with a Gallatin Snow Ranger we didn't see any signs of instability and found calm winds in most areas. However, some places like Frazier Basin had very strong winds and many fresh wind slabs that could easily be triggered.

Isolated slopes may have facets near the ground that could produce a very large avalanche. On most slopes in the Bridger Range and near Cooke City, this layer is not a problem but it is lurking in isolated areas. Snowmobilers triggered a large avalanche on this layer just a week ago near Cooke City on a steep rocky slope with a relatively thinner snowpack ([photo](#)). While not too likely, triggering a slide on this layer remains possible given the load of recent snow.

Today the avalanche danger is rated [CONSIDERABLE](#) on slopes steeper than 35 degrees. Less steep slopes have a [MODERATE](#) danger.

Eric 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 15<sup>th</sup> is the **12<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](#). [More Info](#).

## **ANDROID APP**

If you have an android phone or tablet, you can download our new free app. It's a slick way to get the advisory. [Search Google Play for GNFAAC](#). An iOS version is coming soon. Stay tuned.

## **EVENTS/EDUCATION**

February 6, BOZEMAN: Thursday, 6-8 p.m., Beall Park; **Women's Specific Avalanche Awareness Class and Transceiver Practice**.

February 8, BUCK RIDGE: Saturday, 10 a.m. to 4 p.m., **Companion Rescue Clinic for Snowmobilers**, Pre-Registration is required. <https://www.ticketriver.com/event/9446>

February 8, WEST YELLOWSTONE: Saturday, 7-8 p.m., Holiday Inn, **1-hour Avalanche Awareness** lecture.

February 12, BOZEMAN: Wednesday, 6:30-7:30 p.m., MSU Procrastinator Theater, **Sidecountry IS Backcountry** lecture.

February 22, BIG SKY: Saturday, 10 a.m. – 2 p.m., Beehive Basin Trailhead, **Companion Rescue Clinic**. Space is limited and pre-registration is required. <https://ticketriver.com/event/9964>

More information our complete calendar of events can be found [HERE](#).