

## **GNFAC Avalanche Forecast for Mon Mar 31, 2014**

Good Morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Monday, March 31 at 7:30 a.m. **Montana Ale Works** in partnership with the **Friends of the Avalanche Center** sponsors today's advisory. This advisory does not apply to operating ski areas.

### Mountain Weather

Over the past 24 hours the mountains around West Yellowstone and Cooke City picked up 6-8 inches of snow totaling .7-.8 inches of SWE. Shower Falls Snotel site in the northern Gallatin Range received 9 inches of snow equaling 1" of SWE and the Bridger Range picked up 3 inches of snow totaling .3 inches of SWE.

This morning temperatures are in the teens F and winds are light out of WNW blowing 5-10 mph. Today, lingering moisture will produce light snow showers in the mountains, but no real accumulations are expected. Highs today will warm into the upper 20s to low 30s and winds will remain light out of the WNW. Tomorrow looks to be a warmer and drier day.

### Snowpack and Avalanche Discussion

Gallatin Range Madison Range Cooke City

Lionhead area near West Yellowstone

The three day storm totals are impressive in the mountains south of Bozeman.

- Shower Falls Snotel Site – 1.8" of SWE
- Carrot Basin Snotel Site – 2.2" of SWE
- Madison Plateau Snotel Site – 2.3" of SWE
- Fisher Creek Snotel Site – 1.8" inches of SWE

This powerful spring storm has created a variety of avalanche problems. Wind slabs will certainly be an issue on steep, upper elevation slopes. Although winds have been calm over the past 12 hours, they blew hard yesterday out of the WNW. The Big Sky Ski Patrol found fresh wind slabs to very reactive during control work yesterday. I expect wind loaded slopes to remain sensitive to human triggers today ([photo](#)).

Due to the heavy amount of new snow, slopes do not need to be wind loaded in order to produce avalanches. Yesterday, a skier outside of Cooke City triggered avalanches 1-2 feet deep in non-wind loaded terrain. These slides were likely failing on weak interfaces within the storm snow. Although this type of instability is usually short lived, it will remain a concern over the next 24-48 hours. This type of problem is most pronounced on slopes steeper than thirty five degrees.

The scariest and most unpredictable problem will be avalanches failing at the ground. Weak layers buried deeper in the pack will most certainly be feeling the stress of the most recent load. On Saturday, a large natural avalanche was observed near the north Face of Mt. Blackmore in the northern Gallatin Range. This slide broke 2-7 feet deep and likely failed on facets near the ground ([photo](#), [video](#)). Although the probability of triggering a deep slab avalanche is fairly low, the consequences remain high. Avoiding steep, rocky terrain where the snowpack is shallow and weak is a good way to limit exposure to this problem.

Today, human triggered avalanches are likely and the avalanche danger is rated **CONSIDERABLE**.

### Bridger Range

The Bridger Range has picked up six inches of snow over the past few days. The snowpack has had little trouble dealing with this most recent load. Today, the primary avalanche concern will be wind slabs. This problem will be most prevalent on steep, upper elevation slopes below the ridgeline. Investigate each slope carefully before committing to steep terrain and always be thinking about the consequences of an avalanche.

Today, human triggered avalanches possible and the avalanche danger is rated **MODERATE**.

**Cornices:** Cornices are an increasing problem this time of year. They have grown enormous and can be unpredictable and dangerous. As cornice growth continues they will become increasingly unstable. Warm temperatures also have a destabilizing effect on these house sized chunks of snow. Avoid slopes directly under large cornices and give them a wide berth along the ridgelines.

Doug 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.

Our last daily avalanche advisory will be Sunday, April 6<sup>th</sup>. If conditions warrant we will issue intermittent advisories the following week.