

## **GNFAC Avalanche Advisory for Mon Mar 6, 2017**

Good Morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Advisory issued on Monday, March 6<sup>th</sup> at 7:15 a.m. Today's advisory is sponsored by [Gallatin County Search and Rescue](#) and [Spark R&D](#). This advisory does not apply to operating ski areas.

### Mountain Weather

At 6 a.m. the mountains south of Bozeman have 7-11" of new snow and the Bridger Range has 2". Wind this morning is west-northwest at 10-20 mph with gusts up to 30 mph, and temperatures are single digits to low teens F. Temperatures will be teens F most of today with west wind at 15-25 mph. Steady, light snow showers continue through tonight with more expected this week. By tomorrow morning the mountains will have 4-7" of new snow.

### Snowpack and Avalanche Discussion

Gallatin Range Madison Range Cooke City

Lionhead area near West Yellowstone

New snow improves the skiing and riding on all aspects today, and increases the avalanche danger. Avalanches are easy to trigger where new snow did not bond well to the old surface, such as sun crusts on southerly aspects. New snow will bond better on slopes sheltered from sun and wind that held dense powder yesterday, or slopes that had rough textures from wind scoured sastrugi. Where the riding was soft yesterday will be softer today and a good bet for better stability.

Be extra cautious of freshly wind loaded slopes, regardless of the prior snow surface. West to northwest wind moved new snow into fresh drifts that are easy to trigger. These soft slabs are 1-3 feet thick and especially easy to trigger where they formed over smooth sun crusts on southerly aspects. Wind slabs formed from southwest wind earlier in the week are less likely, but possible to trigger.

The new snow equals .5-.7" of [snow water equivalent](#) (SWE) and is a relatively small addition of weight to the snowpack. However, the mountains near Big Sky had the least snow since early February and weak layers there have gained little strength. New snow and wind make large avalanches more likely on weak facets buried 2-3' deep. Dig to assess this weak layer before riding any steep terrain. On Friday, we found weak layers buried 1.5-3' feet deep in the southern ranges are getting stronger ([video](#)). Near Cooke City and around Hyalite the snowpack lacks widespread weak layers, and avalanches below the recent snow and wind slabs are unlikely.

Today, new snow and wind make avalanches easy to trigger and the avalanche danger is [CONSIDERABLE](#).

Bridger Range

The Bridger Range is satisfied with improved riding conditions, despite less snow than the rest of the advisory area. Fresh wind slabs near ridgelines are easy to trigger today and up to a foot thick. Larger drifts that formed earlier in the week are less likely, but possible to trigger. A natural avalanche was triggered by a cornice fall behind Saddle Peak on Saturday and is evidence to avoid obvious drifts and slopes below cornices.

On Saturday we skied the west side of the Bridger Range and were surprised by multiple loud, rumbling collapses when we ascended a northwest facing slope around 7000' ([video](#)). Last week's powder settled into a dense slab above an ice crust with weak snow below. This instability is likely isolated to similar terrain nearby, and not to be ignored. The snowpack is generally stable elsewhere in the Bridger Range. I went to the Throne yesterday to search for weak layers and found stable snow on non-wind loaded slopes. We experienced strong southerly wind and avoided wind loaded slopes.

Today, avalanche danger is [MODERATE](#) on wind loaded slopes, and [LOW](#) on non-wind loaded slopes.

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

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 ([photo](#)).

### **COOKE CITY**

Next weekend, March 10 and 11, **UYSC 21<sup>st</sup> Annual Hog Roast**, More info [here](#). Free avalanche rescue practice on Saturday.