

## **GNFAC Avalanche Advisory for Sun Mar 30, 2014**

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

### Mountain Weather

Since yesterday morning the mountains around West Yellowstone including the southern Madison Range received 8-10 inches of high density snow totaling over 1" of SWE. Cooke City picked up 6-8 inches totaling .9 inches of SWE while the mountains around Big Sky including the northern Gallatin Range picked up 6-8 inches totaling .5-.7 inches of SWE. The Bridger Range squeezed out 2-3 inches of snow totaling .3 inches of SWE.

Currently, temperatures are in the mid to upper 20s F and winds are light out of the WSW blowing 5-15 mph. Today, temps will warm into the low to mid 30s F under cloudy skies and winds will remain light to moderate out of WSW. A second round of moisture will impact southwest Montana today producing valley rain and mountain snow. Precipitation will begin by mid-morning and will continue through the day. The mountains around Cooke City and West Yellowstone should see 6-8 inches of new snow by tomorrow morning. The Big Sky area will likely see 4-6 inches and Bridger Range should pick up 2-3 inches.

### Snowpack and Avalanche Discussion

Gallatin Range Madison Range Cooke City

#### Lionhead area near West Yellowstone

New snow and wind is the perfect recipe for avalanches. Yesterday, a large natural avalanche was observed on the north face of Mt Blackmore in the northern Gallatin Range. The slide broke 2-7 feet deep and hundreds of feet wide. It appears to be the result of a heavy wind load breaking on facets near the ground. This avalanche is a good example of what's possible in the backcountry right now.

Over the past twenty four hours a rapid and heavy load has put a tremendous amount of stress on the snowpack. Applied stress will be even greater on slopes that have received wind loading. Today, I would not trust the snowpack. Avalanches are likely in both the new snow ([photo](#)) and on deeper layers in the pack ([photo](#), [video](#)).

Under dangerous avalanche conditions such as these, careful snowpack evaluation, cautious route finding and conservative decision making are essential for safe backcountry travel. This means keeping your slope angles below thirty degrees and avoiding avalanche run out zones.

Today, human triggered avalanches are likely on all slopes and the avalanche danger is rated **CONSIDERABLE**. The avalanche danger could rise to **HIGH** on slopes steeper than 35 degrees if today's storm delivers heavy snow and strong winds.

#### Bridger Range

The Bridger Range is often the least favored during a pineapple express. With only a few inches of new snow, the pack will have little trouble supporting this light load. Strong winds yesterday did transport some snow below the ridgelines, which created dense and stubborn wind slabs. These day old slabs should be fairly glued on

to the old snow surface, but I still wouldn't trust them especially in steep, high consequence terrain.

Today, heightened avalanche conditions exist on specific terrain features. This makes human triggered avalanches possible and the avalanche danger is rated **MODERATE**. The avalanche danger could rise to **CONSIDERABLE** on slopes steeper than 35 degrees if today's storm delivers heavy snow and strong winds.

**Cornices:** Cornices are an increasing problem this time of year. They have grown into enormous monsters that 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. Avoiding slopes directly under large cornices and giving them a wide berth along the ridgelines is the best way to avoid being surprised by this growing hazard.

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.

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