

## **GNFAC Avalanche Advisory for Sun Feb 28, 2016**

Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Sunday, February 28, at 7:00 AM. Today's advisory is sponsored by [\*\*Community Food Co-op\*\*](#) and [\*\*Mystery Ranch\*\*](#). This advisory does not apply to operating ski areas.

### Mountain Weather

Over the past 24 hours the mountains south of Bozeman picked up 2-4 inches of snow while the Bridger Range picked up about an inch. At 5 a.m. snow has stopped falling and temperatures are in the upper teens to mid-20s F under partly cloudy skies. West winds are blowing 10-20 mph with a few ridgetop gusts hitting 30 mph. Today, temperatures will warm into the upper 20s to low 30s F and winds will remain moderate to strong out of the west. Skies will start out partly cloudy this morning and become mostly cloudy by this afternoon. Another storm system moves into the area tonight and tomorrow delivering widespread precipitation. The mountains should see 1-2 inches tonight with another 1-2 inches falling during the day tomorrow. This storm will favor the mountains south of Bozeman.

### Snowpack and Avalanche Discussion

[Southern Madison Range](#) [Southern Gallatin Range](#)

[Lionhead area near West Yellowstone](#) [Cooke City](#)

Yesterday's storm dropped 4 inches of snow in the mountains around Cooke City totaling .4 inches of SWE. The mountains around West Yellowstone picked 2-3 inches of snow totaling .2-.3 inches of SWE. This fresh shot of snow will improve conditions without really elevating the avalanche danger.

Today, the primary avalanche concern in the southern ranges will be a layer of surface hoar buried 1-2 feet deep. On Friday, we traveled to Bacon Rind and got widespread cracking and collapsing on east and north facing slopes – a clear indication this layer is still unstable ([video](#), [photo](#)). On Thursday, a snowmobiler triggered and was caught in a slide near West Yellowstone; a good reminder that human triggered avalanches are still possible ([photo](#)). The tricky part about buried surface hoar is it does not exist on all slopes. This makes snowpack and terrain evaluation very important before skiing or riding in avalanche terrain.

A secondary concern will be fresh wind slabs. Due to the high water content of the new snow, these fresh slabs should be well bonded to the old snow surface. However, it will be possible for skiers or riders to find small pockets of unstable snow - mainly in steep, wind loaded terrain below the ridgelines. In addition to fresh wind slabs, wind deposited snow could be applying additional stress to buried surface hoar. This combination could produce larger, more dangerous avalanches.

Today, wind slabs and weak layers make human triggered avalanches possible and the avalanche danger is rated [\*\*MODERATE\*\*](#).

[Bridger Range](#) [Northern Madison Range](#)

[Northern Gallatin Range](#)

Yesterday's fast moving weather system produced wild conditions in the north. Temperatures dropped ten degrees in a few hours and a brief round of lightning was observed with the frontal passage near Big Sky. Intermittent periods of precipitation dropped 2-3 inches of high density snow in the northern Madison and northern Gallatin ranges while the Bridgers squeezed out an angry inch.

The snow that fell was wet and heavy, which helped limit wind transport. However, areas of wind drifted snow likely exist on upper elevation slopes facing the east half of the compass, mainly below the ridgelines. These fresh drifts should be well bonded and reluctant to move, but it's always smart to evaluate wind loaded slopes before traveling on or underneath them. If a slide is triggered, it will likely be small and not run very far, but it's important to remember that even small slides can have severe consequences in steep, unforgiving terrain.

Today, small avalanches in isolated areas or extreme terrain are possible, but generally safe avalanche conditions exist and the avalanche danger is rate [\*\*LOW\*\*](#).

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

## **EVENTS and AVALANCHE EDUCATION**

*A complete calendar of classes can be found [\*\*HERE\*\*](#).*

**Bozeman:** Wednesday, March 9, 6-7 p.m. *1-hr Avalanche Awareness*, REI.