

## **GNFAC Avalanche Advisory for Mon Dec 11, 2017**

Good Morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Advisory issued on Monday, December 11<sup>th</sup> at 6:45 a.m. Today's advisory is sponsored by [Spark R&D](#) and [Gallatin Valley Snowmobile Association](#). This advisory does not apply to operating ski areas.

### Mountain Weather

Under clear skies this morning, temperatures are high 20s to low 30s F near ridgelines and 10-15 degrees colder in valleys. Wind is west-northwest at 15-25 mph in the northern ranges and Cooke City, and 5-15 mph elsewhere. Dry conditions will prevail today under mostly sunny skies. Temperatures will be 30s to low 40s F with west-northwest wind at 10-25 mph. There is a small chance for snow showers near Big Sky and Cooke City on Wednesday, and a better chance for snow for the entire advisory area Friday night through the weekend.

### Snowpack and Avalanche Discussion



**Bridger Range   Gallatin Range   Madison Range   Lionhead Range   Cooke City**

Last week, strong wind in the Bridger Range drifted snow into slabs below ridgelines and across mid-elevations along the edges of ridges and gullies ([photo](#)). Bridger Bowl Ski Patrol easily triggered these 1-3 foot thick slabs with explosives through last Friday. A couple warm days without load from snow and wind allowed these slabs to become stubborn and unlikely to break under the weight of a skier or rider. Although difficult to trigger, it is not impossible in steep terrain. Avoid drifts of snow on steep slopes or approach them with extra caution, especially where the consequences of a slide are high, like above cliffs ([photo](#)). Outside of the Bridger Range, small wind slabs near ridgelines are possible to trigger and should be approached with caution.

Aside from wind slabs, the snowpack is generally stable throughout the advisory area. There is a low possibility for snow from last week to slide on a layer of facets near the crust that formed during Thanksgiving. Dig 1-2 feet deep to assess the interface between the crust and last week's snow before riding anything steep.

Aside from small and difficult to trigger wind slabs today, a generally stable snowpack exists and avalanche danger is **[LOW](#)**.

Today's snow surface is next week's weak layer. The current ridge of high pressure contributes to current good stability, but leaves future stability to question. Cold nights and clear skies create a strong temperature gradient at the surface of the snowpack. The snow surface is much colder than snow just a few inches below, which promotes a rapid transfer of moisture between snow crystals and grows them into angular, weak, sugary facets ([photo](#)). These facets will be buried by the next snowfall, and we will have to be cautious and carefully assess stability before venturing into avalanche terrain. Feathery, surface hoar crystals also formed during these cold, clear nights and will pose a threat when buried ([photo](#)).

If you get out and have any avalanche or snowpack observations to share, drop a line via our [website](#), email ([mtavalanche@gmail.com](mailto:mtavalanche@gmail.com)), phone (406-587-6984), or Instagram (#gnfacobs).

## Upcoming Avalanche Education and Events

### Events and Education Calendar

#### BILLINGS

Dec. 12, **Avalanche Awareness for Snowmobilers**, 6-7:30 p.m. at Red Lion Hotel and Convention Center, Billings

#### BOZEMAN

Dec. 13, **Avalanche Awareness**, 6:30-8 p.m. at Gallatin Valley Snowmobile Association, 4-Corners

Dec. 21, **Avalanche Awareness**, 6-7:30 P.m. at Play It Again Sports, Bozeman

Jan. 12 and 13, **Companion Rescue Clinic**, [Info and Register](#)

Jan. 17, 18 and 20 or 21, **Introduction to Avalanches w/ Field Day**, [Info and Register Here](#)

Jan. 24, 25 and 27, **Advanced Avalanche Workshop w. Field Day**, [Info and Register Here](#)

Feb. 9 and 10, **Companion Rescue Clinic**, [Info and Register](#)

#### WEST YELLOWSTONE

Dec. 14 and 15, **Snowmobiler Introduction to Avalanches with Field Course**, [Info and Register Here](#)

#### COOKE CITY

15 and 16 December, **Weekly Current Conditions and Avalanche Rescue**, 6:30-7:30 p.m. Friday @ the Super 8, and anytime between 10-2 on Saturday @ Lulu Pass road.