# **GNFAC** Avalanche Forecast for Fri Feb 26, 2016

Good morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Advisory issued on Friday, February 26, at 7:15 AM. Today's advisory is sponsored by <u>Yellowstone Arctic Yamaha and Yamaha Motor</u> Corp in partnership with the Friends of the Avalanche Center. This advisory does not apply to operating ski areas.

#### Mountain Weather

At 4 a.m. mountain temperatures are in the 20s F and rising. Wind overnight was out of the west-southwest at 5-15 mph with gusts in the 20s. Today will be mostly clear with temperatures in the 30s to low 40s F. Wind will remain out of the west-southwest at 10-15 mph today, and then increase overnight to around 30 mph by morning. Expect a few inches of snow Saturday afternoon with more Sunday night.

Snowpack and Avalanche Discussion

### Southern Madison Range Southern Gallatin Range

### Lionhead area near West Yellowstone Cooke City

In the southern half of our advisory area there is a weak layer of surface hoar buried 1-3 feet deep. I found this layer near Hebgen Lake on Wednesday (video), and Karl Birkeland examined it at Bacon Rind on Monday (video). Last weekend, avalanches were triggered on this layer near Cooke City and West Yellowstone. Doug investigated one of these slides on Monday in Cooke City (video, photo), and observers have stocked our photo page with evidence of this unstable layer.

The mountains received only 2-3" of snow since multiple slides were triggered on the surface hoar last weekend. Without much load, this weak layer has adjusted to overlying stress and there are fewer places that you can trigger a slide. However, surface hoar is a persistent weak layer that can cause avalanches for weeks after it is buried. Yesterday, a snowmobiler triggered a small, but deep slide near Cabin Creek. They were not caught, but their sled was buried (photo). This is evidence the snowpack is unstable.

Steep slopes that have buried surface hoar should be avoided. The tricky part is this layer does not exist on every slope, so you have to study what is below the surface and dig to look for this layer. It is visible as a grey stripe in the snowpit wall (**photo**). If you don't find it, dig in another spot to confirm it is not there.

Other instabilities are weak facets buried 3-4 feet deep and depth hoar at the ground. These layers exist on many slopes, but have become less active without much load. Like surface hoar, these layers can cause avalanches for weeks to months after they are buried.

Buried weak layers make it possible to trigger an avalanche today, and the avalanche danger is rated **MODERATE** on all slopes.

## Bridger Range Northern Madison Range Northern Gallatin Range

The mountains near Big Sky and Bozeman have a mostly stable snowpack, but many slopes still have sugary, weak depth hoar near the ground. This weak layer has withstood minimal stress from a few small loads of snow

since January, and avalanches are unlikely to be triggered. Unlikely does not mean impossible. Dig a quick snowpit, only expose one person at a time to avalanche terrain, and carry rescue gear. For today, the avalanche danger is rated LOW.

Throughout the advisory area, above freezing temperatures and clear skies today will make wet loose avalanches possible on sunny slopes, and cornices could become more sensitive and trigger a larger slide if they fall. Watch for changing surface conditions, and be aware of what is above you as these slides may release naturally this afternoon.

Eric 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 <a href="mailto:mtavalanche@gmail.com">mtavalanche@gmail.com</a> 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.