

## **GNFAC Avalanche Advisory for Fri Jan 15, 2016**

Good morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Advisory issued on Friday, January 15, at 6:30 AM. Today's advisory is sponsored by the [\*\*Community Food Co-op\*\*](#) and [\*\*Lone Peak Brewery\*\*](#). This advisory does not apply to operating ski areas.

### Mountain Weather

Over the last 24 hours the mountains picked up 1-2" of snow. Storm totals for the past 48 hours are 4-7" with reports from Cooke City stating 18" of low density snow fell in the mountains. Winds have been out of the west-southwest and decreased overnight to 5-15 mph with gusts reaching 20 mph. Over the last 24 hours, westerly wind gusts exceeded 30 mph in the mountains around Bozeman and Cooke City. Temperatures this morning are in the single digits F. Today, temperatures will be in the teens F. Wind will be out of the west-northwest at 5-15 mph. Skies will be mostly cloudy with light snow showers this afternoon. Greater snow accumulation is expected Saturday afternoon through Sunday.

### Snowpack and Avalanche Discussion

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

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

The snowpack throughout our advisory area has three main characters of instability. Weak, sugary depth hoar at the ground, weak faceted snow near the surface, and wind slabs. The weak depth hoar at the ground produced natural and human triggered avalanches through the second half of December ([photo page](#)), and has since become more difficult to trigger. Despite the low likelihood of triggering an avalanche on this layer, the consequences of doing so are high ([video](#)). We continue to get unstable results in stability tests ([video](#)), and there have been a few human triggered avalanches on this layer in the past week ([photo](#), [photo](#)). It is a very real possibility to trigger a large avalanche on this layer.

Yesterday, a skier triggered an avalanche on the Football Field south of Bridger Bowl ([photo](#), [photo](#), [video](#)). This slide is a repeat offender as this path slid on depth hoar about a month ago ([photo](#)). The avalanche was 1-2 feet deep and failed on weak faceted snow near the ground. Luckily, no one was caught in this slide. Shallow areas of the snowpack that have underlying weak faceted snow are likely areas that you could trigger a slide. Whether the weak snow is depth hoar or near surface facets, either of these weak layers can propagate long distances and result in a large and potentially deadly avalanche.

Weak faceted snow near the surface has been observed in most areas ([video](#), [video](#)) and is now buried by a shallow soft slab of snow. In some areas, this weak snow has been buried by wind-blown snow, which has created deeper, denser slabs that are sensitive to human triggers. These slabs can be found near ridgelines and on leeward slopes. As we witnessed on the Football Field, unstable wind loaded slopes are not always confined to ridgelines. These avalanches could be large enough to bury or injure a person, or trigger a much larger avalanche on the weak depth hoar near the ground.

Weak snow buried by fresh wind slabs will make human triggered avalanches likely, and depth hoar at the ground means larger avalanches are possible. Today, the avalanche danger is [\*\*CONSIDERABLE\*\*](#) on wind loaded slopes and [\*\*MODERATE\*\*](#) on all other slopes.

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 [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](#).*

**Cooke City: TOMORROW!!** January 16, *1hr Avalanche Awareness*, Visitor's Center, 6-7:30 p.m.

January 30, *Companion Rescue for Snowmobilers*, <https://www.ticketriver.com/event/18078>

**Dillon:** January 19, *1hr Avalanche Awareness*, UM Western Library, 6:30-8 p.m.

January 23 and 24, *Intro to Avalanches w/ Field Course*, <https://www.ticketriver.com/event/18441>

**West Yellowstone:** January 23, and 30, *1hr Avalanche Awareness*, West Yellowstone Holiday Inn, 7-8:30 p.m.

**EVENT in Bozeman:** January 19, 5:30-7 p.m. and 7:30-9 p.m., *Avi Center Beer Social at Montana Ale Works*. This event is a fundraiser for the Friends of the Avalanche Center, \$35. Tickets here: <https://www.ticketriver.com/event/18542>

**EVENT at BRIDGER BOWL:** February 6, *King and Queen of the Ridge*. A day of hiking and skiing the Ridge as a fundraiser for the Friends of the Avalanche Center. Teams and individuals are welcome! More info here: <http://bridgerbowl.com/event/king-and-queen-of-the-ridge>

### ***ASMSU Intro to Avalanches w/ Field Course***

January 20, 21 and 23 or 24: <https://www.ticketriver.com/event/16861>

The workshops will be held on Wednesday and Thursday evenings, with a field course on either Saturday or Sunday. Different topics will be presented each evening. Topics include: avalanche terrain recognition, the effect weather has on avalanche hazard, the development of the mountain snowpack, decision making skills, and basic search and rescue procedures.

### ***Advanced Avalanche Workshop w/ Field Course***

January 27, 28, and 30: <https://www.ticketriver.com/event/16862>

Course content includes: snowpack metamorphism, the mechanics of avalanche failure and fracture, and decision-making. Different topics are covered each evening session. The field session includes snowpack analysis and avalanche rescue scenarios.