

## **GNFAC Avalanche Advisory for Fri Feb 5, 2016**

Good morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Advisory issued on Friday, February 5, at 7:15 AM. Today's advisory is sponsored by [\*\*Yellowstone Arctic Yamaha and Yamaha Motor Corp\*\*](#) in partnership with the Friends of the Avalanche Center. This advisory does not apply to operating ski areas.

### Mountain Weather

Since yesterday morning the mountains near Bozeman and Cooke City received 3" of low density snow, and the mountains near Big Sky and West Yellowstone received about 7". Winds overnight were out of the west-northwest at 15-20 mph, and gusts were in the 40s near Bozeman and Big Sky. Temperatures this morning are in the single digits to low teens F. Temperature today will rise to the low 20s F under partly cloudy skies. Wind will remain out of the west-northwest around 20 mph and will increase tonight. The next chance for significant snowfall is tomorrow.

### Snowpack and Avalanche Discussion

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

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

Snowfall amounts since Monday range from 10-20" and totaled around .5" of snow water equivalence ([\*\*SWE\*\*](#)). Steady strong winds over the last 72 hours and continued snowfall are a good combination to grow wind slabs. Doug was riding at Lionhead yesterday and noted more snow than the instruments have shown, and drifts at all elevations. An observer in Hyalite yesterday found over a foot of low density snow that was not detected by the SNOTEL sites. On Wednesday, my partner and I saw recent small wind slabs and wind loading in Hyalite. This wind loading combined with unstable depth hoar had us making careful terrain selection ([\*\*video\*\*](#)). Ski patrols have reported soft cornices and slabs that were easy to trigger the last couple days. Today, expect to find larger and denser wind slabs near ridgelines and on leeward slopes.

Buried weak layers increase the danger on slopes where they exist. Depth hoar at the ground can be found on all slopes, and facets 1-2 feet below the surface can be found on some slopes. These weak layers have shown improved stability, but are still unstable on some slopes ([\*\*photo\*\*](#), [\*\*photo\*\*](#)). Slopes where it may be more likely to trigger an avalanche on these layers include wind loaded slopes that have variable slab depth and slopes with an overall shallower snowpack.

[\*\*Doug\*\*](#) and [\*\*Eric's\*\*](#) videos from the Bridger Range explain how the increased variability makes stability assessment difficult. When stability is the question, terrain is the answer. The easy solution is to avoid steep slopes. If you do ride steeper slopes you can reduce the consequences of a slide by limiting the consequences of the terrain. Trees often give a sense of stability, but on steep slopes they become your enemy if caught in a slide. Our friend Mark Staples describes the consequences of treed terrain in [\*\*this video\*\*](#) from a fatality that occurred on Sunday in Utah. This is similar terrain to the slide that killed a patroller near the Yellowstone Club two weeks ago ([\*\*photo\*\*](#)).

Today, wind slabs will be likely to trigger and avalanches on buried weak layers are possible. The avalanche danger today is [\*\*CONSIDERABLE\*\*](#) on all wind-loaded slopes and [\*\*MODERATE\*\*](#) on all other slopes.

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.

### **Darren Johnson Avalanche Education Memorial Fund**

The National Avalanche Foundation set up an education fund in memory of Darren Johnson, the Yellowstone Club ski patroller who died in an avalanche on January 19. You can check out the details and make donations here: <http://www.mtavalanche.com/sites/default/files/NAF%20Darren%20Johnson%20Memorial%20Fund.pdf>.

### **EVENTS and AVALANCHE EDUCATION**

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

West Yellowstone, TOMORROW!!, February 6: ***1hr Avalanche Awareness***, West Yellowstone Holiday Inn, 7-8 p.m.

Bozeman, Tuesday, February 9: ***1hr Avalanche Awareness for Snowmobilers***, Summit Motorsports, 6-7 p.m.

Wednesday, February 10: ***1hr Avalanche Awareness for Women***, REI, 6-7 p.m.

**SATURDAY 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>.