GNFAC Avalanche Advisory for Sun Feb 7, 2016

Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Sunday, February 7, at 7:00 AM. Today's advisory is sponsored by **Bridger Bowl** and **Cooke City Super 8/Bearclaw**. This advisory does not apply to operating ski areas.

The GNFAC would like to extend a huge thanks to all who participated in the King and Queen of the Ride yesterday. The event had a record turnout of 66 competitors who rallied for a total of 814 hikes. The King of the Ridge was Tom Snyder with 26 hikes and the Queen was Alex Benjiman with 20 hikes. All proceeds from this event support the Friends of the Gallatin National Forest Avalanche Center. This event couldn't be held without the amazing support of Bridger Bowl - thanks for making it happen!

Mountain Weather

The big weather story over the past 24 hours has been wind. While no new snow has fallen, overnight winds have been blowing consistently at 20-40 mph out of the W-NW with ridgetop gusts pushing 50 mph. This morning temperatures are in the teens F under mostly clear skies. Today, winds will continue to be strong out of the W-NW through the morning hours, but will begin to relax by this afternoon. Temps will warm into the mid-20s to low 30s and skies will remain mostly clear. There is little to no chance of precipitation over the next 24 hours.

Snowpack and Avalanche Discussion

Bridger Range Madison Range Gallatin Range

Lionhead area near West Yellowstone Cooke City

Intense winds have impacted the entire advisory area. Yesterday, wind speeds in excess of 70 mph were reported near Big Sky with gusts up to 50 mph recorded elsewhere. Winds blew predominantly out of the W-SW yesterday morning then shifted to the W-NW in the afternoon.

Wind can transport snow 10 x faster than snow can fall from the sky which can rapidly create unstable conditions. Yesterday, snowmobilers up Buck Ridge in the northern Madison Range triggered multiple small wind slabs on east through north facing slopes. Although these slides were not large, they are bulls eye information that wind loaded slopes are unstable (**photo**). Snowshoers up Deer Creek in the northern Madison Range also reported large shooting cracks on windloaded slopes (**photo**).

While wind slabs are the primary avalanche concern, faceted layers buried mid-pack and near the ground still hold potential to produce avalanches. On Friday, my partner and I were in Cooke City and experienced a large collapse on a south facing slope. Small facets on top of a suncrust roughly 18" deep caused this instability. We also got unstable results in our stability tests on this layer (video, photo). While facets buried 1-2 feet deep don't exist on all slopes, they have a wide enough distribution to warrant a quick snowpit and stability test before committing to steep terrain.

Facets near the ground are becoming stronger and less of a concern - but if you found the right spot on the right slope, you could still trigger a large avalanche on this layer. See a recent video that Alex made describing this

problem (video).

Today your chances of triggering a slide on a wind loaded slope are about the same as those of the Carolina Panthers winning the super bowl...it is likely. All wind loaded slopes have a **CONSIDERABLE** avalanche danger. Triggering a slide on non-wind loaded slopes will be more difficult but not impossible, just like the Bronco's quest for an upset. Non-wind loaded slopes have a **MODERATE** avalanche danger.

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 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 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**.

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

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