GNFAC Avalanche Forecast for Sat Feb 6, 2016

Good morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Advisory issued on Saturday, February 6, at 7:00 AM. Today's advisory is sponsored by **Gallatin County Search and Rescue** and **Buck Products**. This advisory does not apply to operating ski areas.

Mountain Weather

The mountains did not receive any new snow since yesterday morning, except for Cooke City where they received 2-3". Temperatures this morning are in the teens to low 20s F and wind is out of the west-southwest. In the mountains near Bozeman and Big Sky wind speed is 20-30 mph with gusts up to 50 mph. In the southern mountains wind speed is 10-15 mph with gusts around 20 mph. Today, wind will be westerly and increase to 30-40 mph with gusts up to 60 mph in the northern areas. In the southern areas wind will be 20-30 mph with gusts around 40 mph. Temperatures will be in the 20s F and light snow showers this afternoon will deliver 1-2".

Snowpack and Avalanche Discussion

Bridger Range Madison Range Gallatin Range

Lionhead area near West Yellowstone Cooke City

Over the past few days, steady light snowfall and strong winds formed wind slabs. Strong wind will continue today with increasing speeds this morning, but snow available to transport and grow wind slabs will be minimal. Wind slabs will be possible to trigger today and can be found near ridgelines and on slopes leeward to westerly winds.

It is also possible to trigger an avalanche on one of the buried persistent weak layers that exist throughout our advisory area. Some slopes have facets 1-2 feet below the surface, and most slopes have weak depth hoar at the ground. Eric found both of these in Cooke City this week and discusses their distribution in this <u>video</u>. Increased variability of these weak layers makes stability evaluation difficult (<u>video</u>, <u>video</u>). Depth hoar at the ground has become more difficult to trigger, but it is still possible if you find the right spot on the right slope. Facets near the surface have variable distribution and stability, but these layers near the surface are easy to look for and test by digging quick snowpits.

When uncertainty is high in regards to stability, careful terrain selection can reduce the risk of an avalanche. You can avoid steep slopes all together, or lower the consequences of a slide by avoiding steep slopes with hazards such as trees, cliffs, or confined gullies. Slopes where it is more likely to trigger an avalanche on buried weak layers include slopes with an overall shallower snowpack, such as those that already avalanched on the depth hoar (photo), and wind loaded slopes that have more stress over the weak layer and a variable slab depth where you might find a shallow trigger point (photo, photo).

Today, the avalanche danger is rated **MODERATE** on all slopes. Avalanches are possible to trigger and could be large due to buried persistent weak layers. Cautious route finding is advised.

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 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**.

<u>TODAY at BRIDGER BOWL</u>: 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.

West Yellowstone, **TONIGHT!!**, 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: Ihr Avalanche Awareness for Women, REI, 6-7 p.m.