GNFAC Avalanche Advisory for Fri Feb 24, 2017

Good Morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Friday, February 24th at 6:45 a.m. 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 around Bozeman and Big Sky picked up 1-2" of new snow. At 5 a.m. temperatures are in the single digits under partly to mostly cloudy skies. Winds are blowing 5-10 mph out of the E-NE and SE. Today, highs will warm into the teens and winds will remain light and shift to a more westerly flow. Skies will remain partly to mostly cloudy and no real snow accumulation is expected today. There is a better chance for light snow showers tonight in the northern ranges which could see 1-2" by tomorrow morning.

Snowpack and Avalanche Discussion

Madison Range Southern Gallatin Range Lionhead area near West Yellowstone

The mountains around Big Sky and West Yellowstone have two distinct avalanche problems. The primary problem is wind loaded slopes. Earlier in the week, heavy snow and strong winds out of the W-SW produced widespread natural avalanches, mainly in the mountains near West Yellowstone (**photo**, **photo**, **video**). Winds have calmed over the past few days, which has allowed wind loaded slopes a chance to stabilize. Today, wind loaded slopes won't be hair trigger, but they still hold the potential to fail under the weight of skier or rider.

A secondary concern is a layer of facets buried 1.5-3 feet deep. This layer continues to produce unstable results in stability tests along with the occasional avalanche. It does not exist on every slope, so it's worth digging a quick snowpit to look for and assess before riding steeper terrain.

Wind slabs and weak layers make human triggered avalanches possible today and the avalanche danger is rated **MODERATE**.

Bridger Range Northern Gallatin Range Cooke City

The snowpack in the mountains around Bozeman and Cooke City have similarities and differences. The main difference is the snowpack around Cooke City is over twice as deep as the snowpack around Bozeman. These two areas are similar in the fact that neither has widespread persistent weak layers. This has limited the avalanche hazard to new snow instabilities, primarily wind slabs.

Over the past few days, winds have blown out of the E-NE, which has formed wind drifts in some unusual places. Yesterday, my partner and I skied north of Bridger Bowl and found cornices and wind slabs building on the west side of the ridge (<u>video</u>). These weren't highly reactive, but we still avoided wind loaded slopes in steeper terrain. Winds speeds and direction have been similar around Cooke City over the past few days.

Outside of wind loaded slopes the snowpack is generally stable.

Today, human triggered avalanches are possible on wind loaded slopes which have a **MODERATE** avalanche danger. Non-wind loaded slopes have a **LOW** avalanche danger.

Alex will issue the next advisory tomorrow morning by 7:30 a.m.

We rely on your field observations. Send us an email with simple weather and snowpack information along the lines of what you might share with your friends: How much new snow? Was the skiing/riding any good? Did you see any avalanches or signs of instability? Was snow blowing at the ridgelines? If you have snowpit or test data we'll take that too, but this core info is super helpful! Email us at mtavalanche@gmail.com or leave a message at 406-587-6984.

Upcoming Events and Education

<u>Beacon Training Park at Beall</u>: Open and free to the public for avalanche beacon practice seven days a week from 9 a.m. to 8 p.m., southeast corner of Beall Park in Bozeman (**photo**).

COOKE CITY

Weekly rescue training and snowpack update, 6:30-7:30 p.m., Cooke City Super 8 on Friday, Lulu Pass Road for field location Saturday (Look for the **yellow sign**).

Bozeman

March 1, **1-hr Avalanche Awareness**, 6-7p.m., REI Bozeman.

March 4, **Pinhead Classic**, Proceeds to benefit Friends of GNFAC. More info here.