GNFAC Avalanche Forecast for Fri Dec 11, 2015

Good morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Advisory issued on Friday, December 11, at 7:30 a.m. Today's advisory is sponsored by <u>Yellowstone Arctic Yamaha and Yamaha Motor</u> Corp. This advisory does not apply to operating ski areas.

AVALANCHE WARNING

The Gallatin National Forest Avalanche Center is continuing a Backcountry Avalanche Warning for the **mountains around Cooke City**. The avalanche danger is rated <u>HIGH</u> on all slopes. Heavy snow and strong winds are overloading a weak snowpack structure. Natural and human triggered slides are likely today. Avalanche terrain and avalanche runout zones should be avoided.

Mountain Weather

Temperatures yesterday were in the 20s F and dropped to the teens this morning. Winds were out of the west around 20 mph with gusts between 50 and 60 mph yesterday afternoon. Average wind speeds this morning are around 15-20 mph. Since yesterday morning, the mountains around Bozeman and Big Sky received 2-3" of new snow and the Lionhead area picked up 5". With SNOTEL sites still down, I can say at least 5" inches of snow fell in the mountains around Cooke City based on reports from town and webcams. Our next chance for snow will be Sunday. Today will be mostly clear with temperatures in the mid-20s F and wind less than 20 mph out of the west.

Snowpack and Avalanche Discussion

Cooke City

Since Wednesday night, at least 1.2" of <u>SWE</u> has been added to the snowpack near Cooke City. The mountains have received over 2.5" of SWE since Monday night, and winds were gusting up to 50 mph on Wednesday and Thursday. This is a lot of weight that has been added to a weak faceted snowpack (<u>video</u>). We have received reports of unstable snow and human triggered avalanches since Tuesday (<u>photo</u>), and more snow last night will continue to create dangerous avalanche conditions. Today, I expect natural and human triggered avalanches and the avalanche danger is rated <u>HIGH</u> on all slopes.

Madison Range Southern Gallatin Range

Lionhead area near West Yellowstone

The mountains near West Yellowstone received .5" of SWE in the last 24 hours. This snow fell on a weak and unstable snowpack, which Doug and I observed yesterday (video). Near Big Sky, about .2" of SWE fell and strong winds were recorded. Since Monday, the Big Sky and Yellowstone Club ski patrols have triggered many avalanches that stepped down to weak faceted snow near the ground. This time of year, the snowpack at the ski area is a good indicator of backcountry stability. Yesterday's new snow and strong winds will make the avalanche danger today **CONSIDERABLE** on all slopes.

Bridger Range Northern Gallatin Range

Above freezing temperatures earlier this week helped strengthen the facets and old wind slabs in the mountains around Bozeman. Weak snow is still present, primarily at higher elevations. New snow last night and moderate winds will create wind slabs on this weak snowpack. Look for unstable snow on leeward slopes where fresh slabs have formed over faceted weak snow. Today, the avalanche danger is **MODERATE** on wind loaded slopes and **LOW** elsewhere.

Ice Fest Report:

The snowpack in Hyalite is variable and contains unstable pockets where wind slabs rest over weak snow (<u>video</u>). If you experience signs of instability, such as shooting cracks, I recommend descending. Even tiny avalanches can sweep climbers off cliffs or hit people below.

Eric will issue the next advisory tomorrow morning at 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.

EVENTS and AVALANCHE EDUCATION

A complete calendar of classes can be found <u>HERE</u>.

Bozeman: December 15, Tuesday, Avalanche Awareness and Beacon 101, Beall Park, 6-8 p.m.

Bozeman: December 16, Wednesday, *MAP Brewing Fundraiser*, \$1 pint donated to the Friends of the Avalanche Center

Cooke City: December 23, Avalanche Awareness, Cooke City Visitor's Center, 6-7:30 p.m.

West Yellowstone: Snowmobiler Introduction to Avalanches with Field Course

December 17 and 18, 2015: https://www.ticketriver.com/event/17356

Five hours of lectures are followed by a full day field course. Topics include: avalanche terrain recognition, the affect weather has on avalanche hazard, the development of the mountain snowpack, decision making skills, and basic search and rescue procedures.