GNFAC Avalanche Advisory for Wed Dec 16, 2015

Good morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Wednesday, December 16, at 7:30 a.m. Today's advisory is sponsored by **Community Food Co-op** and **Spark**1. This advisory does not apply to operating ski areas.

Mountain Weather

At 6 a.m. there are 1-2 inches of new snow in the mountains with westerly winds blowing 10-15 mph. The exception is the Bridger Range where 6 inches has fallen and winds are 25-30 mph at the ridgetop. Today will be cloudy and snowy as an energetic air mass drops in from Canada. In the next 24 hours winds will remain the same and temperatures will warm into the teens. By tomorrow morning I expect 4-6 inches in the mountains with double that in the Bridger Range. Cough, cough. "I think I'm getting sick. I might not make it to work tomorrow."

Snowpack and Avalanche Discussion

Bridger Range

In the Bridger Range, strong winds, one inch an hour snowfall and a weak snowpack are creating dangerous avalanche conditions. On Sunday we found very weak snow on Saddle Peak (video), and folks reported similar conditions on slopes under the Great One on Sacajawea. Today these slopes will be very unstable. Consequently, the avalanche danger is rated HIGH on all wind-loaded terrain and CONSIDERABLE on all other slopes. If the storm continues the danger will rise even further and we will issue an Avalanche Warning.

Madison Range Gallatin Range Lionhead area near West Yellowstone Cooke City

Even though snow depths vary from two and a half feet in the Madison and Gallatin Ranges to over four feet around Cooke City, all the mountains in our forecast area have a poor snowpack structure. At the ground, large grains of sugary, faceted crystals (**photo**) are straining to support the snow on top of it. There are some slopes that are especially weak because these facets have grown into large cups (6-8 mm) termed depth hoar, a persistent weak layer that will not go away anytime soon.

In the last few days there have been consistent reports of cracking, collapsing and unstable snow on Mt. Ellis, Beehive Basin, Buck Ridge (video), Taylor Fork (video), and Cooke City. Yesterday, Alex and I found recent avalanches in Taylor Fork (photo) along with acres of unsupportable snow. In Cooke City there was a close call when two sledders were caught in a avalanche but not buried or injured. Six snowmobile triggered slides were reported in Miller Creek yesterday.

No advanced training is needed to find these facets or determine the stability of a slope. If you step out of your skis or off your sled and sink to the ground, you've found them. Shooting cracks, "whumphs", and recent avalanches are Mother Nature's warning that slopes are unstable. And since you are reading this, I'm telling you too: Slopes are unstable.

Today, human triggered avalanches are likely. I expect we will hear of more slides in the coming days and I'm a little gripped about a pre-Christmas avalanche fatality. Today, the avalanche danger is rated **CONSIDERABLE** on all slopes. Any slope steeper than 30 degrees is avalanche terrain and playing on these carries elevated risk.

SNOTEL sites in SW Montana are not working which impedes our ability to report snowfall amounts. NRCS is working hard to fix this issue soon.

Alex 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 HERE.

TONIGHT! Bozeman: December 16, Wednesday, *Pints for Powder*, MAP Brewing \$1 pint donated to the Friends of the Avalanche Center

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.

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