GNFAC Avalanche Forecast for Fri Dec 18, 2015

Good morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Advisory issued on Friday, December 18, at 7:30 a.m. Today's advisory is sponsored by <u>Map Brewing Company</u> and <u>World Boards</u>. This advisory does not apply to operating ski areas.

Mountain Weather

The mountains have received 2-4" of low density snow since yesterday. In the last 24 hours, winds have been around 20 mph out of the southwest with gusts between 30 and 40 mph. Temperatures are increasing this morning from yesterday's frigid single digits and below zero values. Today, temperatures will reach the high 20s F. Wind will remain out of the west around 20-30 mph with gusts upward of 40 mph. Light snowfall will continue with an additional 1-2" today. I expect another 3-6" of snow Saturday afternoon.

Snowpack and Avalanche Discussion

Bridger Range Madison Range Gallatin Range

Lionhead area near West Yellowstone Cooke City

Since Monday, the mountains have received 1-2 feet of low density snow, which totaled 1-1.5" of **SWE**. Over the last 24 hours, winds increased and transported this new snow (**photo**), which formed wind slabs on top of a weak snowpack. We observed this weak snowpack on Saddle Peak in the Bridger Range last Sunday (**video**), in the Taylor Fork on Tuesday (**video**), and on Mt. Ellis and Bacon Rind yesterday (**video**).

When we see avalanches, collapsing, shooting cracks, and hear "whumph" sounds we do not need to dig or do stability tests to know that the snow is unstable. Snowmobilers triggered and were caught in an avalanche near Cooke City on Tuesday. Natural avalanches were also observed on Tuesday near Cooke City (photo) and in the Taylor Fork (photo). Skiers in the Northern Madison and Northern Gallatin Ranges have reported collapsing, cracking, and triggered a small slide (photo, photo). Doug and I both found widespread collapsing at Mt. Ellis and Bacon Rind yesterday, and Doug remotely triggered a small avalanche (photo). A snowmobiler triggered an avalanche yesterday in Cabin Creek in the Southern Madison Range despite efforts to avoid slopes steeper than 30 degrees (photo, photo), and a skier triggered slide was reported in the mountains near Gardiner (photo).

You do not have to look hard to find weak snow. You know it is there when you sink to the ground while riding or skiing. If the snow above this weak faceted snow is supportable then you can likely get collapsing and trigger an avalanche on steep slopes.

For today, new snow, wind, and a weak snowpack make the avalanche danger **HIGH** on all wind loaded slopes and **CONSIDERABLE** on all other slopes.

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.

I 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.

Cooke City: December 23, *1hr Avalanche Awareness*, Cooke City Visitor's Center, 6-7:30 p.m.

West Yellowstone: January 2, *1hr Avalanche* Awareness, West Yellowstone Holliday Inn, 7-8:30 p.m.

Bozeman: January 6, Women's Avalanche Awareness and Beacon 101, Beall Park, 6-8 p.m.

January 9 and 10, Companion Rescue Clinic, REI, Fri 6-8p.m., Sat 10a.m.-2p.m.

January 13, *1hr Avalanche Awareness*, REI, 6-7:30 p.m.

Livingston: January 14, *1hr Avalanche Awareness*, Neptune's Brewery, 6-7:30 p.m.

Dillon: January 19, Ihr Avalanche Awareness, UM Western Library, 6:30-8 p.m.

ASMSU Intro to Avalanches w/ Field Course

January 20, 21 and 23 or 24: https://www.ticketriver.com/event/16861

The workshops will be held on Wednesday and Thursday evenings, with a field course on either Saturday or Sunday. Different topics will be presented each evening. Topics include: avalanche terrain recognition, the effect weather has on avalanche hazard, the development of the mountain snowpack, decision making skills, and basic search and rescue procedures.