GNFAC Avalanche Forecast for Thu Dec 18, 2014

Good morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Thursday, December 18 at 7:30 a.m. Today's advisory is sponsored by a **Montana FWP Recreation Trails Grant**. This advisory does not apply to operating ski areas.

Mountain Weather

Since yesterday morning the Bridger Range received another 3 inches of snow while most other places received a trace to an inch. Winds this morning were surprisingly light, blowing 10 mph gusting 15 mph from the S to W with temperatures in the mid-teens F. Today a few snowflakes may fall in the afternoon but not accumulate. Temperatures should climb into the low 20s F, and winds should increase a little mostly blowing from the SW. A little snow will come Friday night and a more potent storm should arrive late Saturday/early Sunday.

Snowpack and Avalanche Discussion

Bridger Range

Snowfall from yesterday's storm totaled 5 inches (0.6 inches <u>SWE</u>) in the Bridger Range. Stronger winds blew yesterday afternoon, and skiers in the northern Bridger Range in Frazier Basin triggered many 6-10 inch wind slabs (<u>photo</u>). Last week the surface snow faceted and weakened on many slopes. Even on non-wind loaded slopes near Wolverine Bowl just north of the ski area, a skier observed many natural avalanches (3-4" thick) that propagated surprising distances, a good indication of faceted snow under them. With a layer of weak facets under the new snow in many places, today the avalanche danger is <u>CONSIDERABLE</u> on wind loaded slopes steeper than 35 degrees. All other slopes have a <u>MODERATE</u> danger.

Gallatin Range Madison Range

Lionhead area near West Yellowstone Cooke City

Yesterday's snowfall was not enough to change the avalanche danger but there are a few things to watch for. Last week the snow surface faceted and weakened during warm sunny days and clear cold nights. Doug found this weak layer about 1 foot deep on Mt Blackmore on Tuesday (video), and Eric and I found this layer last Friday near West Yellowstone before it was buried (video). In some places a weak layer of surface hoar (frozen dew) formed on the snow surface and was buried by snow from this weekend and yesterday.

A layer of facets remains near the ground. This layer formed during the second week of November and has changed a lot since then. In some places it remains very weak. In other places it gained strength. Near Cooke City on Tuesday, I found this layer strong in most places where the snowpack is 3-4 feet deep but still very weak in steep rocky areas (video, photo). Without much stress from new snow this layer remains dormant on many slopes but could awaken if we get a heavy load of new snow this weekend.

With two weak layers in the snowpack, avalanches are definitely possible and today the avalanche danger is rated **MODERATE**.

I will issue the next advisory tomorrow morning at 7:30 a.m. If you have any snowpack or avalanche observations drop us a line at <u>mtavalanche@gmail.com</u> or call us at 587-6984.

AVALANCHE EDUATION and EVENTS

Take a look at our **Education Calendar** for all our classes being offered.

TONIGHT: Avalanche Awareness (1-hr) at the Yellowstone Association in Gardiner, Thursday, December 18, 6:00-7:00 p.m.

TODAY: Snowmobiler Introduction to Avalanches with Field Course

West Yellowstone: Dec 18 and 19, 2014: https://www.ticketriver.com/event/12955

Five hours of lectures are followed by a full day field course. Topics covered 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.

Snowmobiler Rescue Course, Cooke City, December 27, 0800-1200. Register here: https://www.ticketriver.com/event/13721