GNFAC Avalanche Forecast for Tue Dec 16, 2014

Good morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Tuesday, December 16 at 7:30 a.m. Today's advisory is sponsored by **Soda Butte Lodge** in partnership with the **Friends of the Avalanche Center**. This advisory does not apply to operating ski areas.

Mountain Weather

The weather yesterday was mostly clear and calm with temperatures reaching the high teens. Cooke City had flurries all day, but no accumulation. Around midnight winds picked up out of the west to southwest and are averaging 10-20 mph with gusts of 30, which will continue for the next 24 hours. Mountain temperatures are near 10F and will only rise into the high teens as clouds continue to build. Tonight light snowfall will bring 1-2 inches in the southern ranges and a trace to one inch up north.

Snowpack and Avalanche Discussion

Bridger Range Northern Gallatin Range

The northern Gallatin Range and upper elevations of the Bridger Range received close to a foot of snow by late Sunday. This new snow is bonding well to the old surface and the snowpack is supporting the new snow weight (.6" SWE). On Sunday, Eric toured up History Rock in Hyalite and found good stability in his snowpit (photo). Other skiers on Mt. Blackmore had similar findings. The winds are beginning to increase and for the first time in weeks there is snow to blow around. Wind slabs will form quickly at the ridge lines and easily avalanche. When I head out into the field this morning I expect to find lots of cracking in wind drifts, even thin ones. For today, given the recent snow and increasing wind the avalanche danger is rated CONSIDERABLE on all wind-loaded terrain. All other slopes have a MODERATE avalanche danger.

Southern Gallatin Range Madison Range

Lionhead area near West Yellowstone Cooke City

The mountains from Big Sky to West Yellowstone and Cooke City failed to get a full serving of new snow over the weekend and had to settle for a taste of just a few inches. The main concern in these areas is sugary facets on the ground which is the weakest layer in the snowpack (Eric's <u>video</u> from Lionhead). On many slopes these crystals are getting stronger and bonding as stability test scores climb upward and in many cases fail to propagate fractures. Although there is an upward stability trend, a few slopes are still misbehaving. One party of skiers in the Beehive Basin area found facets breaking at the ground while another group got clean fractures on a stout ice crust under the new snow. Digging a quick stability test gave them all the information they needed to back off (16 sec video).

It is not "Green Light" conditions in the backcountry since lingering instabilities will keep us on our toes. For today, the avalanche danger is rated **MODERATE** on all slopes.

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 mtavalanche@gmail.com or call us at 587-6984.

AVALANCHE EDUATION and EVENTS

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

TONIGHT! Fundraiser at Katabatic Brewing, 4-8 p.m., Livingston

Avalanche Awareness and Beacon Practice, Wednesday, December 17, 6:30-8:30 p.m. at Beall Park, Bozeman

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.