GNFAC Avalanche Advisory for Tue Feb 25, 2014

Good Morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Tuesday, February 25 at 7:30 a.m. <u>Ticket River</u> in partnership with the **Friends of the Avalanche Center** sponsor today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

Late last night it started snowing and by 6 a.m. the mountains around Cooke City picked up 10", the Bridger and northern Gallatin Ranges received 5-7", Big Sky area got 4" and only a trace to one inch fell from Big Sky to West Yellowstone. Winds are blowing from the west to southwest at 15-20 mph and gusting 30-40 mph. In the northern mountains temperatures are in the high single digits and low 20s in the south. The storm will end by mid-morning and drop another inch or two of snow. Today I expect wind gusts to dissipate and temperatures to rise into the high teens to mid-20s. Tomorrow looks to be sunny.

Snowpack and Avalanche Discussion

Cooke City

Cooke City has gotten more snow water in February (10.2") than the Sierra Mountains has gotten all winter. Last night's snowfall conservatively added another 10-12" of snow. Ridgetop winds at <u>Lulu Pass</u> have averaged 15-30 mph over the last 36 hours. The avalanche issue in Cooke is quite simple: new snow and wind continue to load slopes and avalanche. Wind-loaded terrain will be the most dangerous. Given that most avalanches happen during and immediately after a storm, today is a day to be careful and I recommend avoiding avalanche terrain. Today, very dangerous avalanche conditions exist on wind-loaded slopes steeper than 35 degrees which have a **HIGH** avalanche danger. All other slopes have a **CONSIDERABLE** avalanche danger.

An additional thought: This month's snowfall and water weight have been staggering. At some point even a strong snowpack can avalanche and around Cooke City these would be deep and huge. Big avalanches would likely break naturally, so as a precaution I'd give a wide berth to runout zones during a storm. I can't say if or when this will happen, but the hairs on the back of my neck are standing up.

The Bridger Range Northern Gallatin Range

Northern Madison Range

The Bridger and northern Gallatin Ranges have gotten another 5-7" of snow last night (.6" SWE) while the Big Sky area received 4". Winds are remarkably light at 10-20 mph out of the west to southwest. Wind slabs associated with all the new snow in the last 48 hours is the primary avalanche concern. These could be easily triggered today near the ridgetops. The northern Gallatin and northern Madison Ranges have the additional concern of a buried weak layer of facets three feet under the surface. This layer is still breaking in our stability tests and was responsible for a human triggered avalanche in Beehive Basin a week ago. The good news is that this layer is getting stronger and is much harder to trigger. The bad news is that you can still trigger it. Eric made a <u>video</u> explaining this weakness during his tour up Hyalite on Sunday. For today the avalanche danger is rated <u>CONSIDERABLE</u> on all wind-loaded slopes and <u>MODERATE</u> on all others.

Southern Madison Range Southern Gallatin Range

Lionhead area near West Yellowstone

The southern mountains got chumped with last night's storm and only got a trace to an inch of new snow. Average wind speeds have lessened to 15-20 mph, but can still move the 4-6" that was reported yesterday morning. The mountains from Big Sky to West Yellowstone have a layer of weak snow (facets) buried 2-3 feet from the surface. It's getting more difficult to trigger avalanches on this layer, but not impossible. Mark rode around Cabin Creek on Saturday where this layer propagated in his stability tests. New snow and strong winds since then have only made the situation more serious. Today the avalanche danger is rated **CONSIDERABLE** on any slope steeper than 35 degrees or any slope with a wind-load. All other terrain will have a **MODERATE** danger.

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.

EVENTS/EDUCATION

BOZEMAN, Thursday, March 6, 6:30-8:00 p.m.; REI, 1-hour Avalanche Awareness Lecture.

Our complete calendar of events can be found **HERE**.