GNFAC Avalanche Forecast for Tue Feb 18, 2014

Good Morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Tuesday, February 18 at 7:30 a.m. <u>Cooke City Motorsports</u> and <u>Beartooth Powder Guides</u> sponsors today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

In the wee hours of the morning the mountains picked up snow: 5" at the Yellowstone Club, 3" outside Cooke City and 1-2" everywhere else. Westerly winds are blowing strong with speeds averaging 20-30 mph and gusts of 50-70 mph at the ridges. Temperatures are in the teens and should warm into the mid-20s today. Skies will become mostly sunny this morning, but cloud up again tonight and drop another 1-3 inches by tomorrow morning.

Snowpack and Avalanche Discussion

Cooke City

After five days running, the Avalanche Warning has ended in Cooke City. While this is good news, I'd hold off on a full celebration. The snowfall has ended, but the winds are still ripping and loading slopes. The cumulative snow load is over four inches of water weight which amounts to a heavy burden. The constant snowfall kept the Avalanche Warning in place through the holiday weekend and wind-loading will now take over as our primary avalanche concern. Yesterday a skier in Yellowstone National Park found a few natural avalanches on windloaded slopes (**photo**) and Mark witnessed similar conditions around Cooke City over the last two days. He said slopes that had avalanched were reloading like mad and plumes of windblown snow were streaming off the peaks and ridgelines. For today, the avalanche danger is rated **HIGH** on any wind-loaded slope and **CONSIDERABLE** everywhere else.

Madison Range Gallatin Range

Lionhead area near West Yellowstone

Avalanche activity is an undeniable sign of unstable snow and dangerous conditions. Since Saturday we have seen these firsthand and also gotten many reports of natural and human triggered slides on the weak layer that formed in January. This activity extends from Bozeman to West Yellowstone. These include:

- <u>Beehive Basin</u>: Three skiers were caught in an avalanche in Beehive Basin as they skied up a west facing slope. Two were partially buried and one was injured. <u>Photos</u> and a <u>video</u> from the avalanche investigation tell the story. A full report will be posted later this morning.
- <u>Bacon Rind</u>: A skier triggered a wind-loaded slope on an east facing aspect. The avalanche broke 1-2 feet deep on a layer of surface hoar (**photo**).
- <u>Quake Lake</u>: Eric found many natural avalanches, some quite large, on his tour up the south facing slopes of Quake Lake (<u>photo</u>). Nearby, skiers above Hebgen Lake experienced collapsing and cracking of the snowpack over the weekend, another strong sign of instability.
- <u>Near Carrot Basin</u>: I toured in to Lightning Creek in the Taylor Fork and was able to remotely trigger a small avalanche on a non-wind-loaded slope (**photo**, **video**).

The January weak layer is widespread, a few inches thick and buried $1\frac{1}{2}$ -2 feet under the surface. We believe it to be on most slopes and are traveling cautiously and not getting into avalanche terrain. For these reasons the avalanche danger is rated **CONSIDERABLE** on all aspects and elevations.

Bridger Range

The Bridger Range is an island of mostly stable snow. This range has gotten the strong winds, but not heavy snowfall. Pillows of windblown snow are isolated at the ridgelines. The January layer of faceted snow is found on some, but not all slopes. Since it's buried less than two feet down, it's a good idea to dig for and test it before skiing or riding a steep line. Skiers on Bradley and Texas meadows did not get propagation in their extended column tests, a piece of positive news which fits the overall picture of improving conditions. Today the avalanche danger is rated **MODERATE** on wind-loaded slopes and slopes steeper than 35 degrees. All other slopes have a **LOW** avalanche 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

February 20, BOZEMAN: Thursday, 6:30-8:00 p.m., REI, **Women's Specific Avalanche Awareness** lecture. Pre-registration is required: www.rei.com/stores/bozeman.html

February 22, BIG SKY: Saturday, 10 a.m. – 2 p.m., Beehive Basin Trailhead, **Companion Rescue Clinic**. In partnership with Grizzly Outfitters. Space is limited and pre-registration is required. https://ticketriver.com/event/9964

February 22, WEST YELLOWSTONE: Saturday, 7:00-8:00 p.m., Holiday Inn, **1 –hour Avalanche Awareness for Snowmobilers** lecture.

More information our complete calendar of events can be found **HERE**.