GNFAC Avalanche Advisory for Wed Dec 30, 2015

Good morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Wednesday, December 30, at 7:30 a.m. Today's advisor is sponsored by **Yellowstone Club Community Foundation** and **Katabatic Brewery**. This advisory does not apply to operating ski areas.

Mountain Weather

A trace to one inch of snow fell in the last 24 hours. At 5 a.m. west to southwest winds are blowing at 5-10 mph and 20 mph in the Bridger Range. Mountain temperatures are a few degrees either side of 0F, but will warm into the high teens with winds remaining light. Mostly cloudy skies will produce a few flurries, but no accumulation is expected. High pressure builds through the week and by Friday a **Rex Block** forms, a fortress of dry air.

Snowpack and Avalanche Discussion

Bridger Range Madison Range Gallatin Range

Lionhead area near West Yellowstone Cooke City

Yesterday was the first day in two weeks when there was no report of avalanche activity. An uninformed person may think that the backcountry is stable and good-to-go, but they would be wrong. No matter the mountain range, the aspect or the elevation, the snowpack is weak and unstable. Sugary, faceted snow, called depth hoar, cannot support all the snow that fell this month. A tipping point was reached after Christmas and many slopes avalanched naturally. Without new snow or windblown snow adding weight to the snowpack it is getting a breather, a time to adjust. During this phase, which we just entered, natural avalanches are unlikely, but the weight of a skier or rider could be enough to trigger slopes, especially steeper ones. These are scary times because obvious signs of instability are gone. The depth hoar is still there; it's buried deeply and will remain weak and unstable for some time...weeks, if not months.

Slopes may "feel" stable although they are not. In the absence of obvious signs of instability (avalanches and collapsing) we rely on stability tests, as Alex and Eric filmed on Mt. Blackmore. We have to put our shovel in the snow and dig. It is the only reliable way to know what is happening under our feet. On Sunday, near Hebgen Lake, we dug a pit and decided to not ski in avalanche terrain (video) although up until that point the pull to do otherwise was real because it felt stable. All of our Extended column tests (ECT) are propagating on the depth hoar so I recommend taking a wide berth to avalanche terrain. Yesterday, Alex and I were in Taylor Fork and after putting up the weather station we rode around looking at all the avalanches, dug a pit, and to no one's surprise got propagation in our ECT (video). As I said in the video, "It's still pretty heads up."

Eric, Alex and I are in agreement: we are traveling in the backcountry very conservatively because it is likely we could trigger an avalanche. For today, the avalanche danger is rated **CONSIDERABLE** on all slopes steeper than 35 degrees and **MODERATE** on less steep. "Moderate" means human-triggered avalanches are possible. If you are unlucky enough to trigger one, it may be deep and big like the slides on **Mt. Fox** and **Henderson Mountain** over the weekend.

Alex 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.

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, 1hr 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.