GNFAC Avalanche Advisory for Thu Nov 28, 2013

Happy Thanksgiving! This is Doug Chabot with early season avalanche information issued Thursday, November 28 at 7:30 a.m. Today's information is sponsored by <u>Cooke City Motorsports</u> in partnership with the **Friends** of the Avalanche Center. This information will be updated on Monday, December 2 or sooner if conditions change.

Mountain Weather

Our last snows were a week ago and since then we have been under sunny skies. This morning brings more of the same with temperatures in the high 20s and light winds of 10-20 mph out of the west to southwest. Daytime highs will reach the upper thirties. This quiet weather pattern will continue until late Sunday when cold, snowy weather drops down from Canada. The weather models predict a foot of snow falling in the mountains, but since the storm is still four days away my confidence level is low.

Snowpack and Avalanche Discussion

Bridger Range Northern Gallatin Range

Northern Madison Range

The northern mountains have 2-3 feet of snow on the ground. The Bridger Range has relatively stable conditions. In Hyalite the snow depth and layering is variable, but without any new snowfall conditions are generally stable. In the upper elevation gullies of Flanders Mountain (where ice climbs form) the snow is very weak, but not a concern to climbers just yet. New snow and wind would rapidly change that. The snowpack in Beehive Basin is similar: weak, but stable (snowpit). Big Sky is a different beast and the ski patrol has been releasing 3-4 foot deep avalanches during control work that are breaking on sugary facets a foot off the ground. This activity is a sign of what's possible in the backcountry on deeper, windblown slopes.

Southern Gallatin Range Southern Madison Range

Lionhead area near West Yellowstone

Much of the southern Madison and southern Gallatin Range have no snow at low elevations and only a thin covering up high. Bacon Rind is not inviting at all. The Lionhead area outside West Yellowstone is much better with 1.5-2 feet of snow at 8,000 feet (**photo**). I skied into the range on Tuesday and was expecting to find unsupportable snow. Instead I found a snowpack that was strong enough to prevent my skis from surfing the dirt. In my **snowpit** I was unable to get fractures to propagate, a sign of stability. My biggest concern is at the surface: feathery surface hoar crystals with three inches of recycled powder (snow that has become weak, faceted and powder-like), a likely problem after the next snowstorm.

Cooke City

Mark spent the last two days in Cooke City assembling our sleds and putting in an inaugural field day (video). He wasn't sure what to expect since we had conflicting reports of stable snow and human-triggered avalanches. Both ended up being true. Slopes with a thin covering are weak and stable since they lack a key ingredient for avalanches, a slab. Deeper, windblown slopes have good stability because these characteristics inhibit weak layer (facet) growth. Slopes that are not too shallow, yet not too deep are "just right" for triggering an avalanche.

Thankfully, there are not too many of these slopes, but with enough people in search of untracked powder a person could find one. Like the rest of our area, the snowpack in Cooke City is blanketed with surface hoar and a few inches of small weak, facets (**photo**). Mark stalks and caresses this layer in a quirky <u>video</u> everyone should check out.

<u>RECALL:</u> BCA AVALANCHE AIRBAG PACKS

Avalanche Airbags Recalled by Backcountry Access Due to Risk of Injury http://www.cpsc.gov/en/Recalls/2014/Avalanche-Airbags-Recalled-by-Backcountry-Access/ This recall involves BCA Avalanche airbags, models Float 18, 22, 30, 32, 36 and Throttle.

DANGER RATINGS AND FIELD OBSERVATIONS

We will begin issuing daily avalanche advisories on Monday, December 2nd. We rely on your observations, pictures or snowpits to make our forecasts accurate. Drop us a line at <u>mtavalanche@gmail.com</u>. You can also call in your observations in at 587-6984.

NEW BLOG POST

Here's an article that will be published in the December issue of CARVE. <u>The Electronic Halo Might Have</u> Horns: Batteries, Beacons and Smartphones

EVENTS/EDUCATION

BOZEMAN, December 2, 7 p.m. at Northern Lights Trading Company

BOZEMAN: Intro to Avalanches w/ Field Course, MSU; 4, 5 and 7 December

Info and registration: https://www.ticketriver.com/event/7112

BOZEMAN: December 6, 6:30 p.m. American Legion, \$10, Gallatin Valley Snowmobile Association Christmas Party, <u>http://gvsa.net/</u>

BOZEMAN: December 11, 7 p.m., International Mountain Day, Emerson Cultural Center, Avalanche Forecasting and Awareness. http://www.mtavalanche.com/images/13/international-mountain-day

FOUR CORNERS: December 11, 7 p.m., 1-hour Avalanche Awareness for Snowmobilers at the GVSA Groomer Shed, <u>http://gvsa.net/</u>

WEST YELLOWSTONE: Snowmobiler Intro to Avalanches w/ Field Course, West Yellowstone: 19 and 20 December. Info and registration: <u>https://www.ticketriver.com/event/7116</u>