GNFAC Avalanche Advisory for Wed Feb 5, 2014

Good morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Wednesday, February 5th at 7:30 a.m. **Gallatin County Search and Rescue**, in partnership with Friends of the Avalanche Center, sponsor today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

The weather can be summed up in one word: COLD. It was cold yesterday, will be cold today and cold again tomorrow. Temperatures are measuring – 20F in most mountain locations with the Bridger Ridge coming in at -27F. Ridgetop winds averaged 20 mph with gusts to 30 mph from the east in the Bridger Range yesterday and 10-20 mph from variable directions everywhere else. No snowfall is expected through the week, just frigid temperatures and light winds. Aspiring to be a polar explorer? Well, today's your day to train.

Snowpack and Avalanche Discussion

Bridger Range Gallatin Range Madison Range Cooke City

Lionhead area near West Yellowstone

Although winds are calm, in the past 36 hours they were variable and erratic and created soft slabs near the ridgelines (**photo**, **photo**). These slabs were reactive to ski cuts and yesterday skiers (obviously training to be polar explorers) triggered three avalanches outside Cooke City in the new snow (**photo**). The slides were breaking on a layer of facets that formed during the two weeks of dry weather. Eric was in Cooke City last Friday and Saturday and found this layer 12"-18" under the surface (**video**). My snowpit on Monday above Hebgen Lake revealed the facets without much effort: I just dug down two feet and uncovered a stripe of them across my pit wall (**video**). These are breaking clean in our stability tests, and more importantly, a few small slopes around Lionhead avalanched Monday night from a snowcat grooming the trails.

It's easy to think that nothing is happening with the snowpack because it's cold and we are all hunkered down inside. This would be a mistake. The few hours of moderate winds created wind slabs, people triggered slides on the buried facets and the low density surface snow is becoming weaker by the day from the frigid temperatures. The snowpack is dynamic even when we are not.

The layer of small-grained facets that got buried seven days ago is found throughout our entire advisory area and is our primary avalanche concern. A few slopes are wind-loaded and have heightened instability. Underlying the entire snowpack is our secondary concern: large, sugary facets. We have not had avalanche activity on this layer in 10 days, but we would be foolish and negligent to forget about it. I recommend staying off of anything wind-loaded and that you take a couple minutes to dig 1-2 feet under the surface to see if the upper weak layer is there before playing in avalanche terrain. Human triggered avalanches in the last 48 hours are evidence that this layer is unstable. For today, the avalanche danger is rated **CONSIDERABLE** on any wind-loaded slope or any slope steeper than 35 degrees. All other slopes have a **MODERATE** danger.

Mark 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.

TWO NEW BLOG POSTS

Eric wrote an article titled, "The Facet Factory An Introduction to Snow Metamorphism".

Doug posted an article called, "Toughness and Survival".

KING AND QUEEN OF THE RIDGE

Saturday, February 15th is the **12th Annual King and Queen of the Ridge** Hike/Ski-a-thon fundraiser to support avalanche education in southwest Montana. Collect pledges for one, two or the most ridge hikes you can do in the five hours of competition. 100% of the proceeds go to the Friends of Gallatin National Forest Avalanche Center. Kids and families are encouraged to hike too! Hike as an Individual or Team. **Make a Pledge** . **Sign Up**. **More Info**.

EVENTS/EDUCATION

February 6, BOZEMAN: Thursday, 6-8 p.m., Beall Park; Women's Specific Avalanche Awareness Class and Transceiver Practice.

February 8, WEST YELLOWSTONE: Saturday, 7-8 p.m., Holiday Inn, 1-hour Avalanche Awareness lecture.

February 12, BOZEMAN: Wednesday, 6:30-7:30 p.m., MSU Procrastinator Theater, **Sidecountry IS Backcountry** lecture.

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

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