## **GNFAC** Avalanche Forecast for Wed Jan 23, 2013

Good morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Wednesday, January 23 at 7:30 a.m. **Cooke City Motorsports,** in partnership with the Friends of the Avalanche Center, sponsor today's advisory. This advisory does not apply to operating ski areas.

## Mountain Weather

Under partly cloudy skies there's no new snow to report. Mountain temperatures are in the low thirties around Bozeman and Big Sky and mid-twenties near Cooke City and West Yellowstone. Currently, west to southwest winds are blowing 10-25 mph at the ridgetops. Clouds will increase later today with some flurries expected after midnight as winds increase to 30 mph and mountain temperatures cool into the twenties. By morning we'll see a trace to one inch of snow, if we're lucky.

Snowpack and Avalanche Discussion

Bridger Range Madison Range Gallatin Range

Lionhead area near West Yellowstone Cooke City

Today is day eight without snowfall. In the last 48 hours winds have calmed and there is very little snow left for transport at the ridgelines. The snowpack stability continues to improve and avalanche activity is unlikely. Throughout our advisory area there are two common things happening:

- 1. The weakest layer in the snowpack, a layer of facets 6-16 inches under the surface, is gaining strength as the crystals round and bond together.
- 2. The surface snow is changing into and/or growing our next weak layer.

Yesterday, an MSU graduate student went to Lionhead and performed 28 stability tests on a slope with only two showing propagation. This is a very good sign of stability. He also noted a thick layer of feathery surface hoar crystals. On Sunday, a skier in Bacon Rind also found buried facets gaining strength and saw large flakes of surface hoar (**photo**). The same day in Taylor Fork, I too discovered surface faceting (**photo**) and stable snow.

Over the weekend a few small and shallow avalanches were triggered on steep, wind drifted slopes outside Cooke City and in Lionhead (**photo**). Wind effected slopes, or places with an exceptionally thin snowpack, may hold isolated, small pockets of unstable snow. Although triggering an avalanche is unlikely, it is not impossible. Given the overall stability and generally safe conditions, the avalanche danger today is rated **LOW**.

In the last few years our snow has been more unstable than not and the danger rating *Low* rarely got used. As a forecaster, writing *Low* for our entire area feels weird and unfamiliar, but our data and field trips have led us here. We are not throwing caution to the wind, but to be honest, on our days off we are skiing lines, climbing routes and traveling in the backcountry like it's a *Low* 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.

## OTHER RELEVANT STUFF

**No Snow, Big Problem.** Read an article on how surface snow can become the next weak layer and future avalanche problem.

**Practice using your beacon.** The Friends of the Avalanche Center in partnership with the City of Bozeman Recreation Department recently installed a beacon training site at Beall Park on North Black Avenue. It's free and easy to use.

**Quickly assess the snow.** Mark made a **short video** on how to assess the snowpack given our current conditions. In two minutes he gets all the information he needs to make a good decision.

## **EDUCATION**

TONIGHT (1/23) and Thursday (1/24) evenings and all day Saturday (1/26), we are teaching an *Introduction to Avalanches with Field Course* at **MSU**. For more information and to register, visit: https://www.ticketriver.com/event/4970-introduction-to-avalanches-w--field-course

Wednesday (1/30) and Thursday (1/31) evenings and all day Saturday (2/02), we are teaching an *Advanced Avalanche Workshop with Field Course* at **MSU.** Registration is required. For more info and to register, visit: https://www.ticketriver.com/event/4974-advanced-avalanche-workshop-with-field-course

In **Helena**, next Thursday (1/31) at 6:30 p.m., the Friends are giving a free *1-hour Avalanche Awareness* lecture at Exploration Works (995 Carousel Way).

In **Bozeman**, on Wednesday, February 6, REI is hosting a *1-hour Avalanche Awareness lecture for Women*. Marcie Hahn-Knoff is teaching. Space is limited and registration is required: http://www.rei.com/event/47916/session/64605