GNFAC Avalanche Forecast for Wed Dec 22, 2010

Good Morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on the Wednesday, December 22, at 7:30 a.m. The **Yellowstone Club Community Foundation**, in partnership with the **Friends of the Avalanche Center**, sponsor today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

Yesterday's weather was beautiful and uneventful: sunny skies, calm winds and temperatures in the low 20s. In the next 24 hours small weather disturbances will create mostly cloudy skies in the southern mountains and partly cloudy up north. Winds will remain light out of the southwest at 5-10 mph as temperatures rise into the 20s from their current readings in the teens. Some flurries may fall around Cooke City and West Yellowstone, but it should measure less than an inch. The weather through the Christmas weekend is looking dry and warm—no gifts of epic pow from Santa this year.

Snowpack and Avalanche Discussion

The northern Madison Range, the mountains around Cooke City and the Washburn Range:

The weakest and most unstable snow in our advisory area is split between two areas: the mountains around Big Sky and the Cooke City region. Around Big Sky feathery crystals of surface hoar are buried 1-1.5 feet deep and propagating in our stability tests (**photo**) (**video**). On Monday the Yellowstone Club Ski Patrol noted small natural slides on Cedar Mountain which also indicate lingering instability.

Mark is in Cooke City digging lots of holes searching for weak snow. He found it. Two to three feet under the surface are small grained facets which are breaking clean in his stability tests. He saw an avalanche on Crown Butte and another skier saw three recent slides in the backcountry. None of these were very wide or deeper than a couple feet (**photo**). Although the snowpack has adjusted to its new load and avalanches are getting harder to trigger, all the ingredients for a slide are still present. On steep wind-loaded terrain a skier or snowmobiler will have good odds of triggering a slide. For today, the avalanche danger is rated **CONSIDERABLE** on all wind-loaded terrain steeper than 35 degrees. All other slopes have a **MODERATE** danger. Since the weak layer is widespread, it's a serious, honest-to-God moderate. Snowfall or windblown snow would quickly bump the danger up.

The southern Gallatin and southern Madison Ranges, the Lionhead area near West Yellowstone:

Our main avalanche concern in the mountains south of Big Sky is islands of weak and unstable snow. Our field investigations show mostly stable conditions—no cracking or collapsing; no recent avalanche activity; no instability in our snowpits. But like a skin rash there are a few areas of irritation. Bacon Rind is one of them. Yesterday my partner and I found a buried surface hoar layer eight inches down. My Extended Column Test broke ridiculously easy from just the weight of the shovel (video). Although we were not finding these conditions a few miles west in Taylor Fork or south around Lionhead, it's definitely hiding on a few slopes. It'll remain dormant until we get more snow. For today, the avalanche danger is rated MODERATE.

The Bridger Range and northern Gallatin Range:

The Bridger and northern Gallatin Ranges have good stability for two reasons. First is they don't have a widespread weak layer and second is they've only been glanced by the recent snowstorms. On Monday skiers reported thicker slabs of snow cracking near the ridgelines. Thinner and weaker snow is still on the west side of the Bridger Range and also in a few high elevation north facing gullies. However, without a new snow load these are not something to lose sleep over. For today, the avalanche danger is rated **MODERATE** on all wind-loaded slopes and **LOW** on all other slopes.

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 <u>mtavalanche@gmail.com</u> or call us at 587-6984.

Avalanche Education

Avalanche Awareness for Snowmobilers and Skiers, West Yellowstone, Holiday Inn; Lectures: Saturday, January 1 from 12-5 p.m.; Field: Sunday, January 2 all day. No Registration Required. (more information)

There are many upcoming avalanche classes in the month of January. Check them on our education page at: http://www.mtavalanche.com/workshops/calendar