

GNFAC Avalanche Advisory for Tue Dec 28, 2010

Good Morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Tuesday, December 28, at 7:30 a.m. Bridger Bowl Ski Area, in partnership with the Friends of the Avalanche Center, sponsors today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

In the past 24 hours an inch of new snow has fallen from the Yellowstone Club to West Yellowstone while Cooke City got three inches. Winds have lessened to 15-30 mph out of the WSW from yesterdays breezy 35-50 mph. Temperatures are in the low teens which is where they will remain today. A moist southwest flow will bring mostly cloudy skies with the southern half of our advisory area getting an inch or two of snow overnight. An approaching cold front will increase winds tonight with snow and plummeting temperatures forecasted tomorrow.

Snowpack and Avalanche Discussion

The northern Madison Range:

In our entire forecast area the mountains around Big Sky are the most unstable. Yesterday morning five to seven inches fell with wicked westerly winds gusting to 60 mph ([photo](#)). This load did not help the stability. Feathery surface hoar buried 16 inches deep was breaking easily in our tests and from my body weight. As my partner and I toured along the Beehive/Bear Basin ridge line we heard widespread "whumphs" and saw lightning bolt cracks shooting out from our skis as this layer fractured. Even though I love the adrenaline pump of a loud collapse, it signals bad news. If I was on steeper terrain I would've been triggering avalanches.

All day yesterday I watched the winds build cornices. I could see an avalanche on the north side of Fan Mountain that was likely triggered by a cornice fall. Windblown snow formed slabs 12" thick that will be easy to release, but the likelihood of avalanches is not only confined to wind drifted snow. There's no doubt the backcountry surrounding Big Sky has dangerous avalanche conditions which point to a [CONSIDERABLE](#) rating.

The southern Madison and southern Gallatin Ranges, the mountains around Cooke City, the Lionhead area near West Yellowstone and the Washburn Range:

The southern mountains also received wind and snow. In the last 36 hours six to eight inches fell towards West Yellowstone with Cooke City measuring almost a foot. The snowpack down south is generally strong and buried layers will support this new snow. However, we know there are isolated slopes that have buried surface hoar and facets. I found this on Bacon Rind and would treat this area with extra suspicion. Although not widespread, odds and common sense indicate there must be other slopes like this peppered throughout the southern ranges. The avalanche action will be concentrated on wind-loaded slopes which continue to have a [CONSIDERABLE](#) avalanche danger. Slopes without a wind-load have a [MODERATE](#) danger.

The Bridger Range and the northern Gallatin Range:

The Bridger and northern Gallatin Ranges only received a couple inches of snow with this last storm. Eric skied into Frasier Lake on Sunday and dug four snowpits finding stable snow but various surface conditions: sastrugi to breakable crust to stashes of powder. Further north around Flathead Pass skiers located surface hoar 12-16

inches deep, but it was not propagating in their stability test which is a good sign. Also on Sunday, on his day off, Mark and his friends (I wasn't invited) skied a top secret loop up Hyalite and found stable snow too.

Without much new snow the avalanche danger remains MODERATE on slopes steeper than 35 degrees and LOW everywhere else.

I 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.

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>