## **GNFAC Avalanche Advisory for Sun Nov 21, 2010**

Good Morning. This is Doug Chabot with an early season avalanche information bulletin issued on Sunday, November 21 at 7:30 a.m. This bulletin is sponsored by Montana Import Group in partnership with the Friends of the Avalanche Center. Please remember that uphill traffic is not allowed at Big Sky or Moonlight Basin Ski Areas. Bridger Bowl is not open and has backcountry snow conditions.

## Mountain Weather

Yesterday another 3-4 inches fell in the mountains around Bozeman. The Big Sky area picked up closer to 6 inches with amounts climbing to 12-14 inches outside West Yellowstone and Cooke City. Ridgetop winds are steady at 15-20 mph out of the west with temperatures reading in the low single digits. A break in snowfall today will end later tonight as a moist southwest flow drops 2-4 inches in the southern mountains. Monday looks to be snowy and colder with temperatures on Tuesday only reaching zero.

## Snowpack and Avalanche Discussion

In three days a little over an inch of <u>snow water</u> fell from Big Sky to the northern Gallatin and Bridger Ranges totaling 16 inches of snow. Most of our observations are from folks skiing in the Bridger Range. Our biggest concern is wind-loaded slopes near the ridgetop where folks triggered a few pockets in the last two days. I toured around the ski area yesterday and watched a small slide come off the ridge near the northern boundary. Taken by itself it was nothing serious, but downhill were a dozen folks skinning and boot packing up the exposed path. With many dozens of skiers and boarders climbing slopes and dogs running free, it's very easy and very dangerous to think that avalanches can't happen. A popular ski run in January is an uncontrolled backcountry slope right now. >In the higher elevation alpine environment the Big Sky Ski Patrol released big avalanches during control work. Explosives broke many slopes near the ground with fractures propagating far and slides moving fast. These results are especially noteworthy for two reasons. First, this is their first day of avalanche control so the inbounds snowpack is a mirror image of the backcountry. Second, snowpits, fieldwork and public observations are indicating reasonably stable snow on non wind effected slopes at lower elevations closer to treeline; yet Big Sky shows deep instabilities in the alpine. Be on the lookout for this weakness the higher you climb. Numerous large avalanches indicate a uniform weak layer, typically faceted grains, blanketing the slope.

After a slow start the southern mountains finally got hammered with snow. Since Thursday, almost 2 inches of snow water fell around West Yellowstone while closer to 3 inches fell outside Cooke City; that's 2-3 feet of snow. Wind speeds are strong enough to move this snow around which will create dangerous avalanche conditions near ridgetops and in gullies. We have no field data from the southern mountains yet so I recommend conservative decision making if you're heading in to the backcountry.

I will issue another Avalanche Information Bulletin tomorrow morning followed by one on Wednesday. Daily advisories will start on Friday. If you have any snowpack or avalanche observations, drop us a line at <u>mtavalanche@gmail.com</u> or call us at 587-6984. Upcoming Avalanche Education Basic Avalanche Awareness – Wed & Thurs, December 1 & 2, 7:00pm – 9:30pm at SUB Ballroom B&C; 12/4- Field day at Bridger Bowl (more information) (PrePay \$25 fee) Avalanche Awareness for Snowmobilers – Wed & Thur, December 1 & 2, 7pm – 9:30pm at Team Bozeman, 2595 Simmental Way (more information)