

## **GNFAC Avalanche Forecast for Thu Dec 31, 2009**

Good morning and Happy New Year's Eve. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Thursday, December 31, at 7:30 a.m. **Gallatin County Search and Rescue**, in cooperation with the **Friends of the Avalanche Center**, sponsor today's advisory. This advisory does not apply to operating ski areas.

### Mountain Weather

In the past 24 hours most areas received about 3 inches of snow with slightly less falling in the Bridger Range. This morning temperatures were near 10 degrees F, and ridgetop winds were blowing 10-30 mph generally from the west. These winds have been confined to ridgetops with much calmer winds blowing at lower elevations. Today, temperatures will reach the mid teens F, and this afternoon winds increase, blowing 20-30 mph from the WSW. Snowfall will return tonight with 5-7 inches accumulating by tomorrow morning in the mountains near Big Sky, West Yellowstone, and Cooke City while the mountains near Bozeman will receive 2-4 inches. In all areas expect strong winds with this snowfall.

### Snowpack and Avalanche Discussion

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

Yesterday Doug and I rode on Lionhead to install a wind sensor and activate our weather station. The 162 inch tracks on our snowmobiles allowed us to easily ride in untracked snow where it felt like deep powder. Unfortunately it wasn't deep powder, it was deep facets covered by an unsupportable slab. Signs of recent avalanches confirmed what we already knew: the snowpack is weak. In other areas like Cooke City and the Taylor Fork, the snowpack contains a thicker more supportable slab on top of these facets. This slab will sucker you onto a slope because it may not avalanche until someone finds the hidden weak point. This happened to a rider last weekend near Cooke City when he was caught in an avalanche on a slope with many tracks. With a few more inches of snow overnight, the snowpack remains close enough to its breaking point that human triggered avalanches are probable. Today the avalanche is rated **CONSIDERABLE**.

Check out photos of avalanches from the [Taylor Fork](#), [Sheep Creek](#), and [Crown Butte](#) as well as a [video from Crown Butte](#).

*The Bridger and northern Gallatin Ranges:*

In the Bridger and northern Gallatin Ranges the snowpack appears more variable than in other areas. Skiers near Chestnut Mountain found layers of obvious facets that broke cleanly and easily in stability tests, and these skiers stayed on low angle slopes. Several groups of skiers in the northern Bridger Range found different combinations of slabs and facets. For now some slopes have a stronger snowpack while others have a weaker snowpack, but in either case they contain layers of faceted snow. Because these layers exist, human triggered avalanches will remain possible, and today the avalanche danger is rated **MODERATE**.

I will issue the next advisory tomorrow morning at 7:30 a.m. If you get out in the backcountry give us a call or email with your observations. You can reach us at 587-6984 or email us at [mtavalanche@gmail.com](mailto:mtavalanche@gmail.com).

### **AVALANCHE EDUCATION**

## 1. WEST YELLOWSTONE

Snowmobilers and Skiers: Saturday, January 2 from 12-5 pm at the Holiday Inn is avalanche lectures. Sunday, January 3 will be an all day field session for both skiers and snowmobilers. \$30 suggested donation. No sign up required. <http://www.mtavalanche.com/education/classes/snowmobilers>

## 2. BOZEMAN

Level 1: 7-10 January, Montana Outdoor Science School is offering a Level 1 Avalanche Course. Instructors are Angela Patnode and Jay Pape. For more information, contact Montana Outdoor Science School at 406-582-0526.

## 3. BOZEMAN

Level 1: American Avalanche Institute is offering a Level 1 Avalanche Course January 22-24, 2010 at Bridger Bowl. Get more information and register at: [www.americanavalancheinstitute.com](http://www.americanavalancheinstitute.com)

## 4. FOUR CORNERS

Rescue Lecture: On Tuesday, 26 January, the Gallatin Valley Snowmobile Association is having it annual Chili Feed at 6:30pm in the Groomer Shack. At 7:00 there's a free Avalanche Rescue Talk.  
<http://www.mtavalanche.com/workshops/calendar>

## 5. BOZEMAN

Basic Avalanche Workshop: The Friends of the Avalanche Center and MSU are offering a Basic Avalanche Awareness Class the evenings Wed, Thur, 27 & 28 January with a field day on Saturday, 30 January. \$25 donation. No sign up required. <http://www.mtavalanche.com/education/classes/basic>