

## **GNFAC Avalanche Forecast for Wed Dec 30, 2009**

Good morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Wednesday, December 30, at 7:30 a.m. **Jeff King at Edward Jones**, in cooperation with the **Friends of the Avalanche Center**, sponsor today's advisory. This advisory does not apply to operating ski areas.

### Mountain Weather

The mountains around West Yellowstone and Cooke City received an inch of snow last night while a trace dusted the mountains to Big Sky. Winds are blowing west to southwest at 15-20 mph with temperatures near 10F. Under cloudy skies the southern mountains will get another inch as temperatures warm only a few degrees and wind speeds remain the same. Unfortunately, the disturbances rolling through are low energy, pathetic systems.

### 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:

The mountains from Big Sky southward all have similar avalanche concerns: weak, faceted snow underlying a denser slab. In areas around Lionhead the snowpack is mostly facets. Further north in Taylor Fork a thicker slab is avalanching with the weight of snowmobilers. A rider on Saturday reported slopes cracking and collapsing and on Sunday a rider was buried when the sides of a steep gully avalanched ([see photo](#)). Luckily he was ok. We're finding similar instabilities around Buck Creek and Beehive Basin too. Without storms the snowpack is getting a reprieve, but the added stress of a skier or snowmobiler is enough to tip the scales and avalanche slopes. Cooke City is a case in point. In these mountains the slopes, left alone, are holding together. The weak facets are supporting the hard slab above, but a skier or snowmobiler will disturb this natural balance. We saw this on Sunday, Monday and again yesterday when riders triggered slides ([see photos](#)). Some of these occurred on slopes with many tracks. A thicker part of the slab may hold up a passing sledder, but a thinner spot, usually found around rock outcrops, trees or near the flanks of slopes, will give away and propagate a fracture pulling out all the previous highmarks. Given the recent avalanches and other signs of instability, for today, human triggered avalanches are probable and the avalanche danger is rated **CONSIDERABLE**.

Many pictures of recent avalanches: <http://www.mtavalanche.com/photo>

A video of the Crown Butte avalanche investigation: <http://www.youtube.com/watch?v=2O9OjMXIECo>

### The Bridger and northern Gallatin Ranges:

The Bridger and northern Gallatin Ranges are not exhibiting obvious signs of instability. On many slopes there's a layer of facets a foot under the surface, but it's breaking clean only occasionally in our stability tests. Over the weekend, Eric's trip south of the ski area and a ski marathon up Hyalite Peak showed relative stability. Near Frazier Lake, Mark's main concern was this layer of sugary snow, but without a new snow load he wasn't losing sleep over it. The Bridger Ski Patrol dug a pit in an untracked area and came to the same conclusion.

We'll keep an eye on these buried facets since they can't be trusted, but without another snowstorm we're in an avalanche danger holding pattern. For today, the avalanche danger is rated **MODERATE**.

Mark 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>