

## **GNFAC Avalanche Forecast for Thu Jan 14, 2010**

Good Morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Thursday, January 14, at 7:30 a.m. **Sweet Pea's Nursery**, in cooperation with the **Friends of the Avalanche Center**, sponsor today's advisory. This advisory does not apply to operating ski areas.

### Mountain Weather

Early this morning it was snowing and 1-2 inches had accumulated in the mountains by 7 a.m. Unfortunately this fleeting storm will only lay down another ½ to 1 inch of additional snow. Temperatures were in the low 20's F and will rise into the upper 20's today under mostly cloudy skies. Light winds were blowing from the W and SW at 5-10 mph while stronger ridgetop winds in the Bridger Range were blowing about 20 mph. Today winds will continue at these speeds blowing from the W and slightly NW.

### Snowpack and Avalanche Discussion

Last week stability assessments were easy. Avalanches occurred on many slopes and the snowpack produced noticeable collapsing and cracking. These were clear signs of an unstable snowpack. The situation has changed as the snowpack has adjusted to the weight of last week's snow and avalanche activity has diminished.

Unfortunately the structure of the snowpack responsible for recent avalanches has not changed, and recent warm weather has not affected weak, faceted snow buried 2-3ft deep. To further complicate matters, sheltered slopes at or below treeline may contain a layer of buried surface hoar. The problem with surface hoar is that it forms on all slopes but only survives on a few. It has been found near West Yellowstone, Cooke City, and Big Sky. While many of these low elevation, sheltered slopes may seem safer than big alpine bowls they are not, and a regular observer near Cooke City experienced collapsing and cracking on these types of slopes yesterday.

On Tuesday near Mt. Blackmore my partner and I had little confidence in the snowpack and we dug multiple snowpits while approaching the slope we hoped to ski. Even though isolated columns required much force to break, we opted for a more conservative line and skied a slope less than 35 degrees. While riding near Lionhead Doug did not trust the snowpack either. Before crossing a small 30 degree slope, he stopped to dig a snowpit and evaluate stability. This low confidence in the snowpack is based on the existence of a persistent weak layer that has demonstrated the ability to produce avalanches. For this reason today, human triggered avalanches are probable on slopes steeper than 35 degrees where the avalanche danger is rated **CONSIDERABLE**. Less steep slopes have a **MODERATE** avalanche danger. Careful snowpack evaluation, cautious routefinding and conservative decision-making are essential for safe travel.

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).

### Ski Movies/Fundraiser

Hans Saari Memorial Fund presents the UP THERE Film Fest Thursday and Friday, January 14-15 at the Emerson Cultural Center - Two Films, including Mike Marolt's Skiing Everest and Swift, Silent, Deep, the Story of the Jackson Hole Air Force will be shown. For more info go to [www.hansfund.org](http://www.hansfund.org)

### Avalanche Education

### **Education Calendar**

**1. University of Montana/ Western, Room 311 Block Hall, Dillon, MT**

One-hour Avalanche Awareness Class - Thursday, January 14<sup>th</sup> - 7pm to 8pm

**2. University of Montana/ Western, Room 311 Block Hall, Dillon, MT**

One-hour Avalanche Awareness Class - Friday, January 15<sup>th</sup> - 7pm to 8pm

**3. Cooke City Fire Hall**

One-hour Avalanche Awareness Class - Saturday, January 16<sup>th</sup> - 6pm to 7pm

**4. Bozeman**

MMA Teen Avalanche Class: Lecture Thursday, January 21<sup>st</sup> & Field Session Saturday, January 23<sup>rd</sup>. To sign up or get more information, call Erin Taylor Montana Mountaineering Associations at 522-0659

**5. Bridger Bowl**

AAI Level 1 Avalanche Course - Friday, January 22<sup>nd</sup> to Sunday, January 24<sup>th</sup>

[www.americanavalancheinstitute.com](http://www.americanavalancheinstitute.com)

**6. Four Corners Groomer Shack**

RESCUE LECTURE: Tuesday, January 26<sup>th</sup> 7pm. The Gallatin Valley Snowmobile Association is having it annual Chili Feed at 6:30pm in the Groomer Shack at 4 corners.

**7. Billings**

Avalanche Awareness and Rescue Class-Wednesday, January 27<sup>th</sup>, 6-9 pm at Beartooth Harley.

**8. Bozeman**

BASIC AVALANCHE WORKSHOP: The Friends of the Avalanche Center and ASMSU Outdoor Rec 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>

**9. Holiday Inn, West Yellowstone**

One-hour Avalanche Awareness Class - Saturday, January 30<sup>th</sup> - 7pm to 8pm