

## GNFAC Avalanche Forecast for Thu Dec 22, 2011

Good morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Thursday, December 22 at 7:30 a.m. This advisory is sponsored by **Outlaw Partners** and **On Site Management** in partnership with the **Friends of the Avalanche Center**. This advisory does not apply to operating ski areas.

### Mountain Weather

Since yesterday morning an additional 6-10 inches of snow fell in the Gallatin and Madison Ranges while the Bridger Range and Cooke City got an inch at most. Temperatures this morning were in single digits F and northerly winds calmed to 5-10 mph with some gusts of 15 mph. During the storm yesterday winds blew stronger at 15-30 mph sometimes from the E. Skies began clearing overnight and today will be mostly sunny with temperatures rising into the low teens F. Winds will remain northerly at 5-10 mph with some gust up to 20 mph.

### Snowpack and Avalanche Discussion

#### The Madison and Gallatin Ranges, and the Lionhead area near West Yellowstone:

Sometimes avalanche forecasting is easy and today is one of those times. Yesterday's snow combined with a weak snowpack will produce avalanches. Total snowfall for the storm was:

- 15" in Hyalite Canyon (0.8" [SWE](#))
- 10"-12" on Lone Mountain at Big Sky (0.4"-0.8" [SWE](#))
- 10" near the Taylor Fork drainage (0.5" [SWE](#))
- 6"-7" near West Yellowstone (0.3-0.4" [SWE](#))

Most areas have weak, faceted snow crystals throughout the snowpack which will not support the load of yesterday's snowfall. Some slopes produced avalanches on their own and many others are waiting for skier or rider to trigger an avalanche. The most sensitive slopes will be ones with wind deposited snow. Some strong easterly winds yesterday loaded slopes that often do not receive wind-blown snow. Even though winds have calmed this morning, it did not take very strong winds to transport yesterday's low density snow.

The snowpack in and near Hyalite Canyon is generally stronger but this area received the most snow; therefore, this snowpack has the most stress. During the storm yesterday, skiers near Hyalite Lake found 2 natural avalanches and experienced collapsing of the snowpack, both signs of unstable snow.

For today, a **HIGH** avalanche danger exists on all wind loaded slopes where both natural and human triggered avalanches are likely. A **CONSIDERABLE** avalanche danger exists on all other slopes.

#### The Bridger Range and the mountains around Cooke City:

The Bridger Range and the mountains near Cooke City only received 2-3 inches of snow. With less new snow there will be fewer avalanches. The snowpack in the Bridger Range is incredibly weak and completely faceted. Near Cooke City the snowpack is much deeper and generally stronger but near the snow surface it has some facets that can produce avalanches ([photo](#)). In both these areas watch for recently wind loaded slopes. These slopes may not produce very large avalanches but will easily break if you ski or ride on them. Today a **CONSIDERABLE** avalanche danger exists on all wind loaded slopes. All other slopes have a

**MODERATE** avalanche danger.

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](mailto:mtavalanche@gmail.com) or call us at 587-6984.

## **EVENTS/EDUCATION**

To check out all our education programs: <http://www.mtavalanche.com/workshops/calendar>

### **BOZEMAN**

[\*Women's 1-hour Avalanche Awareness Lecture\*](#). Wednesday, January 4, 6:30- 8 p.m. at REI.

[\*Snowmobiler Introduction to Avalanches with Field Course\*](#). Lectures on Saturday, January 7, with an all day field session Sunday, January 8. Advanced registration IS REQUIRED.

[\*1-hr Avalanche Awareness Lecture\*](#). Wednesday, January 11, 6:30-7:30 p.m at REI.

### **BIG TIMBER**

[\*1-hr Avalanche Awareness Lecture\*](#). Tuesday, January 10, 7-8 p.m at Big Timber High School.

### **HELENA**

[\*1-hr Avalanche Awareness Lecture\*](#). Thursday, January 12, 6:30-8:30 p.m at Exploration Works.

### **CODY, WYOMING**

[\*Snowmobiler Introduction to Avalanches with Field Course\*](#). Lectures on Saturday, January 14 at Mountain Valley Motorsports with an all day field session near Cooke City on Sunday, January 15. Advanced registration IS REQUIRED.