

## **GNFAC Avalanche Forecast for Mon Jan 18, 2010**

Good Morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Monday, January 18, at 7:30 a.m. **Bridger Bowl**, in cooperation with the **Friends of the Avalanche Center**, sponsor today's advisory. This advisory does not apply to operating ski areas.

### Mountain Weather

Over the past 24 hours a ridge of high pressure has brought sunny skies and warmer temperatures to southwest Montana. Today that ridge of high pressure will break down as a front approaches from the southwest. Snow and wind will arrive with this front bringing 1-2 inches to the southern mountains while the northern mountains will remain mostly dry. Strong ridetop winds out of the W-SW at 25-35 mph will be present for most of the day. Temperatures will remain warm with highs in the upper 30's and lows in the 20's. Conditions will calm this evening, but another band of moisture will move into southern Montana tomorrow morning bringing an additional 1-2 inches of snow to the southern mountains.

### Snowpack and Avalanche Discussion

#### *The Madison Range, and the Lionhead area near West Yellowstone:*

Despite the fact it has been almost two weeks since our last significant snowfall, human triggered avalanches continue to be widespread throughout the Madison range and Lionhead area near West Yellowstone. Weak, faceted snow near the ground continues to be the culprit of instability making the snowpack fragile and untrustworthy. In the past three days three separate skier triggered avalanches have been reported around Big Sky. Two of these avalanches broke on deep buried facets while the third was a freshly formed wind slab that broke over a foot deep on a north facing slope well above treeline. Another skier in Beehive Basin reported extensive cracking and collapsing as he skied off the ridge into Middle Bear Basin. These obvious signs of instability prompted this skier to stop in his tracks, put on his skins and avoid entering further into avalanche terrain.

Just to the south of Big Sky on Buck Ridge, a snowmobiler triggered an avalanche that buried half his sled and luckily not him. Two more human triggered avalanches were reported in the Lionhead area near West Yellowstone. One of these avalanches resulted in a damaged snowmobile but luckily no serious injuries occurred. When avalanche activity remains consistent two weeks after a storm the snowpack starts to resemble a dart board with the bull's eye being the trigger point. You can only throw so many darts before hitting the bull's eye and in this case that does not make you a winner. With the presence of weak faceted snow near the ground and the abundance human triggered avalanches, all slopes should be approached as if they will slide. For today, a **CONSIDERABLE** avalanche danger exists on all wind loaded slopes and slopes steeper than 35 degrees. All other slopes have a **MODERATE** avalanche danger.

#### *The Bridger and Gallatin Ranges, the mountains around Cooke City and the Washburn Range:*

The lack of avalanche activity and constant improvement in stability tests has slowly raised our confidence in the snowpack. Weak, faceted snow still exists in many areas, but mild weather and no new snow has allowed these weak layers to gradually gain strength. Although stability is improving and human triggered avalanches are becoming scarce, many factors still exist that make avalanches possible. One of these factors is a buried layer of surface hoar that now sits a foot below the surface. This pesky and often intermittent weak layer can go

undetected in stability tests, but can surprise you when you least expect it. Another element that can catch you by surprise is freshly formed wind slabs. These isolate but dangerous loading events can occur over a short period of time and can make a safe slope dangerous in a matter of hours. With strong winds forecasted throughout the day, a mindful and cautious approach should be taken on all slopes that have potentially been wind loaded. Despite the overall improvement of the snowpack instability still exists and human triggered avalanches remain possible. For today, a **MODERATE** avalanche danger exists on all slopes.

Doug 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**

### **Education Calendar**

#### **1. Cooke City Fire Hall**

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

#### **2. West Yellowstone, Holiday Inn**

One-hour Avalanche Awareness Class - Saturday, January 16<sup>th</sup> - 7pm-8pm

#### **3. 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

[\(Info\)](#)

#### **4. 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)

#### **5. 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.

#### **6. Billings**

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

#### **7. Big Sky**

Moonlight Basin Avalanche Course: Join Moonlight Basin for a comprehensive, two-day and one evening avalanche awareness class. Thursday, Jan 28<sup>th</sup> 5-9:30pm and Friday and Saturday, Jan 29&30 8am-4pm. Contact: [events@moonlightbasin.com](mailto:events@moonlightbasin.com) or 406-993-6026

#### **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. West Yellowstone, Holiday Inn**

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