

## **GNFAC Avalanche Forecast for Sun Nov 30, 2014**

Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Sunday, November 30 at 7:30 a.m. Today's advisory is sponsored by the Yellowstone Club Community Foundation in partnership with the Friends of the Avalanche Center. Backcountry conditions exist within the ski area boundary of Bridger Bowl and this advisory is relevant to that area. All the other ski areas are closed to uphill travel.

### **AVALANCHE WARNING**

We are issuing a Backcountry Avalanche Warning for the mountains around Cooke City. Heavy snowfall and strong winds will create widespread instability and the avalanche danger is rated [\*\*HIGH\*\*](#) on all slopes. Very dangerous avalanche conditions exist and both natural and human triggered avalanches will be likely. Travel in avalanche terrain is not recommended and avalanche runout zones should be avoided.

### **Mountain Weather**

Since yesterday morning temperatures have dropped nearly thirty degrees F and a healthy dose of snow has blanketed much of the forecast area. Cooke City was the big winner with over a foot of new snow while the mountains near Bozeman picked up 6-8 inches. Farther south, Big Sky squeezed out 3-4 inches while the mountains around West Yellowstone received a trace to two inches. Currently, temperatures are in the single digits above or below zero F and winds are blowing 10-20 mph out of the west. Stronger winds are being recorded near Cooke City with gusts reaching over 30 mph. Today, temperatures will warm into the single digits to low teens F under mostly clear skies and winds will continue to blow 10-20 mph out of the west.

### **Snowpack and Avalanche Discussion**

#### **Cooke City**

Over the past 24 hours the mountains around Cooke City received over a foot of new snow totaling 1.2 inches of SWE (snow water equivalent). Combined with the new snow, strong winds overnight will make wind-loaded slopes especially unstable. This rapid and heavy load will be adding stress to a layer of facets about a foot above the ground. This layer has been responsible for numerous human triggered avalanches over the past week. A similar setup resulted in an avalanche fatality last Wednesday ([photo](#), [photo](#), [video](#)) and a very close call on Friday. Both incidents were the result of riders triggering avalanches from low on the slope.

Today, I expect avalanches to occur in both the storm snow and on weak layers buried deeper in the pack. It will be possible to trigger avalanches remotely, which means triggering them from a distance. This is a dangerous situation since it's easy to assume that low angle or flat slopes are not avalanche prone. However, if low angle slopes are connected to steeper slopes above, they are still considered avalanche terrain and should be avoided.

With the current snowpack structure, continued avalanche activity, new snow and strong winds, the avalanche danger is rated [\*\*HIGH\*\*](#) on all slopes for the mountains around Cooke City.

#### **Bridger Range   Gallatin Range   Madison Range   Lionhead area near West Yellowstone**

Facets near the ground continue to be a problem throughout our forecast area. On slopes below 8,000 ft. this layer seems to be gaining strength due to a shallower snowpack and warmer temperatures, but in upper elevation terrain, this layer is still active and producing avalanches.

On Friday, the Big Sky Ski Patrol triggered many avalanches that broke on these facets near the ground. Some were triggered with explosives and some were triggered remotely. Yesterday, I toured north of Bridger Bowl and found this layer to propagate consistently in stability tests ([photo](#)).

With the additional weight of new and windblown snow, I expect facets near the ground to become increasingly sensitive to human triggers. For this reason – Human triggered avalanches are likely and the avalanche danger is rated **CONSIDERABLE**.

## **AVALANCHE FATALITY**

A snowmobiler died in an avalanche outside Cooke City on Wednesday, November 26<sup>th</sup>. The victim, a 31 year old male from North Dakota, remotely triggered a slide on the southwest side of Henderson Mountain off the Miller Road .Read the full accident report here: [Accident Report](#)

If you get out please let us know what you find. Pictures, snowpits, and a general narrative of conditions are super helpful. Drop us a line at [mtavalanche@gmail.com](mailto:mtavalanche@gmail.com).

Sharing our advisories and photos. Share the best parts of our website. Social media icons on a page allow you to share individual pictures and the daily advisory.

Have a Smartphone or Tablet? The Friends of the Avalanche Center just published two FREE apps so you can get the latest avalanche information, videos and photos: [iOS 8 GNFAC App](#); [Android app](#)

## **AVALANCHE EDUCATION:**

Take a look at our [Education Calendar](#) for all our classes being offered.

### **MSU - Introduction to Avalanches with Field Course**

The workshops are held on Wednesday and Thursday evenings, with a field course on Saturday. Different topics are presented each evening. Topics include: avalanche terrain recognition, the affect weather has on avalanche hazard, the development of the mountain snowpack, decision making skills, and basic search and rescue procedures.

December 3, 4 and 6 or 7, 2014: <https://www.ticketriver.com/event/13089>

### **Snowmobiler Introduction to Avalanches with Field Course**

Five hours of lectures are followed by a full day field course. Topics covered include: avalanche terrain recognition, the affect weather has on avalanche hazard, the development of the mountain snowpack, decision making skills, and basic search and rescue procedures.

West Yellowstone: Dec 18 and 19, 2014: <https://www.ticketriver.com/event/12955>