# **GNFAC** Avalanche Forecast for Sun Nov 17, 2013

This is Mark Staples with early season avalanche information issued Sunday, November 17 at 7:30 a.m. Today's information is sponsored by **Grizzly Outfitters** in partnership with the **Friends of the Avalanche Center**. This information will be updated as conditions change.

#### Mountain Weather

Snowfall started late Friday night and continued through Saturday. Many places received 9-14 inches of new snow since Friday night except the northern Gallatin Range which only received a few inches. **SNOTEL** sites were unavailable this morning, and exact storm totals are unknown. Strong winds accompanied this storm. Ridgetop winds averaged 10-20 mph generally from the west with gusts of 35 mph. Temperatures this morning were near 10 degrees F and should warm into the high teens F. Today winds shouldn't change much and may increase over the next few days. Most snowfall ended last night, and the next chance for snow will be Tuesday.

## Snowpack and Avalanche Discussion

The Bridger Range and the mountains near Cooke City and West Yellowstone received about 1 inch or more of <a href="mailto:snow water equivalent">snow water equivalent</a> (SWE). This number is important because it tells us how much weight was added to the snowpack. In this case 1 inch of SWE corresponds to over a foot of snow. More importantly it is a lot of weight. Strong winds drifted snow adding an even greater load to lee slopes. Things break when too much weight is added too fast. Many slopes are likely at their breaking point waiting for a skier or rider to tip the balance and trigger an avalanche.

The problem is a layer of weak faceted crystals found about 6-18 inches above the ground (**photo**). There is a GOOD CHANCE you could TRIGGER AN AVALANCHE on this layer. Pull out your shovel, dig a quick snowpit, and look for it. With strong winds expected over the next few days and more snow possible on Tuesday, many slopes may remain near their breaking point through the week. Fresh wind slabs will also be a problem.

Looking ahead, we can say a few things. <u>First</u>, a lot can change during the next month. Our fledgling snowpack may change drastically for good or bad. <u>Second</u>, the layer of facets found in most places could be a lot worse and there's a chance it may heal. Mild temperatures and continued snowfall are the cure. Unfortunately weak layers form quickly but take a long time to go away. <u>Lastly</u>, early season snowpacks in Montana are rarely strong and stable. For the next few weeks, take it easy and be conservative.

#### DANGER RATINGS AND FIELD OBSERVATIONS

We will not be issuing danger ratings until we get more data about the snowpack. We need your help. Drop us a line with any of your snowpack observations, pictures or snowpits to <a href="mailto:mtavalanche@gmail.com">mtavalanche@gmail.com</a>. You can also call in your observations in at 587-6984.

#### EXTRA CREDIT READING

Some recent articles found on our Blog:

Avalanche Safety for Snowmobilers;

The Rules of the Game – safety and strategy in avalanche terrain;

Do phones interfere with avalanche beacons?;

Staying on top during the Bozeman Ice Festival.

## **EVENTS/EDUCATION**

### 1-Hour Avalanche Awareness Classes

BOZEMAN, November 19, 6:30 p.m. at REI

BIG TIMBER, November 19, 7 p.m. at Big Timber High School

BILLINGS, November 20, 6 p.m. at Basecamp

BIG SKY, November 20, 7 p.m. at Grizzly Outfitters

BOZEMAN, November 21, 6 p.m. at Bozeman Public Library (30 min; Avalaunch)

LEWISTOWN, November 23, 3 p.m. at Eagles Club

WEST YELLOWSTONE, November 26, 6 p.m. at West Yellowstone Conference Hotel

BOZEMAN, December 2, 7 p.m. at Northern Lights Trading Company

Go to our EDUCATION CALENDAR for details and more courses.

Intro to Avalanches w/ Field Course, MSU; 4, 5 and 7 December

Info and registration: https://www.ticketriver.com/event/7112

Snowmobiler Intro to Avalanches w/ Field Course, West Yellowstone: 19 and 20 December

Info and registration: https://www.ticketriver.com/event/7116