

GNFAC Avalanche Forecast for Sat Jan 30, 2010

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

Mountain Weather

A weak ridge of high pressure has produced partly cloudy skies and calm conditions over our area for the past 24 hours. Today, temperatures will be on the mild side with highs in the mid to upper thirties and lows in the twenties. Winds will be calm in the lower elevations, but will reach 15-20 mph out of the W-SW along the ridgetops. The existing ridge will begin to break down today bringing a better chance of unsettled weather tonight and tomorrow.

Snowpack and Avalanche Discussion

The Madison Range, southern Gallatin Range and the Lionhead area near West Yellowstone:

From Big Sky to West Yellowstone weak faceted snow continues to persist 2-3 feet below the snow surface and has displayed the ability to propagate fractures and produce avalanches. The question is, what will it take to initiate a fracture and make the slope fail? The answer is finding the right spot on a slope and applying the proper trigger. With the snowpack as weak as it is, a 150 pound skier can just as easily trigger an avalanche as a 500 pound snowmobile. Unfortunately, as time goes on predicting where these sweet spots are is becoming increasingly difficult.

A powerful tool that can be used to your advantage during these conditions is being aware of terrain that will most likely produce avalanches. Slopes steeper than 30 degrees are more prone to avalanching and should be approached with caution and respect. Other areas such as rock outcroppings and convexities generally have a shallow or more stressed snowpack making avalanches easier to trigger. Making informed decisions and avoiding high hazard areas is your best way to mitigate potential hazard when traveling in the backcountry.

Spatial variability and a weak snowpack structure continue to paint a big question mark on many slopes and the potential for triggering an avalanche remains very real. For this reason, a **CONSIDERABLE** avalanche danger exists on all slopes steeper than 35 degrees. A **MODERATE** avalanche danger exists on all slopes less than 35 degrees.

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

The mountains around Bozeman and Cooke City have a slightly deeper and more stable snowpack which has allowed riders and skiers to venture higher and deeper into the backcountry with more confidence. However, this increased comfort level can create problems as backcountry enthusiasts start to explore steeper and more exposed avalanche terrain. A snowmobiler north of Ross Peak in the Bridger Range discovered this the hard way after he triggered a good sized avalanche that broke up to 3ft deep and 75 ft across ([see video](#)). This avalanche broke on buried facets that more than likely formed during the cold snap in early December. Other factors that contributed to this avalanche were a shallow snow pack, only 30 inches deep in some places ([photo](#)), and a steep convex rollover where the slope angle went from less than 30 degrees to 38 degrees in a short distance. With buried facets and wind slabs continuing to produce areas of instability, human triggered avalanches remain possible and the avalanche danger is rated **MODERATE**.

I will issue the next advisory tomorrow morning at 7:30 a.m. If you get out in the backcountry let us know what you find. You can reach us at 587-6984 or email us at mtavalanche@gmail.com.

Monday, February 8: MONTANA ALE WORKS BENEFIT DINNER

Mark your calendars: Montana Ale Works is hosting a benefit dinner for the Friends of the Avalanche Center on Monday evening, February 8th. Chef Roth Jordan has assembled an amazing five course menu themed "Mountains of the World" with foods from Chile, Montana, France, New Zealand and Germany. Dinner is limited to 40 seats with the first course served at 6:30 p.m. Tickets to this event are \$75, all inclusive, and available at Montana Ale Works. More information is available on our [calendar](#) or by calling 587-7700.

8th ANNUAL KING AND QUEEN OF THE RIDGE

The 8th Annual King and Queen of the Ridge will be held at Bridger Bowl on Saturday, February 13th. ALL proceeds go to the Friends of the Avalanche Center who use the money to promote avalanche education in southwest Montana. Last winter we taught 62 classes reaching over 4,300 people. You can help raise money to continue this education in 2 ways:

- 1). Get pledges and hike the ridge. You don't have to do 20 laps - you can get flat pledges and hike just once! Or you can test your mettle and try and break John Yarrington's record of 27 laps in 5 hours.
- 2). Sponsor someone. If you don't have someone to sponsor, consider sponsoring Mark, Eric or myself since we'll be hiking for dollars.

You can go to http://www.bridgerbowl.com/events/view_event/15/ for more information and registration forms.

AVALANCHE EDUCATION CALENDAR

1. West Yellowstone, Holiday Inn

One-hour Avalanche Awareness Class - Saturday, January 30th - 7 p.m. to 8 p.m.

2. Bozeman

Advanced Avalanche Workshop: The Friends of the Avalanche Center and ASMSU Outdoor Recreation are offering an Advanced Avalanche Workshop on the evenings of February 3 & 4 with a field day on Saturday, February 6. **ADVANCED REGISTRATION IS REQUIRED.** For more information or to register contact: friendsofgnfac@gmail.com