

GNFAC Avalanche Forecast for Thu Feb 4, 2010

Good Morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Thursday, February 4, 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

Since yesterday morning 2-3 inches of snow has fallen from Big Sky south to West Yellowstone and Cooke City while the northern mountains near Bozeman received only a trace. Winds have been relatively light blowing 5-15 mph from the west and southwest with temperatures in the mid to high teens F. Today's weather shouldn't change much. High temperatures will be near 20 degrees F with mostly calm winds and only a few more inches of snow falling south of Bozeman.

Snowpack and Avalanche Discussion

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

Two problems exist in the snowpack. Since December weak facets have been found at or near the ground. In January a layer of surface hoar formed and is now buried 1-2 ft deep. Both of these layers have produced avalanches and neither has shown signs of improvement. An observer yesterday examined a recent avalanche that occurred near Hebgen Lake. It initially broke on the surface hoar layer but stepped down to the facets at the ground producing a very large avalanche that ran nearly 1500 ft. The surface hoar layer is tricky because it doesn't exist on every slope and will catch you as soon as you let your guard down. Likely locations to find it are sheltered slopes below treeline.

With two very sensitive weak layers in the snowpack, riding in avalanche terrain is risky at best. Today human triggered avalanches are probable on slopes steeper than 35 degrees where the avalanche danger is rated **CONSIDERABLE**. Less steep slopes have a **MODERATE** danger.

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

The deepest snow can be found in the Bridger Range where skiers and riders have found slopes with stable snow especially on the east side near Bridger Bowl. On Tuesday Doug and I skied in Truman Gulch on the west side where stability has improved as a two foot thick layer of facets has compressed to half that thickness over the last month. Unfortunately they haven't gone away and still propagate fractures in stability tests. Similar conditions have been reported in the northern Gallatin Range and the mountains near Cooke City where stability has improved, but the persistence of these facets has kept backcountry travelers from feeling overly confident. Closer to Big Sky avalanche activity has settled down, but faceted snow near or at the ground has a record this season of surprising us with its sensitivity. The strengthening process is slow and requires patience.

Skiing and riding in avalanche terrain is reasonable with careful stability evaluations. Today human triggered avalanches are 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 Doug 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.