GNFAC Avalanche Advisory for Wed Feb 3, 2010

Good Morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Wednesday, February 3, at 7:30 a.m. **Jeff King at Edward Jones Investments,** in cooperation with the **Friends of the Avalanche Center**, sponsor today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

Yesterday, light, steady snowfall dropped 1-2 inches from the Yellowstone Club to West Yellowstone to Cooke City. Winds were out of the southwest blowing 15 mph and calmed even further last night. Under clear skies, mountain temperatures this morning are in the low teens but will rise into the 20s. A moist southwest flow will increase clouds and bring snowfall to the southern mountains tonight with another 1-2 inches of snow by morning.

Snowpack and Avalanche Discussion

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

A couple inches of new snow with light winds will likely have no effect on the snow stability. Yesterday, Moonlight Basin and Big Sky Ski Patrols continued to clean up 1-2 foot thick windblown slabs. Above 10,000 feet the winds were stronger and created a few stubborn drifts that were neutralized with ski cuts. Karl and a partner rode into the Lionhead area and performed another round of stability tests at their research study site. They did stability test after stability test and noticed two things. First, the surface hoar layer buried two feet down still broke clean in all their tests. Second, their test scores which measure the amount of force needed to break this layer has hardly changed over three weeks. It's taking a very long time for these feathery crystals to gain strength-and will likely take much more.

On Saturday, a snowmobiler riding a few miles north of Karl's site triggered an avalanche on either this surface hoar layer or on the large facets at the ground. Near Hebgen Lake on Sunday, Eric and I got a very low score from a **Rutschblock test** as it broke clean on the surface hoar too. Regardless of the weak layer, surface hoar or facets near the ground, the snowpack is unstable and not to be trusted, especially on steeper terrain. On Sunday we "walked the talk" and skied low angled slopes. For today, the avalanche danger continues to be rated **CONSIDERABLE** on all slopes steeper than 35 degrees. Less steep slopes have a **MODERATE** danger.

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

Mark and I checked out the west side of the Bridger Range yesterday and dropped down Truman Gulch from the ridge. We dug a few snowpits and found the stability is improving. Loose facets at the ground, once two feet thick, have gained strength as they settled to half that depth. Compared to our snowpits from a month ago, the snowpack looks vastly better: 3-4 feet of total snow and inconsistent fractures in our stability tests. Our primary avalanche concern is these large facets at the ground. Last week a snowmobiler triggered an avalanche on this layer on the east side of the range and there's no doubt a skier could do the same on the west side. These instabilities are not widespread, but we skied cautiously and stayed off the bigger, high consequence open slopes. Reports from Hyalite and Mt. Wheeler in the northern Gallatin Range show similar conditions to the Bridger Range. Cooke City has snow depths of 4-5 feet and also has faceted snow and enough instability to warrant careful evaluation. For today, the avalanche danger is rated MODERATE on all slopes.

Mark 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 Yarington'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.

AVALANCHE EDUCATION CALENDAR

1. 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