GNFAC Avalanche Advisory for Sat Feb 6, 2010

Good Morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Saturday, February 6, at 7:30 a.m. **Pinhead Classic Telemark Festival** in cooperation with the **Friends of the Avalanche Center**, sponsor today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

In the past 24 hours a moist southwest flow has deposited 2-3 inches of new snow over much of our advisory area. Winds have been blowing out of the W-SW at 10-15 mph but will shift throughout the day to a more W-NW flow. Currently temperatures are in the mid teens, but will rise into the low 30's by this afternoon. Light snow will continue to fall throughout the day bringing an additional 1-2 inches of new snow to our region. Cold air will follow this band of moisture, dropping temperatures into the low teens by tomorrow morning.

Snowpack and Avalanche Discussion

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

It has been a month since the southern portion of our advisory area went through one of the largest avalanche cycles in recent memory. Although the snowpack today does not have the hair trigger it did then, its structure remains essentially the same. Weak facets near the ground are still laboring to support the slab above them. As the snowpack slowly becomes deeper with an inch here and an inch there, a contrasting situation starts to unfold. The positive side of a deeper snowpack is the weak facets near the ground become harder to trigger. The negative side is if enough force is created, a collapse and propagation of this weak layer is very possible and the result can be a deep and destructive avalanche. During these conditions it becomes very important to pay close attention to terrain features such as rock outcroppings and convexities where the snowpack is shallower and weaker making it easier to trigger an avalanche.

Yesterday, Mark was riding in the Lionhead area and found buried facets in every pit he dug. This persistent weak layer propagated fractures in stability tests and was responsible for localized collapsing felt by other riders, both signs of instability. Another area of concern is a layer of surface hoar that is now buried 1-2 ft below the snow surface. This layer appears to be most prevalent in the southern Madison range on mid to upper elevation slopes sheltered from the sun and wind. On Wednesday, a skier near Hebgen Lake examined a large avalanche that appeared to have initiated on this surface hoar layer, but steeped down to the old facets creating a large avalanche that ran nearly 1,500 vertical feet.

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**. Slopes less than 35 degrees have a **MODERATE** danger.

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

The skiing and riding conditions in the northern ranges and mountains around Cooke City have been exceptional over the past week with very little avalanche activity to speak of. These conditions make it easy to forget that just a few weeks ago human triggered avalanches were being reported in every one of these ranges. While stability seems to be improving, buried facets near the ground remain on all aspects and elevations making avalanches possible, especially on steeper terrain or areas that have a shallower and weaker snowpack. So don't

get fooled by seemingly stable conditions. Always use safe backcountry procedures such as one person on the slope at a time and make sure all rescue gear is operating correctly. Although the danger seems to be dropping your guard shouldn't. 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.

$8^{\rm th}$ 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

More information about these classes are listed at: http://www.mtavalanche.com/workshops/calendar

1. Cooke City Fire Hall

1 Hour Avalanche Awareness Class - Saturday, February 13th 6:30 pm to 7:30 pm

2. Bridger Bowl

AAI Level 1 Avalanche Course - Friday, February 19th to Sunday, February 21st

www.americanavalancheinstitute.com

3. Bridger Bowl

AAI Level 2 Avalanche Course - Monday, February 22nd to Thursday, February 25th

www.americanavalancheinstitute.com

4. Moonlight Basin

Comprehensive avalanche awareness class - Thursday, March 4^{th} to Saturday, March 6^{th}

events@moonlight.com or 406-993-6026