

GNFAC Avalanche Advisory for Tue Jan 26, 2010

Good Morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Tuesday, January 26, at 7:30 a.m. **Jeff King of Edward Jones**, 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, scattered snow in the southern mountains deposited 1-2 inches while the mountains from Big Sky and points north only saw a trace to an inch. Southwest winds are light at 5-10 mph with mountain temperatures reading 15-20F. Today, cloudy skies will dominate our region from a moist southwesterly flow. Winds are expected to remain light as temperatures warm into the 20's before dropping to 10F tonight. Snowfall is expected this afternoon in the mountains from Big Sky southward with 2-4 inches falling by tomorrow morning. The northern mountains will only see a trace to 1 inch.

Snowpack and Avalanche Discussion

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

The weekend storm left the mountains from Big Sky to West Yellowstone with at least a foot of new snow. The avalanche danger spiked with the storm, but has quickly settled down. Last Wednesday, a few of us went into the southern Madison Range and felt huge collapses with shooting cracks as we skied low angled terrain. Yesterday, on a day off, Mark went back and found that things have quieted down. The snow stability was clearly improving, but the snow structure was still bad: large facets trying to support a three foot deep snowpack. He was leery of the sudden improvement. Since the powder was deep and skiable on shallower angles he saw no need to tempt the avalanche dragon with steeper lines.

On Sunday, I snowmobiled and skied around Taylor Fork. I got a few large collapses as my partner and I skinned uphill. At one point a small hill 200 feet away visibly cracked four inches from one of our "whumphs". There was no need to do a stability test since the collapses and cracks indicated two important things. First, it showed that I could initiate a fracture and second, the fracture could propagate. Surface hoar (pic) buried almost two feet down is the new player. It's found on some slopes, but not others. Collapses are Mother Nature's way of telling us it's there, but we better dig to make sure. We've found it on some slopes in Lionhead, near Hebgen Lake, Bacon Rind and in Taylor Fork.

No matter if the weak layer is buried surface hoar or facets near the ground the avalanche danger on slopes steeper than 35 degrees is rated [CONSIDERABLE](#). On less steep slopes the danger is a very real, very serious [MODERATE](#) because of the possibility of triggering slopes from a distance. This is not a widespread problem, but as I found in Taylor Fork, it definitely exists.

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

In the northern mountains close to 16 inches of snow fell over the weekend with only light winds the last two days. The skiing and riding are excellent while the snow stability has gotten better-what a combo! Reports from the Bridger and northern Gallatin Ranges indicate the snowpack is behaving well. Stability tests are not breaking clean and there hasn't been anyone getting cracking or collapsing in the older snow since before the

storm.

Although much further away, the mountains around Cooke City also have similar stability. The storm dropped a foot and a half of powder onto a 4-5 foot deep snowpack. Other than sluffing of the new snow there was no substantial avalanche activity reported. Winds at the higher elevations early in the storm created thick drifts, but one of our observers noted they were not very sensitive to triggering. The storm added an inch of water weight to the snowpack-a decent amount. Given the big grains of sugary snow still underlying the snowpack, I believe it's not out of the question to trigger a slide. For today, the avalanche danger is rated MODERATE on all slopes.

I will issue the next advisory tomorrow morning at 7:30 a.m. If you get out in the backcountry give us a call or email with your observations. 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. Menu and pricing details are coming soon. Last year's special five course meal was an enormous hit and raised \$2,300!

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. Four Corners Groomer Shack

RESCUE LECTURE: Tonight. The Gallatin Valley Snowmobile Association is having its annual Chili Feed at 6:30 p.m. in the Groomer Shack at 4 corners.

2. Billings

Avalanche Awareness and Rescue Class-Wednesday, January 27th, 6 to 9 pm at Beartooth Harley.

3. Bozeman

BASIC AVALANCHE WORKSHOP: The Friends of the Avalanche Center and ASMSU Outdoor Rec are offering a Basic Avalanche Awareness Class the evenings Wed, Thur, 27 & 28 January with a field day on Saturday, 30 January. \$25 donation. No sign up required. <http://www.mtavalanche.com/education/classes/basic>

4. Big Sky

Moonlight Basin Avalanche Course: Join Moonlight Basin for a comprehensive, two-day and one evening avalanche awareness class. Thursday, Jan 28th 5-9:30 p.m. and Friday and Saturday, Jan 29&30 8 a.m. to 4 p.m. Contact: events@moonlightbasin.com or 406-993-6026

5. West Yellowstone, Holiday Inn

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