

GNFAC Avalanche Advisory for Tue Jan 4, 2011

Good morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Tuesday, January 4, at 7:30 a.m. **Team Bozeman and Yamaha**, in partnership with the **Friends of the Avalanche Center**, sponsor today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

Under clear skies, temperatures this morning are in the single digits with westerly winds blowing 15-25 mph at the ridgetops. Increasing clouds, increasing winds and an increasing chance of precipitation are on our plate for the next 24 hours. A northwest flow will push in clouds later today as mountain temperatures climb into the upper teens and winds blow W-NW at 20-30 mph. By morning the mountains will have 1-3 inches of new snow with showers continuing into Wednesday.

Snowpack and Avalanche Discussion

The northern Madison Range:

Strong winds in the northern Madison Range have loaded slopes at many elevations. Avalanche activity has been minimal, but don't let that lull your sensibilities. Yesterday, the Yellowstone Club Ski Patrol sent in two [pictures](#) of an avalanche on Cedar Mountain. This slide likely broke on a buried layer of surface hoar that may have been triggered by a snowmobiler from below. A feathery layer of surface hoar is found 18" deep on many slopes and is our primary avalanche concern in the mountains around Big Sky. This weak layer is gaining strength, but still demands attention since it is the weakest and most unstable snow in our advisory area. For today, the avalanche danger is rated **CONSIDERABLE** on all wind-loaded terrain. All other slopes have a **MODERATE** danger.

The Bridger Range, southern Madison and entire Gallatin Ranges, the Lionhead area near West Yellowstone, the mountains around Cooke City and the Washburn Range:

Sunday's snowstorm dropped 10 inches of fluff in the Bridger Range and 2-3 inches everywhere else. The winds showed no such disparity and blew 20-30 mph out of the west, loading many slopes on the ridgelines as well as cross loading mid-elevation terrain. Yesterday, my partner and I did a one day blast to Cooke City and found a small wind pocket that released near Lulu Pass ([photo](#)). An even smaller slide was seen near Goose Lake and a group of riders from Saskatchewan got a wind slab to crack on Fisher Peak. In the Bridger Range skiers found that the wind slabs could be easily cut, but did not run very far or deep.

Besides the northern Madison Range around Big Sky, the rest of our advisory area lacks a widespread weak layer. On Sunday, I found stable snow in Bacon Rind ([video](#)) which I identified ten days prior as having the weakest snow in the southern mountains. It strengthened quickly. Near Cooke City, the weakest layer in my snowpits ([photo](#)) wasn't all that weak. The only instability I was concerned with was wind pillows, but these were obvious and easily avoided. For today, the avalanche danger is rated **MODERATE** on all wind-loaded terrain. A **MODERATE** danger also exists on all slopes steeper than 35 degrees while lesser angled slopes have a **LOW** danger.

Yesterday, I scared my partner (wife) at the top of the slope we were about to ski. After we determined it was safe, I gave her dibs on going first. She was excited—until she turned around and saw my Avalung mouthpiece deployed, ready for emergency use. That tempered her enthusiasm and she wanted to know why I pulled it out if

the slope was safe. I answered, “For the same reason I keep my beacon on. You just never know.” She pulled hers out too, and headed down.

I will issue the next advisory tomorrow morning at 7:30 a.m. If you have any snowpack or avalanche observations, drop us a line at mtavalanche@gmail.com or call us at 587-6984.

Avalanche Education

There are many upcoming avalanche classes in the month of January. Check them on our education page at: <http://www.mtavalanche.com/workshops/calendar>