

## **GNFAC Avalanche Advisory for Wed Dec 9, 2009**

Good Morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Wednesday, December 9 at 7:30 a.m. **Northern Lights Trading Company**, in cooperation with the **Friends of the Avalanche Center**, sponsor today's advisory. This advisory does not apply to operating ski areas.

### Mountain Weather

Cold temperatures continue to dominate our weather. Mountain temperatures bottomed to -25 yesterday before "warming" to our current temp of -15. Winds picked up yesterday afternoon blowing west to southwest at 15-25 mph. Today, under cloudy skies, the heat wave will raise the thermometer to near zero, but stiff westerly winds will create a brutal wind chill. Small amounts of moisture will roll through bringing scattered showers, but less than an inch of accumulation. In essence, today's another great day to train for a climb of Denali.

### Snowpack and Avalanche Discussion

The Bridger, northern Gallatin, northern Madison Ranges and mountains around Cooke City:

The Bridger Range and northern Gallatins have three feet of supportable snow on the ground. Skiers in the northern Bridgers are finding scoured slopes on north faces and wind-loaded drifts on the south. Strong winds yesterday and today have likely blown all the remaining loose snow onto leeward slopes where it's still possible to trigger a slide.

In the northern Madison range the snowpack is only 2-3 feet deep and weak with facets sandwiched between denser layers. Wind slabs that formed over the weekend could still be triggered, so be mindful of these drifts. The Big Sky Ski Patrol released a 1-2' deep slide on the south face with explosives. Since this area has been closed the snowpack is similar to the adjacent backcountry. They also noted feathery crystals of surface hoar all the way to the summit on the south face too. Winds will most likely destroy it, but remaining pockets could be a future problem. Outside Cooke City the snowpack on north-facing slopes has the depth and strength of the Bridgers, while south-facing hills have similarities with the facet/crust layering of the northern Madison Range.

Variability in the snowpack and wind-loading near the ridgetops means it's possible to still trigger avalanches. Consequently, the avalanche danger is rated **MODERATE** today.

*The southern Gallatin and southern Madison Ranges, the Lionhead Area near West Yellowstone:*

Once you pass Buck Ridge near Big Sky on Highway 191 the snowpack becomes visibly thinner. In most winters the closer you get to West Yellowstone the deeper the berms get. But not this year. Bacon Rind, Taylor Fork, Teepee Basin and Lionhead have 1-2 feet of snow on the ground. On Sunday, Eric and I went to look at the snow around Lionhead and found weak, unsupportable sugary facets everywhere. Fat skis would float, but the track of the sled would nick the ground every now and then. There's no hand lens required to find these facets, just reach into the snow and grab a fistful. Big angular grains will fall out of your hand. These types of crystals, formed from the strong temperature gradient in the snowpack, are weak and will become unstable once we get more snow. With recent strong winds there will be small areas of wind drifts which could fracture. For today, the avalanche danger is rated **MODERATE** on wind-loaded slopes and **LOW** elsewhere.

Mark 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](mailto:mtavalanche@gmail.com).

## **AFTERNOON TWITTER UPDATES**

When we find interesting snowpack conditions or hear of avalanche activity we send out tweets. This gets you information quicker than waiting for the next morning's advisory. Check out our latest at:

<http://www.mtavalanche.com/twitter> or <http://twitter.com/avalancheGuys>

## **AVALANCHE EDUCATION**

1. BUTTE: Tonight at 6pm, a FREE one hour Avalanche Awareness Workshop will be offered at Redline Sports. Call Redline for more information at 406-782-9129
2. GREAT FALLS: On Saturday, December 12 at 10am until 3pm a FREE Avalanche Awareness Workshop will be offered at the Fish and Game Office in Great Falls. This class will have multiple presentations covering terrain, avalanches, weather, rescue, and human factors.
3. BOZEMAN: On Tuesday, December 15 at 7pm there will be a FREE one hour Avalanche Awareness Lecture at the Bozeman Public Library.
4. WEST YELLOWSTONE: TWO DAY GUIDES COURSE. On Thursday, December 17, (noon-5pm) at the Holiday Inn is an afternoon of avalanche lectures. Friday, December 18, will be in the field. Registration is NOT required. More info at: <http://www.mtavalanche.com/education/classes/snowmobilers>
5. BOZEMAN: Montana Outdoor Science School is offering a Level 1 Avalanche Course January 7-10. For more information, contact Moss at 406-582-0526.