

## **GNFAC Avalanche Advisory for Wed Dec 16, 2009**

Good Morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Wednesday, December 16 at 7:30 a.m. **The Dance Center**, in cooperation with the **Friends of the Avalanche Center**, sponsor today's advisory. This advisory does not apply to operating ski areas.

### Mountain Weather

Since yesterday morning the mountains near Cooke City received an additional 5 inches of snow, the mountains near West Yellowstone and the southern Madison Range received 2-4 inches, and the mountains near Big Sky received 2 inches while the Bridger Range remained dry. With this snow came strong SW winds blowing 20-30 mph. This morning at 4 a.m. winds have calmed to 10-20 mph with temperatures ranging from the high teens to low 20s F.

Today a moist southwesterly flow will bring more snow and 15-20 mph SW winds with temperatures in the mid 20s F. Mountains near Cooke City will receive 3-5 inches, West Yellowstone and Big Sky 2-3 inches, and the mountains near Bozeman will get about 1 inch of new snow.

### Snowpack and Avalanche Discussion

*The southern Gallatin and southern Madison Ranges, the Lionhead Area near West Yellowstone, the mountains outside Cooke City and the Washburn Range:*

Heavy snowfall on Sunday and Monday in the southern mountains including those near West Yellowstone and Cooke City combined with a weak snowpack prompted an Avalanche Warning on those days. Prior to that snowfall I experienced collapsing and cracking of the snowpack and even triggered an avalanche in the Taylor Fork drainage. On Monday Doug and Karl went to Lionhead where they observed similar conditions: widespread collapsing and cracking and numerous natural avalanches. Continued snowfall and strong SW winds have kept the snowpack near its breaking point with natural and human triggered avalanches likely on any wind loaded slope. Fractures will propagate over long distances, and avalanches can be triggered from low angle terrain in avalanche runout zones. Avoid riding under any slope steeper than 30 degrees. See a video clip of stability tests at Lionhead at: <http://www.youtube.com/watch?v=UfwsXnndHeM>, and photos of recent snow and signs of instability at: <http://www.mtavalanche.com/photo>

With more snow today, the avalanche danger is rated **HIGH** on any slope with wind deposited snow or any slope steeper than 35 degrees. All other slopes have a **CONSIDERABLE** avalanche danger.

*The Bridger, northern Gallatin and northern Madison Ranges:*

The snowpack in the mountains near Big Sky and Bozeman is hardly stronger than it is in the southern mountains but less stressed with less new snow. Wind loaded slopes are the exception and local ski patrols continue to trigger recently formed wind slabs. Yesterday the Big Sky Ski Patrol triggered one well below treeline breaking 1½ - 2 ft deep. In some areas the snowpack is unsupported and highly faceted. In other areas it is more supportable but contains a layer of facets found just under snow from the past week and a half. In either case this faceted snow has been sensitive to the weight of human triggers producing many avalanches.

Without significant loading from new snow, signs of instability may not be obvious. Ask yourself: Are you looking for signs of unstable snow or stable snow? You can find either and justify poor decisions. A skier

caught in an avalanche near Mt Blackmore saw all the right clues of unstable conditions but ignored them and attributed his decisions to the all the complications of being human. Fortunately he wasn't wearing his ski pole straps, and with some quick thinking he was able to dig into the bed surface and avoid being strained through trees. Today the avalanche danger is rated **CONSIDERABLE** on all wind loaded slopes. Human triggered avalanches are definitely possible on slopes without wind deposited snow where a **MODERATE** avalanche danger exists.

Eric 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).

## **HYALITE ACCIDENT REPORT**

We posted the accident report on the avalanche that killed Guy Lacelle in Hyalite Canyon on Thursday. You can read it out on our Accidents page at: <http://www.mtavalanche.com/accident/09/12/13>

## **TWEET TWEET: STAY IN THE LOOP**

We're using Twitter to update folks at all hours on the snowpack, avalanches, accidents and other worthy topics. Check out our tweets at <http://www.mtavalanche.com/twitter> or <http://twitter.com/avalancheguys>.

## **AVALANCHE EDUCATION**

1. 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>
2. BOZEMAN: Montana Outdoor Science School is offering a Level 1 Avalanche Course January 7-10. For more information, contact Moss at 406-582-0526.