

## **GNFAC Avalanche Advisory for Thu Dec 2, 2010**

Good Morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Thursday, December 2, at 7:30 a.m. Montana Import Group, 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 morning most areas received about 1 inch of new snow but more is coming tonight. This morning temperatures were hovering near 20 degrees F with winds blowing 10-20 mph from the WSW. Temperatures today will climb into the high 20s F and winds will increase this afternoon to 20-40 mph from the SW. Snow should start slowly around midday with the heaviest snowfall occurring late this evening. The southern mountains near West Yellowstone and Cooke City will receive 7-9 inches of snow while the mountains near Big Sky and Bozeman will receive 5-7 inches.

### Snowpack and Avalanche Discussion

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

Snow from October and November has built a solid foundation in the snowpack which is generally stable and "right side up." The snowpack has strong, dense snow near the ground and less dense snow near the surface ([snowpit graph](#)). After last winter's unstable snowpack, these words are hard for me to write, and they were hard for me to say on Tuesday when Doug and I skied Saddle Peak in the Bridger Range ([video](#), [photo](#)). Similar conditions have been found in Beehive Basin near Big Sky and in the northern Gallatin Range south of Bozeman ([snowpit photo](#)). In a few isolated areas above treeline, slightly faceted crystals have been found 6-12 inches above the ground. While this layer is not a major concern, it is worth investigating before committing to any big lines.

The main concern is any pillow or wind slab resting on low density snow formed by generally westerly winds. These wind slabs are confined to ridgetops and have not been especially sensitive or propagated over large areas in recent days. Today the avalanche danger is rated [MODERATE](#) on all wind-loaded terrain and [LOW](#) everywhere else. However, forecasted snow and strong SW winds could increase the avalanche danger this afternoon.

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

Limited field data around West Yellowstone and Cooke City indicate a similar snowpack to northern areas. Near Cooke City, skiers and snowmobilers reported some natural avalanche activity. These avalanches were confined to recently wind-deposited snow near ridgetops. Otherwise, observers found generally stable conditions but remain cautiously optimistic. Skiers in the southern Madison Range avoided any fresh wind slabs, and safely skied steep terrain. For today, the avalanche danger is rated [MODERATE](#) on all slopes though the danger could rise this afternoon with strong SW winds and new snow.

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](mailto:mtavalanche@gmail.com) or call us at 587-6984.

### Upcoming Avalanche Education

1hr Avalanche Awareness - Tue, December 7, 6:30pm – 7:30pm @ REI Bozeman

Join Lucas Zukiewicz from the Montana Snow Survey for a FREE presentation/discussion on the SNOTEL system in SW Montana. The discussion will cover how to access SNOTEL information and interpret the data for snow and weather conditions. Sat, December 11, 7:30pm – 8:30pm at World Boards.