

## **GNFAC Avalanche Advisory for Tue Dec 14, 2010**

Good Morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Tuesday, December 14, at 7:30 a.m. Montana Import Group, in cooperation with the Friends of the Avalanche Center, sponsors today's advisory. This advisory does not apply to operating ski areas.

### Mountain Weather

Yesterday morning an inch of wet snow fell over our forecast area with the mountains around Cooke City getting four inches. Mountain temperatures are hovering near freezing as winds pick up out of the southwest at 20-40 mph ahead of an approaching storm. Temperatures will drop to the upper teens tonight. Snowfall this afternoon and this evening will lay 4-6 inches in the southern mountains and 2-4 inches up north.

### Snowpack and Avalanche Discussion

#### The northern Madison Range and mountains around Cooke City and Washburn Range:

The two worst, most unstable areas are the mountains around Cooke City and the terrain surrounding Big Sky. Although they are far away from each other, their snowpack DNA is related. They both have buried facets and surface hoar 8-10 inches deep near Big Sky and 16 inches under the surface at Cooke City. Over the weekend winds blew near Big Sky creating soft slabs which naturally avalanched and were triggered by snowmobilers and skiers ([photo](#) of Yellow Mountain). On Sunday, Eric found easy shears in his stability test next to a snowmobiler triggered slide on Buck Ridge ([video](#)).

Since Saturday the mountains outside Cooke City have received 1.7 inches of snow water ([SWE](#)) which raised the avalanche danger. Natural and human triggered slides were noted on Sunday ([photo](#), [photo](#)) although the same observer reported much less activity yesterday as the snowpack adjusted to its new load. I found buried surface hoar and small facets last week which are now under all this snow. Dangerous avalanche conditions still exist on any terrain recently wind-loaded which has a [CONSIDERABLE](#) avalanche danger. All other slopes are rated [MODERATE](#).

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

Ten days ago our entire advisory area was blanketed with feathery crystals of surface hoar and smaller facets. Since then, the winds and warm temperatures destroyed it in some regions and we've been scrambling to map its distribution. In the Bridger and Gallatin Ranges as well as the southern Madison Range including Lionhead, we could not find this layer. Last week Mark hunted for it in Bacon Rind and near West Yellowstone and yesterday I snowmobiled into Carrot Basin, but we both came up empty. Although there could be isolated slopes where it's still hiding out, we're confident that it's not widespread.

The stability is good on slopes without this buried layer, but it's still possible to trigger small slides. On Sunday, ski tourers avalanched a few low elevation slopes leading into Mt. Blackmore up Hyalite ([photo](#)). For today, any slope wind-loaded or steeper than 35 degrees will have a [MODERATE](#) avalanche danger. Shallower angled avalanche terrain will have a [LOW](#) danger.

### Tobacco Roots Avalanche

On Saturday, two skiers triggered and were caught in a large avalanche in the Tobacco Roots ([photo](#)) which lies outside our advisory area. They were skinning up an ENE facing slope when they triggered the slide near the ridgeline. It broke under a soft wind slab catching them and their dog. The crown was up to 30 inches deep and ran over 1,000 feet vertical. Besides avalanching their uphill skin track, the slide propagated around the corner. They were able to arrest on the bed surface and luckily were not carried into a steeper, narrower section of the slope. The dog went the furthest, but all survived.

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

Avalanche Awareness for Snowmobilers in West Yellowstone Thursday, December 16<sup>th</sup> from 12 p.m. to 5 p.m (lectures), with an all day field day Friday, December 17<sup>th</sup>. For more information check out <http://www.mtavalanche.com/education/classes/snowmobilers> or call us at 587-6984.

### Other News

This year REI has chosen Friends of GNFAC as their charity of choice. By making a donation through REI you can help The Friends continue to support the Avalanche Center and promote avalanche education throughout southwest MT.