

## **GNFAC Avalanche Forecast for Mon Dec 13, 2010**

Good Morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Monday, December 13, at 7:30 a.m. World Boards, in cooperation with the Friends of the Avalanche Center, sponsors today's advisory. This advisory does not apply to operating ski areas.

### Mountain Weather

Much of our advisory area remained dry over the past 24 hours with the exception of Cooke City which picked up an additional 3-4 inches on snow since yesterday morning ([Fisher Creek Snotel](#)). Warm air has moved into southwest Montana in the wake of the yesterday's storm producing night time lows that barely dipped below freezing. Currently, mountain temperatures are in the high 20's to low 30's F and winds are out of the W-SW at 15-25 mph. Cloudy and warm conditions will continue through the day with a slight chance of mountain snow showers. High temperatures will climb close to 40 F and winds will stay out of the W at 15-20 mph. An increasing chance of precipitation will arrive tomorrow.

### Snowpack and Avalanche Discussion

#### The mountains around Cooke City:

Over the past three days Cooke City has received over a foot of snow totaling well over an inch of water ([SWE](#)). This healthy accumulation of snow has fallen over a variety of weak layers producing natural avalanches on all aspects and elevations ([photo](#)) ([photo](#)). Our once stable snowpack in this area has now lost its balance and has fallen into the dangerous caldron of instability. If you are traveling in the backcountry careful snowpack evaluation, cautious route-finding and conservative decision making is essential. Today, human triggered avalanches are likely and the avalanche danger is rated [CONSIDERABLE](#).

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

During the past 24 hours strong winds and new snow have loaded leeward slopes creating dangerous avalanche conditions. Fresh deposits of windblown snow now rest over a variety of weak layers capable propagating fractures. Yesterday I rode on Buck Ridge south of Big Sky and observed multiple natural and human triggered avalanches. Not all were propagating extensively, but one slide propagated well over one hundred yards on a layer of buried surface hoar ([video](#)).

This 24 hour progression from mounting stability to rapid instability is a great example how quickly conditions can change. I suspect similar activity is taking place in the Lionhead area near West Yellowstone.

Today, natural avalanches are possible and human triggered avalanches are likely on all wind loaded slopes and the avalanche danger is rated [CONSIDERABLE](#). All slopes that have not received wind loading have a [MODERATE](#) avalanche danger.

#### The Bridger Range and northern Gallatin Range

Yesterday, daytime temperatures rose well above freezing, strengthening the fresh snow from Saturday night's storm. This helped limit snow available for transport and kept the avalanche danger from rapidly increasing. Climbers in Hyalite Canyon yesterday reported balmy conditions with snow so wet you could make snowmen.

Although the Bridger and northern Gallatin mountains did not develop the instabilities of the other ranges, the potential for triggering a slide remains. Identifying and avoiding high probability zones such as wind loaded terrain near ridgelines and shallow areas near rock bands will reduce the chances of triggering a slide. In addition, noting the moisture content of the snow is a good idea. If the snow starts to ball up on your skins or produce roller balls in steep terrain, it is sensible to avoid avalanche run out zones or confined gullies.

Today, human triggered avalanches are possible and the avalanche danger is rated [MODERATE](#).

Doug 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

“How Much Did It Snow?” 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. Tomorrow - Saturday, December 11, 7:30pm – 8:30pm at World Boards.

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.

1hr Awareness - Mon, December 13, 7pm – 8pm at Beall Park [map](#)

### 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.