

## GNFAC Avalanche Forecast for Thu Jan 12, 2012

Good morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Thursday, January 12 at 7:30 a.m. This advisory is sponsored by Montana Import Group in partnership with the Friends of the Avalanche Center. This advisory does not apply to operating ski areas.

### Mountain Weather

This morning mountain temperatures were in the low teens F except near West Yellowstone and Cooke City where temperatures were near 0 degrees F. Ridgetop winds were averaging 15-25 mph mostly from the NW. A ridge of high pressure off the west coast is affecting our weather by blocking moisture and creating a NW flow over Montana, a common pattern this winter. This ridge will hopefully flatten late this weekend allowing a chance of precipitation. Today will be mostly sunny with some clouds, temperatures will rise into the low 20s in most areas, and ridgetop winds will blow 10-25 mph from the NW.

### Snowpack and Avalanche Discussion

The Bridger, Madison and Gallatin Ranges, the Lionhead area near West Yellowstone, and the mountains around Cooke City:

Now is a difficult time. Since the large storm on New Year's Eve, the snowpack has adjusted to the stress of that snow, and it has become harder to trigger an avalanche. Signs of instability are not obvious. Yesterday I skied in the Sheep Creek drainage north of Cooke City where the snowpack gave me a false sense of security because it felt "good" under my skis. This feeling does not mean slopes were stable and I was easily tricked. With a sharp eye, my partner pointed out many avalanche crowns from last week that were not easy to see. Weak layers in the snowpack were not obvious either because there is a supportable slab covering them. The only way to identify these weak layers is to dig a snowpit and perform stability tests.

In most areas 1-2 ft of snow rest on top of a variety of weak layers including buried surface hoar, near-surface facets, and depth hoar. Yesterday on Mt Ellis in the northern Gallatin Range, Doug found buried surface hoar. It gave him no signs of instability until he dug a snowpit. It was an obvious stripe in the snowpit wall and easily fractured in stability tests ([photo](#)). Nearby in Hyalite Canyon, conditions are generally more stable, but some slopes have a weak layer buried about 2 ft deep ([video](#)). To further complicate matters near West Yellowstone, yesterday's fresh snow capped another layer of surface hoar that will be a future concern ([photo](#)). This layer was also observed near Big Sky by the Moonlight Basin Ski Patrol where it exists on slopes sheltered from the wind.

On isolated slopes, winds blew yesterday's snow into drifts and formed fresh wind slabs. These drifts and wind slabs should not be trusted. They can make the difference between slopes that avalanche and ones that do not. Karl showed this difference in a recent video taken in the Bridger Range ([video](#)).

Riding in avalanche terrain now is like running a yellow light that turns red just as you pass through the intersection. You can get away with it sometimes, but eventually you'll either get a ticket or cause an accident. Today human triggered avalanches are definitely possible, and the avalanche danger is [MODERATE](#).

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.

### Beacon Parks

The Friends of the Avalanche Center installed a Beacon Training Park outside West Yellowstone last Friday. It's located south of town on the main snowmobile trail. Stop by and do a quick practice before heading off into the mountains!

Events/Education

Bozeman

[20/20 Hindsight - Lessons from recent accidents](#). Tuesday, January 17th, 6:30-7:30 p.m. at Montana Import Group

Cooke City

[1-hr Avalanche Awareness Lecture](#). Saturday, January 14, 5-6:00 p.m. at Cooke City Community Center.

Cody, Wyoming

[Snowmobiler Introduction to Avalanches with Field Course](#). Lectures on Saturday, January 14 at Mountain Valley Motorsports with an all day field session near Cooke City on Sunday, January 15. Advanced registration IS REQUIRED.

Great Falls

[1-hr Avalanche Awareness Lecture](#) Thursday, January 19<sup>th</sup>, 7-8 pm at Greenup Performance

Billings

[Snowmobiler Introduction to Avalanches with Field Course](#). Lectures on Tuesday, January 24 from 6-9 p.m. at Hi-Tech Motor Sports with an all day field session in Cooke City on Sunday, Jan 29. PRE-REGISTER BY JAN 23 at Hi-Tech!! Register with Sharon at 406-652-0090; [hitech@hi-techmotorsports.com](mailto:hitech@hi-techmotorsports.com).