

## **GNFAC Avalanche Forecast for Thu Jan 13, 2011**

Good morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Thursday, January 13, 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

Strong winds have been blowing 15-40 mph from the W and SW with temperatures this morning in the mid 20s F. Since yesterday 5 inches of snow fell near Cooke City, 2-3 inches of snow near West Yellowstone, 1-2 inches near Big Sky, and a trace near Bozeman. This pattern of snowfall should continue when more snow comes today. Temperatures will warm into the high 20s F and strong winds will continue blowing 15-40 mph from the W and SW. By tomorrow morning, 5-7 inches should fall near Cooke City and West Yellowstone, 3-4 inches near Big Sky, and 1-2 inches near Bozeman.

### Snowpack and Avalanche Discussion

#### The northern Madison Range:

Buried surface hoar, about 2-3 ft deep, separates the snowpack near Big Sky from the rest of the advisory area. This layer has been tricky to manage because it has unevenly gained strength and does not exist on every slope, but it will be a problem if you let your guard down. Last week one group did not find this layer in their snowpit in Beehive, but triggered an avalanche nearby in a pocket where this layer was capped by a wind drift. Another group on Fan Mountain experienced collapsing while hiking below treeline but found a deep and strong snowpack above treeline on the slope they skied. These examples demonstrate the variable and tricky nature of buried surface hoar. Despite the existence of this layer, wind slabs remain the primary concern especially in areas with a thin snowpack where recent cold weather has weakened it. Heightened avalanche conditions exist in these specific areas, and buried surface hoar requires careful snowpack evaluations. For today the avalanche danger is rated [MODERATE](#).

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

The rest of the advisory area mostly lacks buried surface hoar or other widespread weak layers, and the snowpack is mostly strong especially where it is deep. The exception lies in areas close to ridgelines where the snowpack is thin and faceted. With a wind slab on top of this faceted snow, we have a good recipe for an avalanche. Yesterday, Doug and I skied in Hyalite Canyon touring up Flanders and descending into the main canyon where we found this combination in many areas on the west facing slopes. At the southern end of the Madison Range, skiers found some cracking in thin wind slabs; otherwise, they found a strong, right-side-up snowpack. Skiers triggered a hard wind slab resting on faceted snow last weekend south of Bridger Bowl ([video](#), [photos](#)), and skiers found a similar situation north of Bridger Bowl on Tuesday. When they stopped to assess stability, the slope collapsed and cracked, a clear sign of unstable conditions. For today, the avalanche danger is rated [MODERATE](#) on all wind loaded slopes, [MODERATE](#) on all slopes steeper than 35 degrees, and [LOW](#) on less steep slopes without a wind load.

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 Park in Bozeman

Feeling rusty with your avalanche transceiver? The new beacon park at Beal Park in Bozeman is up and running. It's got four transmitters and the park is open 9 a.m. to 8 p.m. every day. The Friends of the Avalanche Center and the City of Bozeman worked together to make this possible.

## Avalanche Education

### January 15, Saturday in Cooke City:

The Friends of the Avalanche Center will be sponsoring a FREE 1 hr Basic Avalanche Awareness @ Cooke City Firehall – 6pm to 7pm

### January 15, Saturday in West Yellowstone:

The Friends of the Avalanche Center will be sponsoring a FREE 1 hr Basic Avalanche Awareness @ Holiday Inn – 7pm to 8pm

For additional information and a listing of other avalanche classes, go to:

<http://www.mtavalanche.com/workshops/calendar>

## Other Events

### January 14 & 15, Friday and Saturday in Bozeman

Hans Saari Memorial Fund presents the Up There 2011 Ski Film Festival @ Emerson Cultural Center. \$10 per night with drinks and music. Visit [www.hansfund.org](http://www.hansfund.org) for more info.