

## [GNFAC Avalanche Advisory for Sat Jan 15, 2011](#)

Good morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Saturday, January 15, at 7:30 a.m. The Montana Fish, Wildlife and Parks Snowmobile Program, in cooperation with the Friends of the Avalanche Center, sponsors today's advisory. This advisory does not apply to operating ski areas.

### Mountain Weather

Warm and windy weather continues with temperatures ranging from the low 20s F to the high 20s F and winds blowing 10-30 mph from the W. Since yesterday no snow fell except near West Yellowstone which received a trace and Cooke City which received 2 inches. Today's weather shouldn't change much with high temperatures in the high 20s to near 30 degrees F and winds blowing 15-35 mph from the W. Only 1-2 inches of snow should fall today and tonight mostly near West Yellowstone and Cooke City, but more significant snowfall should start tomorrow morning with even warmer temps and stronger winds.

### Snowpack and Avalanche Discussion

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

Yesterday my partner and I rode in the vertigo inducing fog on Lionhead with Gallatin Snow Rangers where the weather felt very coastal (ie – warm and wet). This weather affects the snowpack in two ways. First, warm temperatures have a long term stabilizing effect forming a strong snowpack which will easily support loads from future storms. Second, warm temperatures have created upside down conditions within the new snow, the primary concern today. Dense snow is resting on lower density snow about 10-12 inches deep. In one place in the southern Madison Range a skier found faceting in this lower density snow. This upside down type of instability doesn't last long and shouldn't produce avalanches that fracture over huge areas. 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.

### The northern Madison Range:

The mountains near Big Sky contain an annoying pest called surface hoar. It is buried 2-3 deep. Although it is becoming less of a problem every day, it remains a concern and its strength should be assessed in stability tests. It exists on some slopes but not on others. In many areas above treeline, strong winds have provided natural grooming, but in other areas strong winds have caused widespread drifting. Warm temperatures helped stabilize these drifts, but their presence as well as the presence of buried surface hoar on many slopes makes human triggered avalanches possible. Today the avalanche danger is rated MODERATE.

### The Bridger Range and northern Gallatin Range:

With no new snow and no widespread weak layers, things are pretty quiet in the mountains near Bozeman. The main avalanche concerns are isolated areas near ridgelines where the snowpack was thin during recent cold weather. In these places cold weather created weak faceted snow now capped by stiff wind slabs on specific terrain features. Despite warm weather, this faceted snow remains weak and can produce human triggered avalanches. 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.

Eric 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, TONIGHT 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, TONIGHT in West Yellowstone:

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

##### January 18, Tuesday in Cody, WY

The Friends of the Avalanche Center will be sponsoring a FREE 1 hr Basic Avalanche Awareness @ Mountain Valley Motorsports – 7pm to 8pm. Call 307-587-6218 for more info.

##### January 19, Wednesday in Bozeman

The Friends of the Avalanche Center will be sponsoring a FREE 1 hr Basic Avalanche Awareness @ REI – 6:30pm to 7:30pm. Register at [www.rei.com/bozeman](http://www.rei.com/bozeman)

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

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

#### Other Events

##### January 15, TONIGHT in Bozeman

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

##### January 15, TODAY, Poker Ride at Buck Ridge

Support the Avalanche Center and the Gallatin Valley Snowmobile Association with this Saturday's Poker Ride. Register 9 a.m. to Noon at the Buck Ridge parking lot. \$5 each hand. Final card at the Corral with a chili feed at 4 p.m.