

## **GNFAC Avalanche Advisory for Thu Jan 1, 2015**

Happy New Year! This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Thursday, January 1, at 7:30 a.m. Today's advisory is sponsored by a **Montana FWP Recreation Trails Grant**. This advisory does not apply to operating ski areas.

### Mountain Weather

Temperatures this morning in the mountains were in the teens F and rising; however, valley locations had below zero temps like Hebgen lake (-18F) and Gallatin Field (-7F). Northerly winds in the Bridger Range were blowing 20-30 mph this morning, south of Bozeman and near Big Sky they were blowing 15-25 mph, and near Cooke City and West Yellowstone they were blowing 10-15 mph. Today will have some sunshine and temperatures that should reach the 20s F. Winds should calm and blow 5-10 mph all around the compass depending on where you are. Snow should return Friday night through the weekend.

### Snowpack and Avalanche Discussion

Bridger Range Gallatin Range Madison Range

Lionhead area near West Yellowstone Cooke City

Northerly winds have plenty of ammunition (i.e. fresh, low density snow) to form wind slabs. These are the primary avalanche concern especially in the Bridger Range. The strongest winds this morning were blowing at Bridger Bowl from the NW at mid-mountain locations. Yesterday, the Bridger Bowl Ski Patrol reported downhill winds that also formed fresh wind slabs. The Big Sky Ski Patrol reported thin wind slabs from N and NE winds. Skiers nearby in Beehive Basin also found fresh wind slabs that would crack on small tests slopes ([photo](#)).

Persistent weak layers about 2 feet deep can produce an avalanche that will break over a much larger area than a wind slab. In some places like Cooke City these layers have gained significant strength. These layers seem to be gaining strength in the Bridger Range as well but I wouldn't discount them just yet. In the mountains south of Bozeman to West Yellowstone (the Gallatin and Madison Ranges) these layers persist on many slopes ([video](#)) and remain a very real avalanche problem. If you're willing to pull out your shovel to look for an assess these weak layers, you can find slopes or areas where they either don't exist or have gained strength as Doug found yesterday in the far southern Madison Range near West Yellowstone.

For today the avalanche danger is **CONSIDERABLE** on wind loaded slopes where fresh wind slabs can easily be triggered. With weak layers lurking in the snowpack in other areas, a **MODERATE** danger exists on non-wind loaded slopes.

### Two New Articles Posted:

Read Doug's article on **"Human-Factors and Digging"** and also Mark's companion article titled **"A survey of our class at MSU"**.

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.

## **AVALANCHE EDUCATION and EVENTS**

Take a look at our [Education Calendar](#) for all our classes being offered.

**1-hour Avalanche Awareness for Snowmobilers**, West Yellowstone, 7 p.m., Saturday, January 3, Holiday Inn.

**Avalanche Awareness for Snowmobilers**, Billings, 6:30-8 p.m., Wednesday, January 7 at Hi-Tech Motor Sports.

**Companion Rescue Clinic**, Bozeman, Fri eve and Sat field, January 9 and 10, REI. Register for the class here: [www.rei.com/stores/bozeman.html](http://www.rei.com/stores/bozeman.html)

**1-hour Avalanche Awareness for Snowmobilers**, West Yellowstone, 7 p.m., Saturday, January 10, Holiday Inn.

**1-hour Avalanche Awareness**, Three Forks, 7 p.m., Monday, January 12, Methodist Church Annex.

**Women's Avalanche Awareness w/ Beacon Practice**, Bozeman, 6:30- 8 p.m., Tuesday, January 13, Beal Park.

**1-hour Avalanche Awareness**, 4 Corners, 6:30 p.m., Wednesday, January 14, GVSA Groomer Shed.

**1- hour Sidecountry Avalanche Awareness**, Bozeman, 6:30-8 p.m., Wednesday, January 14, REI.