

## **GNFAC Avalanche Advisory for Fri Feb 20, 2015**

Good morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Friday, February 20, at 7:30 a.m. [Grizzly Outfitters](#) in partnership with the Friends of the Avalanche Center sponsors today's advisory. This advisory does not apply to operating ski areas.

### Mountain Weather

By 6 a.m. this morning the mountains near Bozeman and Big Sky had received 3-6 inches of snow, the mountains near Cooke City had received an inch, and the mountains near West Yellowstone remained dry. Temperatures were in the upper teens and low 20s F with winds blowing 15 mph gusting 25 mph generally from the NW. Snowfall will continue today, winds should continue from the NW at 15-25 mph, and temperatures may only warm a few degrees. By tomorrow morning, the mountains near Bozeman and Big Sky should get another 4-6 inches and the mountains further south may get 2-3 inches.

### Snowpack and Avalanche Discussion

[Bridger Range](#) [Madison Range](#) [Gallatin Range](#)

[Lionhead Area near West Yellowstone](#) [Cooke City](#)

This morning's new snow should bond well to the old snow. The Bridger Range had similar snowfall amounts to Big Sky, but a much higher water content (0.6 inches of water compared to 0.2 inches). Fortunately the Bridger Range has a strong snowpack with no persistent weak layers ([video](#)).

If skiing or riding today I would do three things to assess stability:

1. See how the new snow is bonding to itself and to the old snow on small steep slopes by skiing or sledding above another person's tracks.
2. Winds were not blowing too strong this morning, but should have transported some snow in near ridgelines. Look for fresh wind slabs or drifts and avoid them.
3. Dig about 2 feet deep with a smooth pit wall looking for a stripe that could be a weak layer of small facets or surface hoar. Perform a quick extended column test (watch how to do this and interpret the results in this [video](#)).

This weak layer mostly exists near West Yellowstone ([video](#)). Eric was conducting research on a layer of surface hoar buried about 2 feet deep yesterday near Lionhead, but he did not feel it was as sensitive as early this week. Additionally its existence is spotty which will limit avalanche activity. My partners and I found a similar layer of small facets buried about 8 inches deep while riding in Portal Creek in the northern Gallatin Range yesterday, and a skier in the northern Madison Range found it about 12 inches deep. This layer did not propagate fractures in our extended column tests, a good sign.

For today there are a few things to watch for which could create heightened avalanche conditions in specific terrain and the avalanche danger is rated **MODERATE**. Head's up! The avalanche danger could rise today depending on how much snow falls.

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 classes being offered.

**1-hour Avalanche Awareness**, West Yellowstone, Holiday Inn, 7 p.m., Saturday, February 21.

**Companion Rescue Course for Snowmobilers**, Cottonwood Drainage, Crazy Mountains, Saturday, February 21, 9:30 a.m. – 2 p.m. Please RSVP to your club officers or to [kathrynjbarker@fs.fed.us](mailto:kathrynjbarker@fs.fed.us) if you are interested in participating.

**Snow Science and the Human Factor**, Big Sky, location TBD, 6-8:00 p.m., Tuesday, February 24. The free event will feature a talk by Powder editor and MSU graduate John Stifter, multimedia presentations on the human factor in avalanche risk, a panel of experts from MSU's Snow & Avalanche Lab and Gallatin National Forest Avalanche Center, as well as a Q & A session.