

GNFAC Avalanche Forecast for Sat Feb 15, 2014

Good Morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Saturday, February 15 at 7:30 a.m. **Mystery Ranch**, in partnership with **Friends of the Avalanche Center**, sponsors today's advisory. This advisory does not apply to operating ski areas.

AVALANCHE WARNING

The Gallatin National Forest Avalanche Center is continuing a **Backcountry Avalanche Warning for the mountains around Cooke City**. Relentless snowfall and strong winds have created highly unstable conditions. Natural and human triggered avalanches are likely. **The avalanche danger is rated HIGH in the mountains around Cooke City**. Very dangerous avalanche conditions exist. Travel in avalanche terrain is not recommended and avalanche runout zones should be avoided.

This warning will either be terminated or updated by 6:30 a.m. on Sunday, February 16.

Mountain Weather

Since yesterday morning, another 8 inches of dense snow fell near Cooke City, 4-6 inches near Big Sky and Hyalite Canyon, 3-4 inches near West Yellowstone, and 1-2 inches in the Bridger Range. Temperatures this morning ranged from the high teens to mid 20's F. Westerly winds were averaging 15-25 mph and gusting 40-50 mph. With a warm front approaching SW Montana, temperatures will warm to near 30 F. Winds will blow 15 mph gusting to 25 mph from the SW but will increase tonight as the front passes. More snow will come with 4-6 inches expected near Cooke City and West Yellowstone, 1-3 inches near Big Sky, and a trace near Bozeman.

Snowpack and Avalanche Discussion

Cooke City

Snowfall near Cooke City won't stop. In the past three days 2.2 inches of [snow water equivalent \(SWE\)](#) has been recorded at the [Fisher Creek SNOTEL](#) and nearby areas have received much more than this amount. Very strong westerly winds have easily drifted this new snow. Avalanches were occurring last weekend prior to this recent snowfall and occurred in the middle of the week when I was last there. Yesterday skiers remotely triggered an avalanche on steep slopes near the Soda Butte Campground ([photo](#)). With more snow and more wind, we should expect more avalanches ([video](#)).

To make matters worse, many slopes facing the southern half of the compass have a fragile layer of faceted snow on top of an ice crust. My partner and I triggered a large slide ([photo](#)) on this layer on Tuesday and found a similar layer on other slopes like ones on Scotch Bonnet Mountain. For today very dangerous conditions exist and the avalanche danger is rated **HIGH**. We can still get out and ride powder in low angle meadows, BUT don't go near or under any slope steeper than 30 degrees.

Madison Range Gallatin Range

Lionhead area near West Yellowstone

Now is a tricky time in the mountains south of Bozeman, near Big Sky, and near West Yellowstone. The easy part is that strong westerly winds ([photo](#)) formed wind slabs on leeward slopes, and these are easy to identify

and avoid. There are two other more difficult problems:

1. There is a highly variable, faceted layer buried 1.5 to 2 feet deep. It is very weak on some slopes ([photo](#)) and strong on many others. Just north of Big Sky yesterday, Eric and his partner were surprised that this layer had gained a lot of strength after producing an avalanche early this week ([video](#)). Fortunately, it is quick and easy to dig to this layer and perform stability tests.
2. Isolated slopes may break near the ground. The Big Sky Ski Patrol triggered one yesterday that slid previously this year. This slope had been receiving a steady load of wind-blown snow this week. I found a similar slope last week near Beehive Basin ([photo](#)), and sleds triggered a slope on weak snow near the ground last Sunday on Lionhead ([photo](#)). If you find an area with a snowpack shallower than a ski pole, it could break near the ground especially if it has been loaded by recent winds. If snowmobiling and your buddies are climbing steep slopes, make sure to park further away than you think is necessary to be in a safe zone. Don't be lazy doing this.

For today the most likely place to trigger an avalanche either in the new snow or in deeper layers is on wind loaded slopes that are steeper than 35 degrees where the avalanche danger is [CONSIDERABLE](#). All other slopes have a [MODERATE](#) danger.

Bridger Range

The Bridger Range received 1-2 inches of snow since yesterday and has only received a dusting this week; therefore, strong winds have had little ammunition to form wind slabs. Additionally, a faceted layer buried 1-2 feet deep is strong on most slopes. Heightened avalanche conditions exist in specific places making human triggered avalanches possible. For this reason today the avalanche danger is rated [MODERATE](#) on slopes steeper than 35 degrees and [LOW](#) on less steep slopes.

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 or call us at 587-6984.

EVENTS/EDUCATION

February 20, BOZEMAN: Thursday, 6:30-8:00 p.m., REI, **Women's Specific Avalanche Awareness** lecture. Pre-registration is required: www.rei.com/stores/bozeman.html

February 22, BIG SKY: Saturday, 10 a.m. – 2 p.m., Beehive Basin Trailhead, **Companion Rescue Clinic**. In partnership with Grizzly Outfitters. Space is limited and pre-registration is required. <https://ticketriver.com/event/9964>

February 22, WEST YELLOWSTONE: Saturday, 7:00-8:00 p.m., Holiday Inn, **1 –hour Avalanche Awareness for Snowmobilers** lecture.

More information our complete calendar of events can be found [HERE](#).