GNFAC Avalanche Advisory for Mon Dec 25, 2017

Good Morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Advisory issued on Christmas Day, Monday, December 25th at 6:30 a.m. Today's advisory is sponsored by <u>Spark R&D</u> and the **Yellowstone Club Community Foundation.** This advisory does not apply to operating ski areas.

Mountain Weather

At 4 a.m. Santa's sleigh full of powder is overhead and dropping light snow throughout the advisory area. Temperatures are single digits to low teens F. Wind is west-southwest at 5-15 mph with gusts to 25 mph, and out of the northwest near Cooke City. For Christmas, the mountains will get 2-4" of light powder by evening with another 2-3" possible by tomorrow morning. Temperatures today will reach teens F with westerly wind at 5-15 mph and gusts to 20 mph at ridgelines.

Snowpack and Avalanche Discussion



The Lionhead area near West Yellowstone has an unstable snowpack and dangerous avalanche conditions exist. Two feet of snow last week formed a cohesive slab above a persistent weak layer of sugary facets (video). Even without new snow today, this unstable snowpack is sensitive to the weight of a snowmobiler or skier, and large, destructive avalanches are possible to trigger. For this reason, the avalanche danger today is <u>CONSIDERABLE</u> on all slopes. Be extra cautious of riding on or below slopes steeper than 30 degrees, and expose only one person at a time when riding or crossing below steep slopes.

Bridger Range Gallatin Range Madison Range Cooke City

In the mountains near Bozeman, Big Sky and Cooke City, moderate west-northwest wind drifted last week's snow into slabs below ridgelines. Skiers in the Bridger Range were able to trigger 1-2 foot deep, 20 foot wide wind slabs yesterday, and these slabs are possible to trigger today. Be cautious of wind loaded slopes and cornices, and minimize exposure to high consequence terrain like steep slopes over cliffs.

Light snow and wind today will create small, fresh wind slabs that are minimal hazard alone, but add to larger slabs formed over the weekend. If Santa delivers more snow than expected, larger wind slabs could become easy to trigger. Avoid steep terrain if you see cracking and collapsing of the snowpack.

Secondary to wind slabs, there are some slopes where it is possible to trigger an avalanche on facets buried 2-3 feet deep. Doug found this layer below the new snow on Buck Ridge yesterday (video), and witnessed one avalanche on a wind loaded slope (photo). This instability will not be a long-term problem and is not widespread (video, video), but the weight of recent snow makes avalanches possible to trigger today. These facets are weaker in some areas like the west side of the Bridgers (photo) and low elevation slopes that have a shallower snowpack (photo, photo). Avoid slopes where this layer is suspected, and dig 3 feet to test for this instability before riding steep terrain.

Today, avalanches are possible to trigger and the avalanche danger is **MODERATE** on all slopes.

If you get out and have any avalanche or snowpack observations to share, drop a line via our <u>website</u>, email (<u>mtavalanche@gmail.com</u>), phone (406-587-6984), or Instagram (#gnfacobs).

Merry Christmas and Enjoy the Powder!

Upcoming Avalanche Education and Events

Events and Education Calendar

BOZEMAN

Jan. 3, Avalanche Awareness, 6-7 p.m. at REI Bozeman

Jan. 12 and 13, Companion Rescue Clinic, Info and Register

Jan. 17, 18 and 20 or 21, Introduction to Avalanches w/ Field Day, Info and Register Here

Jan. 24, 25 and 27, Advanced Avalanche Workshop w. Field Day, Info and Register Here

Feb. 9 and 10, Companion Rescue Clinic, Info and Register

WEST YELLOWSTONE

Jan. 6, Avalanche Awareness, 7-8 p.m. at West Yellowstone Holiday Inn Conference Center

BIG TIMBER

Jan. 11, Avalanche Awareness, 6-7 p.m. at Sweet Grass County High School

BUTTE

Jan. 13, Rescue Clinic, 10 a.m. at Homestake Lodge

Dillon

Jan. 16, Avalanche Awareness, 6:30-8 p.m. at U.M. Western Library

COOKE CITY

Every Friday and Saturday, **Current Conditions Update and Avalanche Rescue**, Friday 6:30-7:30 p.m. at Super 8 this week, and Antler's Lodge in January. Saturday anytime between 10-2 @ Lulu Pass road.