GNFAC Avalanche Advisory for Sat Jan 27, 2018

Good Morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Advisory issued on Saturday, January 27th at 7:00 a.m. Today's advisory is sponsored by <u>Spark R&D</u> and <u>Cooke City</u> <u>Motorsports</u>. This advisory does not apply to operating ski areas.

Mountain Weather

Overnight, the mountains near Cooke City got 2" of snow and near Big Sky got 1" with zero snow elsewhere. Wind has been west to southwest at 15-25 mph with gusts of 30-40 mph. Temperatures this morning are single digits to teens F and will reach the mid-20s F today. Wind will be southwest at 10-20 mph and increase to 20-30 mph this afternoon. Light snow showers through tonight will drop 2-3" in the northern mountains and 4-7" near Cooke City and West Yellowstone.

Snowpack and Avalanche Discussion



The Lionhead area near West Yellowstone has a weak, unstable snowpack and large avalanches are possible. Avalanches breaking on weak facets 3-5 feet deep are getting more difficult to trigger, but can fracture across entire slopes and have high consequences (video). The best plan is to avoid steep slopes and be extra conservative when riding in and below avalanche terrain. Southwest winds drifted recent snow into slabs and grew large cornices near ridgelines. These are possible to trigger and add stress to buried weak layers. Avalanches are possible today and could be large. The avalanche danger is MODERATE on all slopes.



The mountains received steady, small snow storms over the past week and soft powder is plentiful. Strong westsouthwest wind drifted recent snow into slabs 6-18" thick near ridgelines and along the edges of cliffs and gullies. Yesterday, skiers near Big Sky and in the Bridger Range found wind slabs easy to trigger. In the last week, skiers and snowmobilers have triggered wind slabs through the advisory area (**photo**, **photo**), and a large natural avalanche was observed near Cooke City (**photo**). Similar avalanches are possible today. Avoid pillows of wind drifted snow and seek terrain sheltered from the wind. Stay far back from the edge of large cornices along ridgelines, and avoid slopes below or approach with extra caution.

Avalanches breaking on weak, sugary facets 1-2' off the ground are difficult to trigger, but possible on some slopes. We continue to get unstable test results on this layer (video), and yesterday skiers observed an old avalanche crown in the Bridger Range that may have failed on this layer (photo). This layer is most unstable where the snowpack is shallower or depth is highly variable. Evaluate individual slopes carefully before riding avalanche terrain. Yesterday I found a weak layer in my snowpit that was only visible after it produced an unstable result in my test (video), which provided evidence to find different or low angle terrain.

For today, avalanches are possible and avalanche danger is **MODERATE**.

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).

AVALANCHE FATALITY REPORT: Reas Peak, Centennial Range, 20 January

A full report on the avalanche that killed a snow biker on January 20^{th} can be read <u>here</u>. The report has links to all supporting documentation (advisory, photos, video, maps).

King and Queen of the Ridge

King and Queen of the Ridge, Saturday, February 3rd. A Hike and Ski/Ride-a-Thon fundraising event to support the Friends of the Gallatin National Forest Avalanche Center. Sign up and start collecting pledges **HERE**.

Upcoming Avalanche Education and Events

Events and Education Calendar

BOZEMAN

Feb. 6th, Sidecountry specific avalanche awareness for family and friends. 6-8 p.m. @ Beall Park

Feb. 7th, Woman's specific avalanche awareness, 6-7:30 p.m. @ REI in Bozeman

Feb. 7th, Avalanche awareness, 6-7:00 p.m. @ Roskie Hall MSU

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

March 2nd, Avalanche Awareness, 6-7:00 p.m. Bozeman Split Fest

March 7th, Avalanche Awareness, 6-7:30 p.m. @ REI

DILLON

Feb. 24th and 25th, **Snowmobile intro to avalanches w/ field course**. More info: https://msuextension.org/conference/.

WEST YELLOWSTONE

Feb. 3rd, Avalanche Awareness, 7-8 p.m. at West Yellowstone Holiday Inn Conference Center

Feb. 10th, Avalanche Awareness, 7-8 p.m. at West Yellowstone Holiday Inn Conference Center

COOKE CITY

Every Friday and Saturday, **Current Conditions Update and Avalanche Rescue**, Friday 6:30-7:30 p.m. at The Antler's Lodge in January. Saturday anytime between 10-2 @ Round Lake.