GNFAC Avalanche Advisory for Sun Jan 14, 2018

Good Morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Advisory issued on Sunday, January 14th at 7:00 a.m. Today's advisory is sponsored by the <u>Gallatin Valley Snowmobile</u> <u>Association</u> and <u>Cooke City Motorsports</u>. This advisory does not apply to operating ski areas.

Mountain Weather

The storm ended yesterday morning with an additional 1-2" of snow in the mountains near Big Sky, Bozeman and Cooke City, and zero near West Yellowstone. This morning, temperatures are teens to mid-20s F and westerly wind is 10-20 mph with gusts of 25-30 mph. In the Bridger Range, wind overnight was 30-35 mph. Today, temperatures will reach high 20s F and wind will be west-northwest at 15-20 mph. An inch or two of new snow is possible near Bozeman and Cooke City early tomorrow morning.

Snowpack and Avalanche Discussion



The Lionhead area near West Yellowstone has a weak, unstable snowpack and large avalanches are easy to trigger (**photo**). This weak snowpack was loaded with 2 feet of snow equal to 2.5" of <u>snow water equivalent</u> (SWE) last week, and it will not quickly gain strength. Yesterday at Lionhead, a group of snowmobilers triggered a 2-4' deep avalanche from within trees low on the slope (**photo**). Eric was at Hebgen Lake and had large collapses while touring through the trees. He found a snowpack similar to Lionhead, capable of producing avalanches across entire slopes (**video**). This is bullseye information to avoid travel on and below steep slopes. Avalanche danger is **CONSIDERABLE**.



The Bridger Range got 3-4 feet of snow equal to 3.7" SWE since Wednesday. On Friday, Eric and I found short-lived new snow instabilities to be our main concern (video). Strong wind last night drifted snow into slabs 2-3' feet thick that are easy to trigger. These slabs are most likely near ridgelines, and possible at lower elevations near the edges of cliffs and steep, convex rolls. Aside from wind slabs, the snowpack in the Bridger Range is generally strong. However, almost 4" of water in four days is like a widespread stability test. Give steep slopes a day to pass the exam and adjust to the recent load. Avalanche danger today is CONSIDERABLE.



In Cooke City and the southern Madison and Gallatin ranges avalanches breaking on a weak layer of facets 3-4' deep are getting harder to trigger, but recent observations show they are possible. A large natural avalanche was observed on the Fin near Cooke City on Friday (**photo**). Before the recent 2-3' of snow, riders in the southern

Madison Range had unstable stability test scores (**photo**). Doug had similar findings at Bacon Rind on Thursday (**video**). In addition, wind has drifted snow into small wind slabs near ridgelines that are easy to trigger today. Avalanche danger is **CONSIDERABLE** today.

Northern Gallatin Northern Madison

In the mountains near Hyalite and Big Sky moderate winds drifted recent new snow into slabs that are possible to trigger. Yesterday, Doug found fresh drifts easy to trigger near ice climbs in Hyalite (**video**), and skiers near Divide Peak saw a natural avalanche on a wind loaded slope (**photo**). These slabs will gain strength, but be cautious of wind loaded slopes today.

Avalanches on weak facets 2-4' deep are possible, but confined to specific terrain where the snowpack is relatively shallow, 3-5' deep. On Friday, skiers in the northern Madison Range remotely triggered a large avalanche on this layer (**photo**). Be cautious of lower elevation terrain and slopes with highly variable snow depth. Today, the avalanche danger is rated **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).

King and Queen of the Ridge

<u>King and Queen of the Ridge</u>, 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

Jan. 15, Avalanche Awareness, 6-7 p.m. at Yellowstone Motorsports

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

Jan. 22, **MAP Brewing Pint Night**, 4-8 p.m. MAP donates 50 cents of every pint sold to the Friends of the Avalanche Center.

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

BUTTE

Today!!!, 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 The Antler's Lodge in January. Saturday anytime between 10-2 @ Round Lake.