GNFAC Avalanche Forecast for Wed Jan 31, 2018

Good Morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Wednesday, January 31st at 7:00 a.m. Today's advisory is sponsored by <u>Gallatin Valley Snowmobile Assoc.</u> and <u>Alpine Orthopedics</u>. This advisory does not apply to operating ski areas.

Mountain Weather

Yesterday's snow squall dropped 5" around Bozeman and Cooke City, and 2" everywhere else. As the snow fell it blew 50-70 mph from the west to southwest at all elevations. This morning winds are averaging 20-25 mph and gusting to 45 mph from the west with mountain temperatures in the single digits. Today will remain cold and breezy with 1-2" inches of snow falling in the mountains and 4" falling outside Cooke City.

Snowpack and Avalanche Discussion



In the last few days Cooke City has gotten wind, snow and avalanches. Yesterday, winds blew 60-70+ mph at all elevations and a large natural avalanche on Woody Ridge broke at the ground, estimated to be over 8' deep on a heavily wind-loaded slope (**photo**). Two cornice triggered avalanches on Town Hill also released yesterday. Additionally, there were two smaller slides were remotely triggered over the weekend (**photo**, **photo**). A layer of surface hoar buried 1-2' deep, has been unreactive in tests, but it cannot be ruled out as a culprit in past and future avalanches. Given the new snow, very strong winds, recent avalanches, and buried surface hoar, there are only a couple ways to safely proceed: 1. Avoid all wind-loaded slopes, and 2. Dig and test the upper few feet of the snowpack to find instability. For today, the avalanche danger is rated **CONSIDERABLE** since human triggered avalanches are likely.



Southern Madison Southern Gallatin Lionhead Range

Yesterday, the southern mountains had strong winds and a couple inches of new snow. Our field visits outside West Yellowstone (video) and Cabin Creek (video) indicate the snowpack is strengthening, but there are isolated instabilities too look for, such as facets near the ground and feathery crystals of surface hoar buried 1-2 feet under the surface. Eric and I skied into Bacon Rind yesterday and had the surface hoar propagate in our stability test, a sign of instability (video, photo). The layer is found on many slopes, but is only unstable on a few. This was one of those few. As snowpack strengthens, signs of instability disappear so we have to dig and test if we want to play in avalanche terrain. For today, the avalanche danger is rated MODERATE on all slopes.

Wind blew and snow fell in the northern mountains: 5" in the Bridger Range and in Hyalite, and 2" around Big Sky. The snow fell with warm temperatures which will help the 12-18" thick wind slabs bond to the old surface. While many wind-loaded slopes will be stubborn to trigger, some could avalanche from the weight of a skier or rider. Since the wind blew fierce at all elevations, search for wind-loading in gullies, on roll-overs, and of course, under ridgelines (photo). For today, the avalanche danger is rated MODERATE on all wind-loaded slopes and LOW elsewhere.

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

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

PHILLIPSBURG

Feb. 8th, **Avalanche Awareness**, 6:30-8:30 p.m. @ the new Fire Hall

DILLON

Feb. 24^{th} and 25^{th} , **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 Soda Butte Lodge in February. Saturday anytime between 10-2 @ Round Lake.