GNFAC Avalanche Advisory for Thu Jan 25, 2018

Good Morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Thursday, January 25th at 6:45 a.m. Today's advisory is sponsored by <u>Grizzly Outfitters</u> in partnership with the Friends of the Avalanche Center. This advisory does not apply to operating ski areas.

Mountain Weather

This morning at 5 a.m., skies are cloudy, wind is blowing and mountain temperatures are near 20F. Most ridgelines have S-SW winds averaging 15-25 mph with gusts of 50-60 mph in Hyalite and Cooke City. Light snowfall today and tonight will drop 1-2" in the northern ranges and 2-4" in the south. Winds will remain gusty and strong from the southwest today, but lessen and switch west tonight.

Snowpack and Avalanche Discussion



Lionhead has a poor snowpack structure because it has a weak foundation of sugary facets (snowpit profile). With time these layers are gaining strength and the likelihood of triggering slides is decreasing, which I am happy about, but these facets 1-2' off the ground make me uneasy. Eric and I rode and dug pits on Tuesday and outlined our cautious optimism in this video. Additionally, wind yesterday and last night have formed thick wind slabs that will easily avalanche today. Stay clear of ridgelines as a rider or skier can break cornices far from the edge and trigger slides. For today, the avalanche danger is rated CONSIDERABLE on all wind-loaded slopes and MODERATE elsewhere.

³ Bridger Range Gallatin Range Madison Range Cooke City

The wind is strong, gusty and loading slopes. At the ridgelines it is blowing S-SW, but will be swirly everywhere else. Gullies, road cuts, roll-overs and other fetches will have wind drifts that can avalanche. Riders up Buck Ridge triggered a small wind slab which served as a warning that they could trigger bigger slides up high (**photo**). Wind-loading was also noted by skiers in the Bridger Range, up Hyalite, and in the southern Gallatin Range. With the Lulu Pass weather station reading 50 mph gusts, I'm certain Cooke City has many wind-loaded slopes. Let us not forget that over the weekend two skiers in the Bridger Range separately triggered wind-loaded slopes, one near the ridge and one at a lower elevation (**photo**).

A secondary concern is weak, sugary snow 1-2' off the ground. Although most slopes are stable, a few are not. I found this instability on one slope in Taylor Fork on Sunday (video), and yesterday skiers north of Bridger Bowl and in the southern Gallatin Range also had unstable test results in their snowpits when this layer propagated during an Extended Column Test. Variability between slopes is not unusual so we dig and test, which is what these parties did. In the absence of other signs of instability, one poor test result is enough to turn around.

For today, strong wind is creating a **CONSIDERABLE** avalanche danger on wind-loaded slopes. All other slopes have a **MODERATE** avalanche danger.

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.