GNFAC Avalanche Forecast for Sat Feb 3, 2018

Good Morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Saturday, February 3rd at 7:00 a.m. Today's advisory is sponsored by **Yellowstone Ski Tours** and **PH D Skis**. This advisory does not apply to operating ski areas.

Mountain Weather

Over the past 24 hours the mountains around Cooke City received over a foot of new snow while all other areas picked up 2-4". Currently, temps range from the teens to mid-20's F and westerly winds are blowing 15-35 mph with gusts around Big Sky and Hyalite breaking 40 mph. Today, snow will continue around Cooke City with an additional 3-5" likely by this evening and another 3-5" overnight. Snow will develop over the rest of the advisory area by this afternoon. The mountains around Bozeman and Big Sky will see 2-4" by tomorrow morning while the West Yellowstone area will pick up 1-3". Highs today will warm into the upper 20's to low 30's and winds will remain moderate to strong out of the W-NW.

Snowpack and Avalanche Discussion

Cooke City

The equation is pretty simple around Cooke City. Heavy snow and strong winds are creating very dangerous avalanche conditions. Over the past 24 hours more than a foot of snow has fallen totaling 1.1" of SWE. This heavy shot of snow was accompanied by strong winds out of the west. Today, I expect natural and human triggered avalanches to occur on wind loaded slopes. Avoid all wind loaded terrain and be extra cautious when traveling in avalanche run out zones (**video**).

Non-wind loaded slopes also pose a significant avalanche threat. Storm slabs will be easy to trigger in steeper terrain. Yesterday, Alex skied up Republic Creek south of town and found steep, non-wind loaded slopes to be touchy to human triggers. I expect steep slopes to be even more reactive today. Slides have the potential to step down to buried surface hoar 2-3' deep or weaker layers near the ground (**photo**, **photo**). Today's a great day to seek out lower angle terrain while practicing cautious route-finding and conservative decision making.

Today, very dangerous avalanche conditions exist on wind loaded slopes which have a **HIGH** avalanche danger. Non-wind loaded slopes have a **CONSIDERABLE** avalanche danger.

Southern Madison Southern Gallatin Lionhead Range

Today, wind loaded slopes are the main concern in the mountains around West Yellowstone. Four to six inches of new snow over the past few days combined with moderate to strong winds out of the west will create a fresh batch of wind slabs (**photo**). Watch for wind loaded slopes below ridgelines and on the leeward side of cross-loaded terrain features.

Buried surface hoar continues to produce unstable test results and is the main layer of concern. This pesky weak layer does not exist on all slopes so digging a pit and doing a quick stability test is an easy way to stack the deck in your favor. (**video, photo**). Facets near the ground are getting stronger, but still hold the potential to produce large slides in isolated areas.

Today, human triggered avalanches are possible and the avalanche danger is rated **MODERATE**.

Bridger Range Northern Gallatin Northern Madison

Yesterday's fast moving storm dropped 6” inches of snow in the Bridgers and 3-5” around Hyalite and Big Sky. The new snow was easily transported by strong westerly winds. Yesterday, both Big Sky and Bridger Bowl Ski Patrols found wind loaded slopes to be reactive during control work. Slides are staying confined to the new snow, but have enough volume to carry and potentially bury a skier or rider. Warm temps will make wind slabs a little stubborn, but they still can’t be trusted, especially in steep high consequence terrain (think Saddle Peak). The snowpack is mostly stable on non-wind loaded slopes (**video**).

Today, the avalanche danger is rated **MODERATE** on all wind-loaded slopes and **LOW** elsewhere. The avalanche danger could rise if this evening’s storm arrives earlier than forecasted.

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

Today! King and Queen of the Ridge

King and Queen of the Ridge. A Hike and Ski/Ride-a-Thon fundraising event to support the Friends of the Gallatin National Forest Avalanche Center. Join the party today at Bridger Bowl.

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**

Feb. 28th, **Know Before You Go** avalanche awareness, 7:00 p.m. @ Procrastinator Theater, MSU

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

WEST YELLOWSTONE

Today, **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.