GNFAC Avalanche Forecast for Tue Dec 31, 2019

Good Morning. This is Dave Zinn with the Gallatin National Forest Avalanche Forecast on Tuesday, December 31st at 7:00 a.m. Today's forecast is sponsored by **World Boards** and **Bridger Bowl**. This forecast does not apply to operating ski areas.

Mountain Weather

There was no new snow in our advisory area in the last 24 hours. This morning, mountain temperatures are in the single digits to teens F and winds are 10-20 mph out of the west to southwest. Winds are stronger in the Bridger Range and are currently blowing 20-35 mph from the west. The New Year will start right with snow beginning this afternoon and 6-10" falling by morning. Winds will blow 20-30 mph from the southwest and temperatures will rise into the 20s to low 30s.

Snowpack and Avalanche Discussion

Cooke City

Doug and I spent the last two days north of Cooke City looking at several large, human triggered avalanches from earlier in the weekend (**video**, **photos**, **activity log**). These avalanches broke 3-6' deep and 100-250' wide. Riders likely triggered these avalanches when they hit thin areas in the snowpack and their weight impacted the weak snow. Today, it is possible to trigger similar avalanches on slopes where heavy wind slabs cap a weak layer facets near the ground. While the story is challenging because some slopes are unstable and others are not, the solution is simple. Avoid steep slopes with heavy slabs of snow and you will avoid the primary hazard (**video**). Carefully assess the snowpack if you choose to ride in steep terrain. The avalanche danger is rated MODERATE and it is possible to trigger large avalanches.

Madison Range Southern Gallatin Lionhead Range Island Park

The mountains from Big Sky to West Yellowstone have weak facets near the ground. While obvious signs of instability such as cracking and "whumphing" of the snowpack are unlikely, human triggered avalanches breaking two to three feet deep and spreading wide across steep slopes are still possible. A stability test will likely be your first clue that something is amiss (**video**, **photo**, **photo**). As snow starts falling later this afternoon, expect the avalanche danger to increase. Human triggered and natural avalanches occurred on many steep slopes during the last snowstorm (**photo 1**, **2**, **3**). End 2019 safely by avoiding avalanche terrain or carefully assessing the snowpack and the consequences of an avalanche. Large, human triggered avalanches are possible and avalanche danger is MODERATE.

Bridger Range Northern Gallatin

Yesterday, mid-elevation winds in the Bridger Range formed fresh, unstable drifts of snow. During avalanche mitigation work, the Bridger Bowl Ski Patrol triggered 12-18” deep hard slab avalanches in isolated areas lower on slopes where this wind created new instabilities. Last night, ridge winds picked up and formed similarly unstable drifts. Look for these drifts high on slopes as well as lower elevations in more uncommon areas. Aside from areas of windblown snow, generally stable conditions will continue until the Bridger and Northern Gallatin Ranges start getting new snow later this afternoon (**video**). Avalanche Danger is MODERATE on wind-loaded slopes and LOW everywhere else. Avoid areas where small avalanches could have oversized consequences.

If you get out, please send us your observations no matter how brief. You can fill out an **observation form**, email us (**mtavalanche@gmail.com**), leave a VM at 406-587-6984, or Instagram (#gnfacobs).

Upcoming Avalanche Education and Events

Our education calendar is full of awareness lectures and field courses. Check it out and plan to attend one or two: Events and Education Calendar.

COOKE CITY

Every Friday and Saturday, **Snowpack Update and Rescue Training**. Friday, 6:30-7:30 p.m. at the Soda Butte Lodge. Saturday anytime between 10-2 @ Round Lake.

WEST YELLOWSTONE

January 4, **1-hr Avalanche Awareness**, 7-8 p.m. at West Yellowstone Holiday Inn.

January 25, **1-hr Avalanche Awareness**, 7-8 p.m. at West Yellowstone Holiday Inn.

BOZEMAN

January 7, **Women's Specific Avalanche Awareness + Beacons**, 6-8 p.m. at Story Mill.

January 8, **1-hr Avalanche Awareness**, 6-7 p.m. at REI.

January 8, **1-hr Avalanche Awareness**, Gallatin Valley Snowmobile Association Groomer Building.

January 10 & 11, **Companion Rescue Clinic**, 6-8 p.m. on the 10th at REI and 10-2 p.m. on the 11th at History Rock. **More info and Register Here**.

January 15 and 16, **Introduction to Avalanche w/ Field Course**, evenings of January 15 & 16 plus one field day either January 18, 19 or 25. Snowmobile specific field day offered January 25. **More info and Register Here**.