GNFAC Avalanche Forecast for Sat Nov 30, 2019

Good morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Forecast on Saturday, November 30th at 7:30 a.m. Today's forecast is sponsored by **Mystery Ranch** and **World Boards**. This is our first daily forecast and danger ratings for the season. I will issue the next forecast by 7:30 tomorrow morning.

*Note: Bridger Bowl Ski Area is closed and there is no avalanche control or ski patrol services. Backcountry conditions exist. Workers are setting up for the season and making snow. Please stay clear of work areas, snow guns, chair lifts and other equipment.

Mountain Weather

Since yesterday morning the mountains near West Yellowstone received 7" of snow, and elsewhere received 3-5" of low density snow. Yesterday wind was south-southeast at 10-20 mph with gusts to 40 mph. This morning wind shifted to the northeast-east at 5-15 mph, and temperatures are single digits F. Today temperatures will reach low teens F with north-northwest wind at 5-10 mph. Snow will stop later this morning and skies will clear by tomorrow.

Snowpack and Avalanche Discussion

Southern Madison Southern Gallatin Lionhead Range Island Park

Since Wednesday night the mountains near West Yellowstone, the southern Gallatin and the southern Madison range received 12-14" of snow equal to 1.2" of snow water equivalent (SWE). Last week Dave and I were at Lionhead and found a shallow, sugary, weak snowpack that will struggle to support this heavy new snow (**photo**, **video**). Today, avalanches are easy to trigger, will be large and destructive, and can be triggered from low angle terrain below or adjacent to steep slopes.

Snowfall is forecast to end this morning and wind will be calm, so natural avalanche activity is not expected to be widespread. However, the snowpack is fragile and needs only the weight of a person to trigger a large slide. See **Episode 2** of Dashboard Talks for Dave and Doug's discussion of the unstable snowpack at Lionhead. Avalanche danger is **CONSIDERABLE**. Avoid travel on or underneath steep slopes.

Bridger Range Northern Gallatin Northern Madison Cooke City

The mountains near Bozeman, Big Sky and Cooke City have a deeper and generally stable snowpack below the new snow. Earlier this week, Doug and Dave were in Cooke City and found a snowpack that lacks widespread buried weak layers (**video**, **video**, **photo**), and we received similar reports from skiers in Hyalite and the Bridger Range.

Today avalanches will involve the 5-8" of low density snow (0.3-0.7" SWE) that fell since Wednesday. This snow will be most unstable where light to moderate winds drifted it into stiffer slabs.

Yesterday skiers in Hyalite reported a weak interface below the new snow (**photo**), and on Thursday skiers in Cooke City saw thin, wide avalanches which indicate a potential weak interface (**photo**). Dig and do a quick stability test to look for weak layers directly below the new snow. If you find unstable results, poor structure, or see cracks shooting out from your skis, then find lower angle terrain to ride. Today, new snow makes avalanches possible to trigger and avalanche danger is rated **MODERATE**.

Please send us your observations (no matter how brief) of avalanches, snow structure and stability, or new snow amounts and wind effects. You can fill out an **observation form**, email us (**mtavalanche@gmail.com**), leave a VM at 406-587-6984, or Instagram (#gnfacobs).

Dashboard Talks

Episode 1: On our drive back from Cooke City, Dave and I discuss what we look for when we go to an area for the first time.

Episode 2: Dave explains why the snow is unstable in West Yellowstone.

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

TODAY! 30 November. 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.

BOZEMAN

4 & 5 December, **Introduction to Avalanche w/ Field Course**, Evenings of December 4 & 5 plus one field day either December 7, 8 or 14. Snowmobile specific field day offered December 14. **More info and Register Here**.

December 11, **1-hr Avalanche Awareness**, 6-7 p.m. at REI.

December 12, **Avalanche Awareness + Beacon Practice**, 6-8 p.m. at Story Mill Community Center.

WEST YELLOWSTONE

9 & 10 December, **Snowmobile/Ski Introduction to Avalanche w/ Field Course**, 12-5p Dec 9 and field day Dec 10. **More info and Register Here**.

MANHATTAN

December 9, **1-hr Avalanche Awareness**, 7-8 p.m. at Manhattan High School.