GNFAC Avalanche Advisory for Fri Dec 30, 2016

Good Morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Friday, December 30th at 7:00 a.m. Today's advisory is sponsored by **Community Food Co-op** and **Katabatic Brewery.** This advisory does not apply to operating ski areas.

Mountain Weather

This morning mountain temperatures range from the 20s F in the north to mid-teens F in the south. Winds are blowing 20-40 mph out of W-SW with ridgeline gusts reaching 50 mph. Today, highs will warm into the 20s to low 30s F and winds will gradually decrease and shift to the W-NW. Snow moves into the area this afternoon and the mountains should see 2-4" by tomorrow morning.

Snowpack and Avalanche Discussion

Madison Range Southern Gallatin Range

Lionhead area near West Yellowstone Cooke City

Recent avalanche activity has one thing in common – avalanches are occurring on wind loaded slopes. Yesterday, Alex was in Cooke City and observed multiple large natural avalanches that took place over the past few days (**photo**). Other skiers in the area also observed recent natural activity. Most slides are taking place on wind loaded slopes leeward to W-SW winds (**photo**). The larger slides appear to be failing on the facet-curst combination near the base of the snowpack. This facet-crust combination is most prevalent on upper elevation slopes facing north through east.

Slopes do not need this facet-crust combination to be unstable. Weak snow near the ground plagues the snowpack on all aspects and elevations across the advisory area. Doug found this layer to be reactive in stability tests at Bacon Rind and the Taylor Fork earlier in the week (**video, video**). Fortunately, this layer isn't highly reactive on all slopes. Yesterday, my partners and I skied in Beehive Basin and found good snow quality and better stability on non-wind loaded slopes. Facets near the ground were a concern, but they weren't propagating in stability tests. We felt comfortable skiing slopes up to thirty five degrees in non-wind loaded terrain (**video**).

Today, human triggered avalanches remain likely on wind loaded slopes which have a **CONSIDERABLE** avalanche danger. Non-wind loaded slopes have a **MODERATE** avalanche danger.

Bridger Range Northern Gallatin Range

Wind slabs remain the primary avalanche concern in the Bridger Range and northern Gallatin Range. Strong winds out of the W-SW have formed dense wind drifts on the leeward side of ridgelines and exposed terrain features. These have the potential for fail under the weight of a skier or rider. Today, watch for and avoid areas that appear to be heavily wind loaded.

Without wind deposited snow the snowpack is generally stable. Facets at the ground do exist, but without recent snowfall have become less reactive.

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

I will issue the next advisory tomorrow morning by 7:30 a.m.

We rely on your field observations. Send us an email with simple weather and snowpack information along the lines of what you might share with your friends: How much new snow? Was the skiing/riding any good? Did you see any avalanches or signs of instability? Was snow blowing at the ridgelines? If you have snowpit or test data we'll take that too, but this core info is super helpful! Email us at mtavalanche@gmail.com or leave a message at 406-587-6984.

Upcoming Events and Education

Month of January: Montana Ale Works has chosen the Friends of the Avalanche Center as January's "Round It Up America" recipient. Every time you round-up your bill the change gets donated to the Friends. Pennies equal dollars!

BOZEMAN

Tuesday, January 17, Avalanche Center Forecaster's Social at Montana Ale Works. A small-plate fare and beer tasting **fundraiser for the Friends:** $40.00/person; 2 seatings (5:30 p.m. and 7:00 p.m). Get your tickets **HERE**.

COOKE CITY

Weekly rescue training and snowpack update, 6-7:30 p.m., Soda Butte Lodge on Friday, Field location Saturday TBA.