GNFAC Avalanche Advisory for Sun Jan 8, 2017

Good Morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Advisory issued on Sunday, January 8th at 7:00 a.m. Today's advisory is sponsored by <u>Yellowstone Arctic Yamaha and Yamaha</u> <u>Motor Corp</u> in partnership with the Friends of the Avalanche Center. This advisory does not apply to operating ski areas.

Mountain Weather

Warmer, snowy weather is here. Temperatures at 4 a.m. are teens to low 20s F. The mountains received 4-6" of new snow near Big Sky, West Yellowstone and Cooke City, and 2" near Bozeman. Wind overnight was out of the west to southwest at 15-30 mph with gusts of 40-50 mph. Today, temperatures will be in the high 20s F with westerly wind at 20-30 mph. Light snow showers today will become heavier tonight. By tomorrow morning the southern mountains will have 6-8" of heavy new snow and the northern ranges will have 2-4".

Snowpack and Avalanche Discussion

Cooke City Madison Range Southern Gallatin Range

Lionhead area near West Yellowstone

New snow and strong wind formed fresh wind slabs overnight. These slabs rest over weak snow near the surface of the snowpack, and add weight over weak layers near the base of the snowpack. I found weak snow throughout the snowpack at Buck Ridge on Friday (video). Weak snow formed near the surface of the snowpack during recent cold temperatures, and fresh slabs above this weak snow are easy for a skier or rider to trigger. These sensitive slabs could be 1-2 feet thick and are likely near ridgelines leeward to west-southwest winds.

Avalanches breaking on weak snow at the base of the snowpack are possible today. These slides are difficult to trigger, but large and destructive (video). Sugary, weak snow near the ground lies beneath 2-6 foot thick slabs and has produced large avalanches this season. See our photo page for a look at some of these slides. Snowfall last night totaled .4-.6" of snow water equivalent (SWE). This is not an alarming amount of weight, but wind-loading on a weak snowpack makes large avalanches possible. Wind loaded slopes will be the most likely place to trigger a large avalanche. These slopes have more weight above the weak snowpack, and a wind slab or avalanche in new snow could trigger a larger avalanche near the ground.

Fresh wind slabs and a weak snowpack make avalanches likely today. The avalanche danger is CONSIDERABLE.

Bridger Range Northern Gallatin Range

The mountains near Bozeman got less snow. However, fresh wind slabs are possible today, and weak layers near the base of the snowpack make large avalanches possible (video). Wind slabs formed overnight above weak, faceted snow near the surface. These slabs will be small, but easy to trigger. A small slide could have high consequences above cliffs, trees, or confined gullies, and could trigger a larger slide on weak snow near the ground. Carefully assess the snowpack and terrain. Avoid terrain traps and dig a hole to look for weak layers before committing to steep slopes. The avalanche danger is MODERATE on wind loaded slopes and slopes steeper than 35 degrees. Less steep, non-wind loaded slopes have a LOW danger.

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

<u>Month of January</u>: 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 10, Women's Avalanche Awareness and Beacon Practice, 6-8 p.m., Beall Park.

Wednesday, January 11, **Avalanche Conditions and Awareness for Snowmobilers**, 6:30-7:30 p.m., Gallatin Valley Snowmobile Association groomer shed at 4-corners.

Friday and Saturday, January 13 and 14, **Companion Rescue Clinic**, REI Friday 6 p.m., field Saturday TBA. Register here: https://events.ticketprinting.com/event/21313.

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., The Antlers Lodge on Friday, field location Saturday TBA.

DILLON

Tuesday, January 10, Avalanche Awareness, 6-7:30 p.m., UM-Western Library.