GNFAC Avalanche Forecast for Thu Feb 9, 2017

Good Morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Thursday, February 9th at 6:45 a.m. Today's advisory is sponsored by <u>Community Food Co-op</u> and <u>World Boards</u>. This advisory does not apply to operating ski areas.

AVALANCHE WARNING

We are continuing a Backcountry Avalanche Warning for the mountains around **Cooke City**. Continued snowfall and strong winds have created a <u>HIGH</u> avalanche danger on all slopes. Natural and human triggered avalanches are likely today. Avalanche terrain and avalanche runout zones should be avoided.

Mountain Weather

In the past 24 hours the mountain around Cooke City received 8-10" of new snow. The southern Madison Range picked up 4-6" while the mountains near Bozeman, Big Sky and West Yellowstone picked up 1-3". This morning, it's still snowing lightly in the mountains around Cooke City and skies are partly to mostly cloudy elsewhere. Temps are in upper 20s to low 30s F and winds are blowing 15-40 mph out of the W-SW. Today, light snow will continue in the southern Mountains with 1-3" possible. Temps will warm into the low to upper 30s F and winds will remain moderate to strong out of the W-SW. More snow is expected tonight in the southern Mountains with an additional 2-4" possible by tomorrow morning. The mountains around Bozeman and Big Sky could see 1-3".

Snowpack and Avalanche Discussion

Cooke City

Over the past week, snowfall around Cooke City has been measure in feet! Fisher Creek Snotel site has recorded 6" of SWE (snow water equivalent) in the past 6 days. This is a tremendous amount of snow. Even the strongest snowpack will have difficulty supporting this extremely heavy load. Over the past five days, both natural and human triggered avalanches have been reported. This is bull's eye information the snowpack has been pushed past its breaking point (photos page). Today, continued snowfall and strong winds will create very dangerous avalanche conditions. Both natural and human triggered avalanches are likely. Avalanche terrain and avalanche runout zones should be avoided.

For today, the avalanche danger is rated **HIGH** on all slopes.

Bridger Range Madison Range Gallatin Range

Lionhead area near West Yellowstone

The mountains around Bozeman, Big Sky and West Yellowstone have a few different avalanche problems to contend with. The primary avalanche concern today will be wind loaded slopes. Strong winds out of the W-SW will create a fresh batch of wind slabs that will be sensitive to human triggers. Today, the best way to avoid triggering a slide will be to avoid wind loaded slopes.

A secondary concern are weak layers buried 1-2 feet deep (<u>video</u>). Yesterday, Doug and Karl went to Bacon Rind in the southern Madison Range a found a layer of surface hoar buried two feet below the surface. Although

this layer appears to be getting stronger, it continues to demonstrate its ability to propagate a fracture (video, video). A skier up Deer Creek in the northern Madison Range found a similar set up on an east facing slope (photo). Buried surface hoar does not exists in the Bridger Range, but weak facets near the ground remain a concern. However, this layer appears to be getting stronger and probably won't produce avalanches without a heavier load (video).

A third problem to look out for will be wet loose avalanches in lower elevation terrain. Above freezing temps will destabilize the fresh snow form the past few days. This type of avalanche is most dangerous when associated with terrain traps such as creek beds or gullies.

Today, fresh snow and strong winds will create dangerous avalanche conditions on wind loaded slopes which have a **CONSIDERABLE** avalanche danger. All other slopes have a **MODERATE** avalanche 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

Beacon Training Park at Beall: Open and free to the public for avalanche beacon practice seven days a week from 9 a.m. to 8 p.m., southeast corner of Beall Park in Bozeman.

COOKE CITY

Weekly rescue training and snowpack update, 6:30-7:30 p.m., Cooke City Super 8 on Friday, Lulu Pass Road for field location Saturday (Look for the **yellow sign**).

BOZEMAN

February 10 and 11, Companion Rescue Clinic, REI and field day, more info and register here.

WEST YELLOWSTONE

February 11, **1-hr Avalanche Awareness**, 7-8 p.m., West Yellowstone Holiday Inn.

ENNIS

February 17, **1-hr Avalanche Awareness**, 6-7 p.m., Madison Valley Rural Fire Department Station 1.