GNFAC Avalanche Advisory for Mon Feb 2, 2015

Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Monday, February 2, at 7:30 a.m. **Bridger Bowl** in partnership with the **Friends of the Avalanche Center** sponsors today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

Over the past 24 hours the mountains picked up 4-6 inches of low density snow with the exception of the Big Sky area which picked up 2-3 inches. At 4 am, mountain temperatures range from the mid-teens to low 20s F and winds are blowing 15-25 mph out of the W-NW with stronger gusts being recorded along the ridgelines. Today, temperatures will warm into the upper 20s F under mostly cloudy skies and winds will remain light to moderate out of the W-NW. There is a continuing chance of mountain snow showers, mainly in the southern mountains where an additional 1-2 inches could accumulate by this afternoon. Another potent storm system is forecasted to arrive Tuesday night into Wednesday.

Snowpack and Avalanche Discussion

Bridger Range Madison Range Gallatin Range

Lionhead area near West Yellowstone Cooke City

Winter is doing its best to make a return. After weeks of above average temperatures and below average precipitation, this latest round of snow is a welcomed sight. While 4-6 inches will improve overall riding conditions, it will also increase the avalanche danger.

The snow that fell is of the cold smoke variety (5-6%) which will make it easily transported by light to moderate winds out of the west-northwest. This makes wind slabs today's primary avalanche problem. Likely areas to encounter wind drifted snow will be in upper elevation, leeward terrain below the ridgelines. Fresh wind slabs will be resting over a variety of snow surfaces ranging from firm ice crusts to weaker, faceted snow. This will make them quite reactive to human triggers.

Out of wind affected terrain, there is the possibility of small sluffs or soft slabs being triggered in steep terrain. The new snow likely capped a layer of surface hoar that formed over the past few weeks (**photos**). This layer has been observed in the mountains around Big Sky, West Yellowstone and Cooke City. As more snow accumulates over the next few days, this layer will become an increasing problem.

Today, human triggered avalanches are likely on steep, wind loaded slopes which have a <u>CONSIDERABLE</u> avalanche danger. Steep non-wind loaded slopes have a <u>MODERATE</u> avalanche danger while less steep slopes have a <u>LOW</u> avalanche danger.

Doug will issue the next advisory tomorrow morning at 7:30 a.m. If you have any snowpack or avalanche observations drop us a line at mtavalanche@gmail.com or call us at 587-6984.

KING AND QUEEN OF THE RIDGE

Saturday, February 14th is the **13th Annual King and Queen of the Ridge** Hike/Ski-a-thon fundraiser to support avalanche education in southwest Montana. Collect pledges for one, two or the most ridge hikes you can

do in the five hours of competition. 100% of the proceeds go to the Friends of Gallatin National Forest Avalanche Center. Kids and families are encouraged to hike too! Hike as an Individual or Team. Make a Pledge. Sign Up and More Info.

RESEARCH PROJECT ON UNDERSTANDING TRAVEL BEHAVIOR IN AVALANCHE TERRAIN NEEDS YOU!!

Scientists from the Snow and Avalanche Lab at Montana State University are seeking more participants for their project examining decision making and travel in avalanche terrain. Their project aims to collect GPS information (from your smartphone) and survey responses from backcountry skiers and riders to better understand what types of terrain are used, and how decisions are made. Their focus is on backcountry skiers and riders of all abilities and experience. You need not be an expert backcountry skier to participate in this research.

To Participate or get more information: www.montana.edu/snowscience/tracks or their companion site directed toward snowmobilers at: www.montana.edu/snowscience/sleds

AVALANCHE EDUATION and EVENTS

Take a look at our **Education Calendar** for all classes being offered.

1-hour Avalanche Awareness, Bozeman, REI, 6:30 p.m., Wednesday, February 4.

1-hour Avalanche Awareness, Great Falls, Back Alley Pub, Thursday, February 5.

Woman's Specific Avalanche Awareness, Bozeman, REI, 6:30 p.m., Wednesday, February 11.

Companion Rescue Clinic Part 1, Bozeman, REI, 6-8 p.m., Friday, February 20.

Companion Rescue Clinic Part 2, Field Location TBD, 10 a.m. - 2 p.m., Saturday, February 21.

1-hour Avalanche Awareness, West Yellowstone, Holiday Inn, 7 p.m., Saturday, February 21.