GNFAC Avalanche Advisory for Tue Feb 3, 2015

Good morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Tuesday, February 3, at 7:30 a.m. Montana Import Group in partnership with the Friends of the Avalanche Center sponsors today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

Cooke City received another six inches of snow, most of it falling last night, while the other mountain ranges just received wind. Under mostly cloudy skies mountain temperatures are in the low to mid 20s with west to southwest winds gusting 35-50 mph and averaging 20-30 mph at the ridgetops. Today will be windy and cloudy with snow falling later this afternoon. By morning the northern mountains could have 3-4 inches, the mountains towards West Yellowstone 4-6 inches, and Cooke City 6-10 inches. Winter is back!

Snowpack and Avalanche Discussion

Cooke City

In the last 48 hours Cooke City has gotten over a foot of new snow measuring an inch of <u>snow water equivalence</u>. A snowmobiler triggered a small, 20-foot wide avalanche on a steep wind-loaded slope on the lower flanks of Crown Butte yesterday. Small avalanches like this are warning signs that bigger ones may follow as the snow piles up. Winds are blowing and drifting snow at all elevations. On some protected slopes the recent snowfalls buried a layer of feathery surface hoar crystals (**photos**) which will be easy to trigger. New snow, wind and a freshly buried weak layer point to a **CONSIDERABLE** avalanche danger on all wind-loaded terrain. Slopes without a wind-load are rated **MODERATE** since pockets of buried surface hoar make it possible to trigger avalanches, even in the deep powder.

Bridger Range Madison Range Gallatin Range

Lionhead area near West Yellowstone

Yesterday winds increased at the ridgelines and blew snow into 8-10 inch soft slabs. Skiers in Hyalite triggered a 20-foot wide wind deposit in very steep terrain (**photo**). There's limited snow to fuel the wind drifts since only 4-6 inches fell Sunday night. Around Big Sky, Buck Ridge and further south to West Yellowstone, a thick carpet of surface hoar was buried. It does not seem to be in the Bridger or northern Gallatin Range, but take that with a grain of salt since observations have been few. Winds prior to the storm likely destroyed the fragile crystals on some slopes but not others. A quick swipe of the hand is enough to find it, and if you do, proceed with caution. For today, the avalanche danger is rated **MODERATE** on all wind-loaded slopes. Slopes without a wind-load have a **LOW** danger, but this will increase with more snowfall.

I 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 at Bridger Bowl to support avalanche education in southwest Montana. Collect pledges for each lap of hiking to the ridge and skiing back down. 100% of the proceeds go to the Friends of Gallatin National Forest Avalanche Center. Hike as an individual or form a team of your workmates or playmates or family! Prizes are awarded for Team and Individual categories. <u>Make a Pledge</u>. <u>Sign Up and More Info</u>.

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: <u>www.montana.edu/snowscience/tracks</u> or their companion site directed toward snowmobilers at: <u>www.montana.edu/snowscience/sleds</u>

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 1-hour Avalanche Awareness, Bozeman, REI, 6:30 p.m., Wednesday, February 11.

Companion Rescue Clinic, Bozeman, REI, 6-8 p.m., Friday, February 20 and 10 a.m.-2 p.m. on Saturday, February 21 (field location TBD). .Pre-registration is required: www.rei.com/stores/bozeman.html

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