GNFAC Avalanche Forecast for Wed Jan 15, 2014

Good morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Wednesday, January 15 at 7:30 a.m. <u>Helio Collective</u> and <u>Buck Products</u> sponsor today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

Early yesterday morning Cooke City squeezed out another three inches of snow while the Red Lodge Ski Area got hammered with over 20"! Currently mountain temperatures are in the high teens to low twenties under partly cloudy skies. Winds are west to southwest averaging 30 mph with gusts of 50 mph around Bozeman, and averaging 15-20 mph everywhere else. High pressure is moving in and forecasted to stay through the weekend. Today will be partly cloudy with temperatures reaching the low thirties and wind speeds decreasing.

Snowpack and Avalanche Discussion

Bridger Range Gallatin Range Madison Range

Lionhead area near West Yellowstone

Yesterday a few us skied to Mount Blackmore in the northern Gallatin Range to look at an avalanche. It likely broke early Sunday after significant wind-loading. It was huge (**photo**). The entire east-face ripped out with other crowns seen further to the south. Weak snow at the ground got wind-loaded to the point of failure. Eric and I saw a similar avalanche on Sunday in Lionhead near West Yellowstone (**photo**, **video**) and that same day a snowmobiler triggered a six foot deep wind-loaded slope on Buck Ridge. The snow at the ground is weak and wind-loads are heavy. When we put these two together we get avalanches. Snowpack assessment has not been complicated, but that's about to change.

With high pressure forecasted to dominate, the snowpack will get a reprieve from loading. Slopes will not be hair-trigger and the likelihood of a slope avalanching will steadily decrease, which are both positive developments. However, the snow structure is poor and will be slow to heal. In the coming days, sunny skies, good powder and a lull in avalanche activity (or other signs of instability) can give us a false sense of security. Stability assessment will become tricky as some slopes stabilize faster than others. Our best line of defense is simple: be conservative and dig snowpits. Nibble around the edges of a slope and test the snowpack before committing. Hunt for instability and go elsewhere when you find it. Don't use "stable" test results as a sole green light to play in avalanche terrain.

For today, the avalanche danger is rated **CONSIDERABLE** on all wind-loaded terrain AND on all slopes steeper than 35 degrees. Lower angled slopes without a wind-load have a **MODERATE** danger.

Cooke City

Cooke City has gotten the most snow and has the strongest snowpack in southwest Montana. But even strong snowpacks can avalanche. On Monday, the east face of Republic Peak avalanched "wall to wall". It was reported to be new snow and heavily wind-loaded. Over three inches of <u>water weight</u> fell since late last week which has now consolidated to 1.5-2 feet of snow. Winds raked the area too. The mountains around Cooke City are like a boxer still standing after absorbing some good punches—he might have won the bout, but needs a rest and time to heal. With no snow forecasted and winds decreasing, the snowpack will get a breather. The danger today is on

wind-loaded slopes, which can be found at many elevations and aspects, not just at the ridgelines. For today, the avalanche danger is rated **CONSIDERABLE** on all wind-loaded terrain. Slopes without a wind-load have a **MODERATE** danger.

Mark 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.

MONTANA ALE WORKS FUNDRAISER DINNER, Wednesday, January 22

On Wednesday, January 22, Montana Ale Works is hosting the 6th Annual Fundraiser Dinner for the Friends of the Avalanche Center. Chef Roth is creating an elegant, multiple course menu. His culinary creation will be paired with wines from the Ale Works cellar. Seating is limited to 40. Get your tickets early. https://www.ticketriver.com/event/9572

BACKCOUNTRY SKIERS AND RIDERS NEEDED FOR MSU SURVEY

This project aims to collect GPS location information and survey responses from backcountry skiers and riders to better understand what types of terrain decision we make. The 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. For more information and to sign up: www.montana.edu/snowscience/tracks

ANDROID APP

If you have an android phone or tablet, you can download our new free app. It's a slick way to get the advisory. Search Google Play for GNFAC. An iOS version is coming soon. Stay tuned.

EVENTS/EDUCATION

TONIGHT, BOZEMAN: Wednesday, 6:30-7:30 p.m., MSU Procrastinator Theater, **Sidecountry IS Backcountry** lecture.

January 16, BOZEMAN: Thursday, 6-8 p.m., Beall Park, 1-hour Avalanche Awareness and Transceiver Practice.

January 18, COOKE CITY: Saturday, 6-7 p.m., Community Center, 1-hour Avalanche Awareness lecture.

January 18 & 19, BOZEMAN: Saturday, 12-4:30 p.m. Bozeman Public Library; Sunday, all day in the field, **Snowmobiler Introduction to Avalanches with Field Course**. Pre-registration is required: https://www.ticketriver.com/event/8565-bozeman--snowmo-intro-to-avalanches-w-field

January 22,23 & 25, BOZEMAN: Wednesday and Thursday 7-9:30 p.m.; all day Sunday in field, **Introduction to Avalanches with Field Course**. Pre-registration is required: <u>https://www.ticketriver.com/event/7113</u>

January 22 & 23 &26, BILLINGS and COOKE CITY: Wednesday and Thursday 6-9 p.m.; all day Sunday in field, **Snowmobiler Introduction to Avalanches with Field Course**. Pre-registration is required: <u>https://www.ticketriver.com/event/9380</u>

January 25, WEST YELLOWSTONE: Saturday, 7-8 p.m. at Holiday Inn, **1-hour Avalanche Awareness** lecture.

More information our complete calendar of events can be found **<u>HERE</u>**.