GNFAC Avalanche Advisory for Tue Feb 10, 2015

Good morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Tuesday, February 10, at 7:30 a.m. Soda Butte Lodge in partnership with the Friends of the Avalanche Center sponsors today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

This morning the southern areas have three inches of new snow around West Yellowstone, six inches in Taylor Fork and a foot in Cooke City. Snow just started falling and at 6 a.m. Bridger Bowl has an inch of new snow in addition to the inch from yesterday morning which also fell in the northern Madison and northern Gallatin Ranges. Mountain temperatures are in the low to mid 20s with winds out of the west to southwest averaging 20 mph and gusting to 30 mph. Today will remain windy at the ridgetops as temperatures climb to the upper 20s and snow falls. I expect 2-4 inches of new snow in the mountains with closer to six inches around Cooke City before skies clear tonight.

Snowpack and Avalanche Discussion

Cooke City

Once again Cooke City is in a world of its own. I don't know why this surprises me, but it does. I love that place; it's an anchor for winter and a beacon of hope. A foot of snow fell in the last 24 hours measuring an inch of snow water equivalency (SWE). Winds are strong enough to load slopes and these will be our main concern today. Last week Eric was able to trigger a wind slab and saw a few natural slides on slopes with a wind-load (video, photo). Cooke City is a windy place, but even in the sheltered trees it will be possible to trigger small slides given all the fresh snow falling. For today the avalanche danger is rated CONSIDERABLE on all wind-loaded slopes and MODERATE on all others.

Southern Madison Range Southern Gallatin Range Lionhead Area near West Yellowstone

Three to six inches of new snow fell in the southern mountains. On many slopes the snowpack is strong and won't flinch with this load (.3-.6 inches of SWE), but a few will. A thin layer of surface hoar and facets are buried 1-2 feet deep on some slopes. Mark and Eric found it in Teepee Creek on Saturday and I found it on one slope on Sunday in Taylor Fork. It broke clean in my stability tests (video, photo, snowpit profile) and nearby a rider triggered a small slide on a steep slope that same day. The distribution of this layer is scattered but worth looking for. New snow, wind, and a weak layer that's hard to find all point to a MODERATE danger on slopes steeper than 35 degrees or any slope with a wind-load. All other terrain has a LOW avalanche danger.

Bridger Range Northern Madison Range Northern Gallatin Range

A squall in the pre-dawn hours yesterday gave Eric a headache as he was trying to forecast. Two inches fell in the northern mountains with another inch falling later that morning. The avalanche problem lies on slopes that are wind-loaded. The Big Sky Ski Patrol triggered many 4-6 inch thick wind slabs. I expect similar conditions in the backcountry, especially near the ridgelines where wind-loading is most prominent. In the Hyalite drainage skiers found weak snow buried about a foot deep. This layer is not widespread, but it broke clean in their stability tests. Triggering slides is unlikely, but in the spirit of full disclosure it's worth tucking that information away. Steady winds out of the west to southwest coupled with a few inches of snow are creating a MODERATE avalanche danger on wind-loaded slopes today. Slopes without a wind-load have a LOW danger.

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 <u>mtavalanche@gmail.com</u> 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>.

AVALANCHE EDUCATION and EVENTS

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

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

Snow Science and the Human Factor, Bozeman, MSU Procrastinator Theater, 6-8:00 p.m., Tuesday, February 17. The free event will feature a talk by Powder editor and MSU graduate John Stifter, multimedia presentations on the human factor in avalanche risk, a panel of experts from MSU's Snow & Avalanche Lab and Gallatin National Forest Avalanche Center, as well as a Q & A session (**poster**).

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: <u>www.rei.com/stores/bozeman.html</u>

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