GNFAC Avalanche Advisory for Wed Feb 1, 2012

Good morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Wednesday, February 1 at 7:30 a.m. **Mystery Ranch** in partnership with the Friends of the Avalanche Center sponsor today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

Late yesterday most mountain locations picked up 1-2 inches, although West Yellowstone and the northern Gallatin Range were missed. Temperatures are near 10F this morning after reaching the mid 20's yesterday and winds are west to southwest at 15-25 mph. Today will become progressively cloudy as a weather disturbance moves in from the coast. By tonight winds will be light, but shift west to north. By tomorrow morning I expect 1-2 inches in the northern mountains and 2-4 inches in the southern ranges.

Snowpack and Avalanche Discussion

The southern Madison and southern Gallatin Ranges, the Lionhead area near West Yellowstone and the mountains around Cooke City:

The mountains around Cooke City, as well as the other southern ranges, have dangerous avalanche conditions. Outside Cooke City a layer of weak, faceted snow is buried 2-3 feet deep on many slopes. I found this last week on south facing slopes, like Scotch Bonnet, where this layer formed on an ice crust. On other aspects it's not as widespread, but wherever it exists you'll likely trigger avalanches. Natural avalanches this weekend (**photo**) and a small snowmobiler triggered slide near Daisy Pass yesterday, illustrate the instability. The slide was reported 70' wide, 2 feet deep, and 120 feet long.

I toured with my partners into Bacon Rind in the southern Madison Range yesterday. I was expecting to find unstable snow and was not disappointed. Large collapses and shooting cracks made stability assessment easy; it was poor. The snowpack here is only three feet deep with over half of it made up of weak, sugary facets, which are not getting stronger or more supportable. I sunk to the ground every time I stepped out of my skis. A layer of feathery surface hoar buried a foot deep is consistently collapsing and propagating fractures. We dug into one of these cracks (photo) and did a few stability tests (video), further confirming its touchy conditions. For today, the avalanche danger is rated CONSIDERABLE on all slopes.

The Bridger Range and northern Madison Range:

Mark snowmobiled into Buck Ridge south of Big Sky yesterday. He saw a large crown line on a northeast facing slope that released a few days ago from wind-loading. He rode miles, dug six pits and surmised that although there is plenty of weak snow (depth hoar and facets), slopes with a big enough wind-load to avalanche are isolated. In the Bridger Range a weak, faceted, thin snowpack abounds. A few slopes have thicker slabs of windblown snow capping these facets and should be avoided. Given the weak snow structure, it's still possible to trigger an avalanche today and the danger is rated **MODERATE** on all slopes.

The northern Gallatin Range:

The northern Gallatin Range is not plagued by widespread layers of faceted snow. Eric was in Hyalite yesterday and found dense powder in protected areas and variable wind affected snow at higher elevations (**photo**). Slopes with a recent wind-load are suspect as are steeper slopes, especially those with a thinner, weaker snowpack like

Mount Ellis or Wheeler. For today, the avalanche danger is rated **MODERATE** on any wind-loaded slope and also on any slope steeper than 35 degrees. All other slopes have a **LOW** 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.

FUNDRAISING

February 4: Poker Run

The Gallatin Valley Snowmobile Association is sponsoring their annual Buck Ridge Poker Ride this Saturday. All proceeds benefit the Friends of the GNFAC. Registration is at 9 a.m. in the Buck Ridge parking lot. More info at www.gvsa.net

February 8: 4th Annual Montana Ale Works Wine Dinner

Come join us for a wonderful, social evening at Montana Ale Works. Menu and ticket information is here: http://bit.ly/wEg01j

February 11: 10th Annual King and Queen of the Ridge

The 10th Annual King and Queen of the Ridge Hike/Ski-a-thon fundraiser is Saturday, Feb 11th. The event supports 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! **More Information** / **Registration Form**

EDUCATION

Bozeman: TONIGHT

Advanced Avalanche Workshop with Field Course. MSU, Wednesday and Thursday, February 1 and 2 from 7-9:00 p.m. with a field day Saturday, February 4. **Advanced registration** is required.