GNFAC Avalanche Forecast for Wed Mar 4, 2015

Good morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Wednesday, March 4, at 7:30 a.m. This advisory is sponsored by <u>Cooke City Motorsports and Yamaha</u> in partnership with the Friends of the Avalanche Center. This advisory does not apply to operating ski areas.

Mountain Weather

There's no new snow to report this morning, just clear skies under a nearly full moon. Mountain temperatures are in the single digits below zero with ridgetop winds averaging 15 mph and gusting to 30 out of the north to northwest – strong enough to freeze your face off. Temperatures will rise into the low 20s under clear skies as winds remain steady. A strong high pressure system builds today which will block moisture and bring above average temperatures into the weekend. Wah.

Snowpack and Avalanche Discussion

Bridger Range Madison Range Gallatin Range

Lionhead Area near West Yellowstone Cooke City

Yesterday I rode around Lionhead and found weak snow at the surface on all aspects and elevations. The upper six inches of the snowpack has faceted into small sugary grains from a process called near-surface faceting, or more specifically, diurnal recrystallization. Its urban slang definition is "recycled powder" since it resembles powder in its consistency (video). These crystals formed during repeated cycles of cold clear nights and warm(er) days and once buried they can become a long-term weak layer. On the ridge this layer was capped by a thin wind slab which will help preserve it over the coming days. Karl found the exact layer in Bacon Rind and I imagine it's in many other places too. To learn more about it without getting all "sciency" read Karl's 1998 article in *The Avalanche Review*.

Is it a problem now? No. Will it be in the future? Possibly. This week's weather may melt it, heal it or develop it further. We'll be monitoring it closely in anticipation of the next monster storm which is out there somewhere, right?

Weak snow at the surface does not make for unstable conditions. The snowpack is generally strong (video) and avalanches are unlikely. Wind-loaded slopes near the ridgelines have a few thin wind slabs that could be triggered, but these are not widespread (photo). For today, the avalanche danger is rated LOW on all slopes.

The Snow Science Program at MSU needs your Help!

They are looking for backcountry skiers and sledders to help them with a study on Human Factors. Watch this **2:46 minute video** for details.

Forum on Snow Science and the Human Factor on video.

In case you missed it, here's the entire **<u>1:13 hour video</u>** from the forum on <u>Snow Science and the Human Factor</u> at MSU. John Stifter, editor of Powder Magazine, talks about his own personal experience with the avalanche that killed three of his friends in 2012 at Tunnel Creek. Doug Chabot gives a presentation about *Sidecountry Skiing and Digging Pits* starting 44 minutes into the program.

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 <u>mtavalanche@gmail.com</u> or call us at 587-6984.

AVALANCHE EDUCATION and EVENTS

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

1-hour Avalanche Awareness, Bozeman, REI, 6:30 - 8 p.m., Wednesday, March 11.