GNFAC Avalanche Forecast for Wed Dec 31, 2014

Happy New Year's Eve! This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Wednesday, December 31, at 7:30 a.m. Today's advisory is sponsored by **Soda Butte Lodge** in partnership with the Friends of the Avalanche Center. This advisory does not apply to operating ski areas.

Mountain Weather

I'm happy to report that mountain temperatures are +10F to +15F this morning, almost 25 degrees warmer than yesterday, because of an inversion (although it's not as strong in the <u>Bridger Range</u>: +5F). Skies are mostly clear and winds shifted from the east to north and are currently averaging 15 mph with gusts reaching 30 mph. Today will be sunny as mountain temperatures climb towards 20F and ridgetop winds continue to blow steady out of the north to northwest.

Snowpack and Avalanche Discussion

Bridger Range Gallatin Range Madison Range

Lionhead area near West Yellowstone Cooke City

One to two feet of snow fell in the mountains since Christmas. Today my primary avalanche worry is fresh wind slabs. Yesterday afternoon the wind direction changed northerly and speeds increased at many elevations, not just at the ridgelines. The Bridger Ski Patrol reported downhill winds created sensitive slabs in gullies and bowls and I expect similar conditions in the other ranges too. Even **Lionhead near West Yellowstone**, normally quiet, is showing windy conditions. There is lots of powder snow to feed these wind drifts. Surface cracking is a tell-tale sign the snow has been wind-effected. Don't just drop in, brah.

The weak layer I'm concerned with is two feet under the surface (video). The crystals are either a layer of feathery surface hoar or a thin layer of sugary facets. If you dig, either is seen as a stripe in the snowpit wall. The recent storms have not produced avalanches on this layer but our stability tests are still propagating fractures, a sign that skiers or riders could trigger a slope. Overall we are pleased with the trend toward stability which Eric expressed as "cautiously optimistic" in Monday's video from the Bridger Range.

For today the avalanche danger is rated **CONSIDERABLE** on any wind-loaded slope and **MODERATE** on all other terrain.

Wind slabs will be obvious and easy to navigate, but the buried weak layer will require you to put your shovel in the snow to find it and test it. We have <u>seven videos</u> which were shot in the last 10 days explaining what to look for. Further, we have <u>pictures</u> and <u>snowpit profiles</u> to help you learn about the snowpack too.

Two New Articles Posted:

Read Doug's article on <u>"Human-Factors and Digging"</u> and also Mark's companion article titled <u>"A survey of our class at MSU"</u>.

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.

AVALANCHE EDUATION and EVENTS

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

1-hour Avalanche Awareness for Snowmobilers, West Yellowstone, 7 p.m., Saturday, January 3, Holiday Inn.

Avalanche Awareness for Snowmobilers, Billings, 6:30-8 p.m., Wednesday, January 7 at Hi-Tech Motor Sports.

Companion Rescue Clinic, Bozeman, Fri eve and Sat field, January 9 and 10, REI. Register for the class here: www.rei.com/stores/bozeman.html

1-hour Avalanche Awareness for Snowmobilers, West Yellowstone, 7 p.m., Saturday, January 10, Holiday Inn.

1-hour Avalanche Awareness, Three Forks, 7 p.m., Monday, January 12, Methodist Church Annex.

Women's Avalanche Awareness w/ Beacon Practice, Bozeman, 6:30-8 p.m., Tuesday, January 13, Beal Park.

1-hour Avalanche Awareness, 4 Corners, 6:30 p.m., Wednesday, January 14, GVSA Groomer Shed.

1- hour Sidecountry Avalanche Awareness, Bozeman, 6:30-8 p.m., Wednesday, January 14, REI.