GNFAC Avalanche Forecast for Tue Mar 11, 2014

Good Morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Tuesday, March 11 at 7:30 a.m. **Grizzly Outfitters** in partnership with the **Friends of the Avalanche Center**, sponsor today's advisory. This advisory does not apply to operating ski areas.

AVALANCHE WARNING

ISSUED ON March 11 2014 AT 05:30 am

The Gallatin National Forest Avalanche Center is issuing a **Backcountry Avalanche Warning for our entire advisory area.** Dense, wet snow has fallen at a rapid pace creating widespread instability. Natural avalanche activity is likely on all slopes. The avalanche danger is rated **HIGH** in the Bridger, Gallatin and Madison Ranges along with the Lionhead area outside West Yellowstone and mountains around Cooke City. Very dangerous avalanche conditions exist. Travel in avalanche terrain is <u>not</u> recommended and avalanche runout zones should be avoided.

This warning will either be terminated or updated by 6:30 a.m. on Wednesday, March 12.

Mountain Weather

Snowfall has been heavy, wet and plentiful. 14-20+" has fallen at the higher elevations, but even more important is the weight of this new snow which is measuring 1.5-2" of snow water equivalency (<u>SWE</u>), a very heavy 24-hour burden for almost all of our areas. Mountain temperatures are near 20F and winds are westerly at 20-40 mph. A few more inches will fall before the storm ends early this morning. Partly cloudy skies with west winds blowing 20-30 mph are in store for us today with sunny skies forecasted the rest of the week.

Snowpack and Avalanche Discussion

Bridger Range Gallatin Range Madison Range

Lionhead area near West Yellowstone Cooke City

Avalanches are going to happen everywhere today; no mountain range will be spared. As a general rule most avalanches happen during or immediately after a storm, which is today, and this was a very nice storm indeed. The storm started as rain in many locations and turned to snow as it progressed. Measuring the storm using inches of snow is an inaccurate way to measure the load. While 14 to 20+ inches fell rapidly at many stations, the snow water equivalency tells us the load was heavy. I cannot remember the last time I saw SWE totals approaching two inches in 24 hours!

Winds have been gusty and strong enough to move this heavy, dense snow. During a break in the storm yesterday the Big Sky Ski Patrol saw many natural avalanches on different aspects. Continued snowfall and wind since then will not make conditions better. Most avalanches will occur on steep slopes with the new snow. A few will break 3-4 feet deep on a layer of facets while fewer still will break near the ground on weak, sugary snow that formed in December. Even though our field investigations have showed a slow strengthening of the snowpack, there are lingering weakness' which will be exploited by this snowfall. I found this in the Bridger Range (video) and also in Beehive Basin (snowpit profile) over the weekend while Eric and Mark had similar concerns around Buck Ridge (video) and further south in Bacon Rind. Cooke City has had impressive avalanche

activity before the storm and will likely have deep slab avalanches today as well (photo).

Today is a day to stay out of avalanche terrain and runout zones. All the dense, wet, new snow has led us to an avalanche warning with a **HIGH** avalanche danger on all slopes.

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 mtavalanche@gmail.com or call us at 587-6984.