GNFAC Avalanche Advisory for Tue Mar 28, 2017

Good Morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Tuesday, March 28th at 7:15 a.m. Today's advisory is sponsored by <u>Yellowstone Arctic Yamaha and Yamaha Motor</u> Corp in partnership with Friends of the Avalanche Center. This advisory does not apply to operating ski areas.

Mountain Weather

In the last 24 hours Cooke City has gotten 5" of new snow with 3-4" in other locations, except the Bridger Range which picked up an inch. Temperatures are in the high teens to low 20s with N-NW ridgetop winds blowing 10-20 mph. Today will become sunny with temperatures reaching 40F and winds switching west at 10 mph. Tonight will be partly cloudy with no precipitation expected until Wednesday evening.

Snowpack and Avalanche Discussion

Madison Range Gallatin Range Lionhead area near West Yellowstone Cooke City

New snow (.3-.5" <u>snow water equivalent</u>) combined with wind is drifting snow into slabs near the ridgelines which could be triggered. A supportable 6-8" thick ice crust is underlying the snow from the weekend. Our two dry snow concerns are triggering freshly formed wind slabs and releasing loose snow avalanches (sluffs) that can run for long distances on the ice crust (<u>photo</u>, <u>photo</u>). Outside Cooke City these sluffs reportedly ran fast and far on the ice crust and will do the same today.

As the day heats up the wet snow avalanche danger will increase on sun exposed slopes. The warmer and sunnier it gets, the more likely avalanches will be. New snow is especially susceptible to wetting and avalanching. I expect wet loose avalanches (**photo**) sliding on the underlying crust. This time of year solar radiation is acute and quickly changes the snow surface from dry to wet. Pinwheels growing as they spiral downhill are signs of increasing wet snow avalanche danger.

On many slopes conditions are stable and skiing and riding is great (<u>video</u>). The caveat are wind-loaded slopes, sluffs of the new snow and wet loose avalanches sliding on the shallowly buried ice crust. For today, the dry snow avalanche danger is <u>MODERATE</u>. The wet snow avalanche danger will rise to <u>MODERATE</u> today and possibly higher if air temperature rises more than my forecasted 40F.

Bridger Range

The Bridger Range did not get enough new snow to adversely affect the dry snow avalanche danger. There may be small pockets of wind-blown snow at the ridgelines, but they will not be widespread. The dry snow avalanche danger remains <u>LOW</u>. As the sun rises the temperatures will warm the snow surface and the wet snow avalanche danger will rise to <u>MODERATE</u> and possibly higher if the temperature spikes higher than forecasted.

I will issue the next advisory tomorrow morning by 7:30 a.m. Our last advisory of the season will be Sunday, April 9th.

We rely on your field observations. Send us an email with simple weather and snowpack information along the lines of what you might share with your friends: How much new snow? Was the skiing/riding any good? Did you see any avalanches or signs of instability? Was snow blowing at the ridgelines? If you have snowpit or test data we'll take that too, but this core info is super helpful! Email us at mtaylorgraph and we'll take that too, but this core info is super helpful! Email us at mtaylorgraph and mtaylorgraph or leave a

message at 406-587-6984.

MAY 4: Give Big Gallatin Valley

The **Friends of the Avalanche Center** are one of the recipients of the Give Big Gallatin Valley campaign. It is a 1-day fundraising event for local non-profits on May 4, so mark your calendars. The Friends will send reminders as the day approaches: https://www.givebiggv.org/organizations/friends-of-the-gallatin-national-forest-avalanche-center