GNFAC Avalanche Forecast for Sun Feb 12, 2017

Good Morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Advisory issued on Sunday, February 12th at 7:15 a.m. Today's advisory is sponsored <u>Yellowstone Arctic Yamaha and Yamaha</u> <u>Motor Corp</u> in partnership with **The Friends of the Avalanche Center**. This advisory does not apply to operating ski areas.

Mountain Weather

The mountains received a dusting of new snow yesterday with westerly wind gusts of 40-50 mph. This morning, temperatures are in the single digits to low teens F with westerly wind at 15-20 mph. Temperatures will reach the high 20s F today with wind out of the west at 10-20 mph. Expect calm, dry weather and slightly warmer temperatures through the first half of the week.

Snowpack and Avalanche Discussion

Cooke City

Yesterday near Cooke City, skies cleared for the first time in over a week and the aftermath of an historic storm was visible (<u>video</u>). Large to historic sized avalanches were observed throughout the mountains on all aspects yesterday. Slides ranged from 1-3' deep within the recent storm snow (<u>photo</u>, <u>photo</u>) to over 8 feet deep running historical distances (<u>photo</u>). Between Friday and Saturday morning a huge avalanche on Henderson Mountain buried the Lulu Pass road with 10-20' of debris over 1000' wide (<u>photo</u>, <u>photo</u>). A similar sized slide was also observed on Fisher Peak near Lulu Pass (<u>photo</u>).

Strong wind yesterday continued to load slopes with fresh snow and create huge slabs. These slabs could break naturally today or be triggered by a rider, and are not survivable. Avalanches today are capable of running far into flat terrain, breaking trees, and piling deep debris in areas that are often perceived as safe. Avoid avalanche terrain today and give runout zones a lot of space, especially below heavily wind loaded slopes. Avalanche danger today is HIGH on wind loaded slopes and CONSIDERABLE on non-wind loaded slopes.

Madison Range Gallatin Range

Lionhead area near West Yellowstone

The mountains near Big Sky and West Yellowstone received rain below 8,500-9,000' a couple days ago, and freezing temperatures yesterday helped stabilize the soaked snowpack below those elevations. At higher elevations, strong wind transported snow into wind slabs that are the main concern today. These slabs are found near ridgelines and convex terrain features. Yesterday a snowmobiler near Buck Ridge triggered and escaped a slide similar to what is possible today (**photos**), and a skier near Deer Creek in the Northern Madison Range observed a natural wind slab that ran to flat terrain (**photo**).

The weight of recent snow and wind loading added stress to buried weak layers and made them more sensitive to the weight of a skier or rider. Yesterday, Big Sky patrol trigged avalanches that broke deep on buried crusts (photo), and skiers in Hyalite experienced a loud, rumbling collapse as they ascended a slope. Eric went to Beehive where he witnessed wind-loading (photo) and found unstable test results on a buried weak layer (wideo, photo). These layers are not widespread, which makes them tricky to assess. Dig to look for these layers before committing to steep terrain.

The avalanche danger today is **CONSIDERABLE** on wind loaded slopes and **MODERATE** on all other slopes.

Bridger Range

The Bridger Range received less snow than other areas last week, and below freezing temperatures yesterday helped to stabilize previously warm and wet snow. Eric was near the Throne on Tuesday and was "cautiously optimistic" about overall stability (video). Strong wind created wind slabs near ridgelines that are possible to trigger today (photo). Wind loaded slopes should be approached with caution or avoided. Avalanche danger today is MODERATE.

I will issue the next advisory tomorrow morning by 7:30 a.m.

Nearby Incident: On Friday, a snowmobiler triggered a slide north of Lincoln, MT (not within any advisory area). He deployed his airbag and was not caught while his sled was partially buried. A short report and photos of the incident **here.**

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 mtavalanche@gmail.com or leave a message at 406-587-6984.

Upcoming Events and Education

<u>Beacon Training Park at Beall</u>: Open and free to the public for avalanche beacon practice seven days a week from 9 a.m. to 8 p.m., southeast corner of Beall Park in Bozeman.

COOKE CITY

Weekly rescue training and snowpack update, 6:30-7:30 p.m., Cooke City Super 8 on Friday, Lulu Pass Road for field location Saturday (Look for the **yellow sign**).

ENNIS

February 17, 1-hr Avalanche Awareness, 6-7 p.m., Madison Valley Rural Fire Department Station 1.