GNFAC Avalanche Forecast for Fri Apr 1, 2016

Good morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Advisory issued on Friday, April 1, at 7:15 AM. Today's advisory is sponsored by the <u>Yellowstone Club Community Foundation</u> and <u>Buck Products</u>. This advisory does not apply to operating ski areas.

Mountain Weather

Since yesterday morning, the mountains south of Bozeman and near Big Sky got 5" of snow, the Bridger Range got 3", and the rest of the area got 1-2". Winds overnight were out of the north-northwest at 30-40 mph with gusts over 50 mph in Big Sky and Cooke City. In the Bridger Range, winds were westerly at 10-20 mph. Temperatures this morning are in the teens to low-20s F. Under partly sunny skies today, temperatures will reach the low 40s F and wind will be out of the northwest at 10-20 mph. More sunshine and warm weather are on deck for the weekend.

Snowpack and Avalanche Discussion

Bridger Range Madison Range Gallatin Range

Lionhead area near West Yellowstone Cooke City

The challenge today will be to not get fooled as the March madness marathon of snow abruptly changes to sunshine and above freezing temperatures. The mountains received 5-7" of snow water equivalent (<u>SWE</u>) in March, summarized here:

March Madness SWE totals (SNOTEL Sites):

Bridger Range (Brackett Creek) – 5"

Hyalite (Shower Falls) -6.5"

Big Sky (Lone Mountain) – 4.8"

Southern Madison (Carrot Basin) – 6.8"

West Yellowstone (Madison Plateau) – 5.5"

Cooke City (Fisher Creek) – 5.6"

Snowfall in the past week totaled 1.5-3" of SWE that was accompanied by strong winds to form slabs and add weight to the snowpack. Strong northwest winds the last two nights formed wind slabs that will be possible to trigger and up to 2-3' thick. On some slopes, recent snow and wind slabs are bonded well to the old snow. On other slopes these slabs lie over facets, lower density new snow, or deeper weak layers to create instability (video, video). Current instabilities are not widespread, which can make them difficult to assess. A guide in Cooke City yesterday found surface hoar that propagated in their snowpit, and they backed off that slope. In the absence of obvious instabilities, dig a snowpit to know what is below your feet.

In the past week, natural avalanches occurred in Hyalite (photo, photo) and the northern Bridger Range (photo), and avalanches were triggered near Gardiner (photo) and Cooke City (photo). All of these avalanches were on wind-loaded slopes and most were triggered by cornices. This does not mean a large trigger is required, but that wind-loaded slopes are unstable and large avalanches could be triggered from the right spot. Also, cornices are large this time of year and above freezing temperatures will make them easy to trigger or fall naturally. Give cornices a wide berth as you travel along ridgelines and be cautious in terrain below them.

Eric is in Cooke City and found over a foot of fresh snow yesterday (<u>video</u>). Most slopes hold 1-2 feet of new snow, which will quickly warm with sunshine and above freezing temperatures to increase the possibility of loose avalanches. By this afternoon wet loose slides may be likely on steep sunny slopes. Avoid slopes with unconsolidated wet snow or where large pinwheels of snow form.

For today, the avalanche danger is rated **MODERATE**. Wet snow avalanche danger will start **LOW** and could rise to **CONSIDERABLE** this afternoon if skies are clear with warmer temperatures.

Eric will issue the next advisory tomorrow morning by 7:30 a.m. If you have any snowpack or avalanche observations to share, drop us a line at mtavalanche@gmail.com or leave a message at 587-6984.

EVENTS and AVALANCHE EDUCATION

A complete calendar of classes can be found **HERE**.