

## **GNFAC Avalanche Advisory for Sat Feb 11, 2017**

Good Morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Advisory issued on Saturday, February 11<sup>th</sup> at 7:15 a.m. Today's advisory is sponsored by [\*\*Excel Physical Therapy\*\*](#) and [\*\*Cooke City Super 8/Bearclaw Bob's\*\*](#). This advisory does not apply to operating ski areas.

### Mountain Weather

Recent wet and warm weather has shifted to colder and dry. An historic week of snow in Cooke City ended yesterday afternoon with another 8-10" of snow. Yesterday morning, the mountains south of Bozeman to West Yellowstone received 3-5" of new snow, and the Bridger Range got 1-2". Temperatures this morning are in the teens F and wind overnight was out of the west to southwest at 20-30 mph with gusts of 40-50 mph. Temperatures today will be in the high teens to 20s F. Wind will be out of the west at 25-35 mph. There is a chance for 1-2" of snow near Cooke City and a trace elsewhere before skies become partly sunny this afternoon.

### Snowpack and Avalanche Discussion

#### Cooke City

The mountains near Cooke City received historic snowfall over the last week with 8-10 feet of snow totaling 9.5" of [\*\*snow water equivalent\*\*](#) (SWE) over eight days. This storm was the largest since 1986 when 7.7" of SWE fell over six days. Snow stopped falling yesterday afternoon, but winds overnight continue to load slopes and form huge slabs of snow. Wind loading will continue today and large avalanches are likely on wind-loaded slopes. Yesterday I was in Cooke City during extreme danger. We steered clear of all steep slopes and avalanche runout zones with fear that slides could run historic distances, break trees, and be deadly in small terrain ([\*\*video\*\*](#)). We were not able to observe many slopes due to poor visibility, but saw a large, 6' deep wind slab that piled up in a confined terrain trap ([\*\*photo\*\*](#), [\*\*photo\*\*](#)). Large to historic avalanches are possible today and avalanche terrain should be avoided. Have fun in low angle terrain and avoid runout zones below steep, wind loaded slopes. Avalanche danger is [\*\*HIGH\*\*](#) on wind loaded slopes and [\*\*CONSIDERABLE\*\*](#) on all other slopes.

#### Southern Madison Range Southern Gallatin Range

#### Lionhead area near West Yellowstone

In the mountains near West Yellowstone and south of Big Sky temperatures dropped below freezing last night to help stabilize yesterday's rain soaked snowpack. The main avalanche concern today will involve dry snow at elevations above where rain fell yesterday ([\*\*video\*\*](#)). Strong winds overnight formed wind slabs with yesterday's new snow, and these slabs will be easy to trigger today. Avalanches breaking within and below the recent storm snow are also possible to trigger on steep non-wind loaded slopes, similar to the slide triggered in the Taylor Fork two days ago ([\*\*photo\*\*](#)). Avalanche danger today is [\*\*CONSIDERABLE\*\*](#).

#### Northern Madison Range Northern Gallatin Range

The mountains south of Bozeman and near Big Sky received snow yesterday morning and strong wind overnight. Wind slabs are easy to trigger today and will likely be found near ridgelines. Larger avalanches on buried weak layers are possible and most likely on wind loaded slopes. Persistent weak layers are not widespread, but have caused avalanches and produced unstable stability test results the last couple days ([\*\*photo\*\*](#)). Yesterday, Big Sky ski patrol triggered an avalanche that broke on old facets above a crust. This slide was on a

wind loaded slope with a shallow snowpack that avalanched earlier in the year ([photo](#)). The avalanche danger today is [CONSIDERABLE](#) on wind loaded slopes and [MODERATE](#) on all other slopes.

### Bridger Range

Below freezing temperatures overnight helped to stabilize a previously warm and wet snowpack in the Bridger Range. Eric was near the Throne on Tuesday and was “cautiously optimistic” about overall stability ([video](#)). A couple inches of snow yesterday morning and strong winds will make wind slabs possible to trigger today ([photo](#)). Approach wind loaded slopes with caution. Avalanche danger today is [MODERATE](#).

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

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](mailto:mtavalanche@gmail.com) or leave a message at 406-587-6984.

### Upcoming Events and Education

**Beacon Training Park at Beall:** 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](#)).

### WEST YELLOWSTONE

**TONIGHT!!!** February 11, **1-hr Avalanche Awareness**, 7-8 p.m., West Yellowstone Holiday Inn.

### ENNIS

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