GNFAC Avalanche Forecast for Sat Feb 25, 2017

Good Morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Advisory issued on Saturday, February 25th at 7:00 a.m. Today's advisory is sponsored by <u>Bridger Bowl</u> and <u>Alpine Orthopedics</u>. This advisory does not apply to operating ski areas.

Mountain Weather

At 6 a.m. the Bridger Range has received 24" of classic cold smoke powder since yesterday morning, while the rest of the advisory area got 2-3" of low density snow. Temperatures range from below zero to low teens F. Yesterday, wind shifted from an easterly direction to west-southwest at 5-15 mph. Today, wind will be westerly at 20-30 mph with temperatures in the single digits to low teens F. By tomorrow morning the mountains will get another 2-4" of low density snow.

Snowpack and Avalanche Discussion

Bridger Range

The prayers of Bridger skiers have been answered at once as the Bridger Range got dusted with 2 feet of cold smoke powder last night. This new snow equals 0.5" of **snow water equivalent** (SWE) which is a small addition of weight to a generally stable snowpack. Westerly winds will increase today, and wind of any speed will drift the fluffy new snow into slabs that are easy to trigger or could avalanche naturally. Wind slabs could grow more than 3-4 feet thick near ridgelines, and recently wind-loaded slopes should be avoided.

Loose snow avalanches are easy to trigger today and large enough to knock over or carry a skier. Warm and dry weather contributed to better stability prior to this weekend's return of winter, but the shallow snowpack likely harbors weak snow on some slopes where a larger avalanche could be triggered. Natural and human triggered avalanches are likely today. The avalanche danger is HIGH on wind loaded slopes and CONSIDERABLE on all other slopes.

Madison Range Gallatin Range Lionhead area near West Yellowstone

The mountains south of Bozeman to West Yellowstone got a couple inches of snow yesterday in addition to 10-20" over the last week. Strong southwest wind on Monday and Tuesday drifted snow into slabs that avalanched naturally at Lionhead (**photo**, **photo**, **video**). East winds prior to yesterday drifted snow into unusual places (**video**), and west-southwest wind last night drifted this snow back to more commonly loaded slopes. Stronger westerly wind today has plenty of snow available to drift into slabs that will be easy to trigger.

Layers of facets buried 1.5-3' deep exist from Big Sky to West Yellowstone and could produce larger avalanches. Karl and I looked for these layers yesterday at Bacon Rind. Our first snowpit did not reveal any instability or obvious weak layers, but a second pit 300' up slope surprised us with unstable test results on an obvious layer of facets over a crust (**snowpit**). These layers are worth digging for to assess before riding steep terrain.

Wind slabs are likely to trigger today and weak layers make larger avalanches possible. The avalanche danger is **CONSIDERABLE** on wind loaded slopes and **MODERATE** on non-wind loaded slopes.

Cooke City

The snowpack near Cooke City is 7-11' deep and does not have widespread weak layers. Instabilities are limited to new snow, and primarily wind slabs. Easterly wind prior to yesterday formed drifts in unusual places, and west wind yesterday drifted snow back to where slabs are more commonly found. Wind slabs are possible to trigger today and likely found on the leeward side of ridgelines and convex terrain. Avalanches deeper in the snowpack are unlikely, but not ruled out in isolated areas, possibly on steep, rocky slopes where the snowpack is shallow. The avalanche danger is **MODERATE** on wind loaded slopes and **LOW** elsewhere.

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 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 (**photo**).

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**).

Bozeman

March 1, 1-hr Avalanche Awareness, 6-7p.m., REI Bozeman.

March 4, Pinhead Classic, Proceeds to benefit Friends of GNFAC. More info here.