GNFAC Avalanche Advisory for Tue Feb 28, 2017

Good Morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Tuesday, February 28th at 7:00 a.m. Today's advisory is sponsored by the <u>Pinhead Classic</u> and <u>Gallatin Valley</u> <u>Snowmobile Association</u>. This advisory does not apply to operating ski areas.

Mountain Weather

The Bridger Range picked up 2" last night and a trace to 1" everywhere else. SNOTEL is not posting, so outside the ski areas snowfall amounts are an estimate. Under a mostly cloudy sky, temperatures are in the single digits and ridgetop winds are averaging 20 mph with gusts of 40 mph out of the W-SW. Today, snow showers will drop 2-3" in the mountains as winds shift more northerly and temperatures rise into the teens.

Snowpack and Avalanche Discussion

Bridger Range

Since Friday night the Bridger Range has gotten 4-6' of low-density snow measuring 1.5-2" of **snow water equivalent** (SWE). That equates to 3% powder, or 97% air. Although the weight is not a big burden the winds are blowing and drifting snow at *all elevations*, not just the ridgelines. On Saturday Eric was in the northern Bridger Range (**video**) and on Sunday Alex toured north of the ski area (**video**). Their videos outline our main stability concern: wind-loading. Skiers triggered avalanches on Saturday (**photo**, **photo**) and today there is no question that folks will likely trigger avalanches on the wind slabs that formed overnight. For today, the avalanche danger is rated **CONSIDERABLE** on all wind-loaded terrain and **MODERATE** on slopes sheltered from the wind.

Madison Range Gallatin Range Lionhead area near West Yellowstone

In the last 7 days the mountains south of Bozeman to West Yellowstone have gotten over a foot of snow (1-1.5" SWE), mostly in dribs and drabs. Yesterday, the Big Sky Ski Patrol was able to trigger a few wind slabs which will be the case in the backcountry today. Additionally, buried 1.5-3" under the surface is a weak layer of facets that is not easily distinguished in a snowpit wall, but reveals itself in stability tests. These facets are sitting on an ice crust around Bacon Rind and Hebgen Lake and were responsible for the avalanches a week ago at Lionhead. Digging and testing is the only way to know if this layer is present. Given our dual concerns of wind-loading and buried weak layers, avalanches are possible today and the danger is rated MODERATE on all slopes.

Cooke City

Like a heavyweight boxing champion, the snowpack in Cooke City has been tested in the ring by huge storms and emerges the victor, slightly bruised, but intact. The snowpack is over 9' deep and lacks weak layers. Our stability concerns are focused on the 2' of snow that fell in the last 10 days. West to southwest winds blew over the weekend and speeds increased to 30 mph last night forming new wind slabs. A fetch and snow mean avalanches are possible. For today, the avalanche danger is rated MODERATE on wind-loaded slopes and LOW on all others.

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

<u>Note:</u> Cornices have grown with recent snow and wind. These monsters hang far off ridgelines and can be easily broken free by simply skiing nearby. Give them a wide berth. Many skiers and climbers have been injured or killed when a cornice breaks underfoot.

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

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 (**photo**).

COOKE CITY

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

Bozeman

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

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