# **GNFAC** Avalanche Advisory for Thu Feb 16, 2017

Good Morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Thursday, February 16<sup>th</sup> at 6:45 a.m. Today's advisory is sponsored by **Bountiful Table** and **Katabatic Brewery**. This advisory does not apply to operating ski areas.

#### Mountain Weather

At 5 a.m. mountain temperatures range from the upper 20s to mid-30s F and winds are blowing 20-35 mph out of the W-SW. Today, a strong SW flow will keep conditions warm and windy. Highs will climb into the mid-30s to low 40s F and winds will continue to blow 25-35 mph out of the W-SW. There is a slight chance for valley rain and mountain snow in the mountains south of Bozeman. This storm is weak and unorganized and won't amount to much. There is a better chance of rain and snow tonight in the mountains around West Yellowstone and Cooke City. These areas could receive 1-2" of snow by tomorrow morning.

# Snowpack and Avalanche Discussion

**WET AVALANCHES:** Above freezing temperatures and the potential for rain will increase the <u>wet avalanche</u> <u>danger</u> on steeper slopes. Pinwheels and point releases are signs instability. If these signs are present, move to lower angle terrain or to shadier aspects.

# Cooke City

It has been five days since snow stopped falling around Cooke City. During this time, wind has been relatively calm and temperatures have been above average. This has allowed the snowpack to settle and adjust. As the snowpack gains strength, avalanches are becoming harder to trigger. It has been three days since the last reported avalanche (aerial photo, runout, crown).

This is a tricky and often dangerous time to push it in avalanche terrain. While many slopes are stable, some are not. I would be especially wary of previously wind-loaded slopes, most of which exist in alpine terrain. If you do commit to steeper slopes, dig a snowpit, make sure you have avalanche rescue gear, and only expose one rider at a time. Remember, if a slide is triggered in these conditions, it will likely be large and destructive. For today, the avalanche danger is rated **CONSIDERABLE** on slopes that were previously wind-loaded and **MODERATE** on all others.

### Madison Range Gallatin Range Lionhead area near West Yellowstone

The snowpack in the mountains near Big Sky and West Yellowstone, including the northern Gallatin Range (Hyalite) have a layer of facets buried 1.5 to 2' feet deep. On some slopes this layer is surface hoar while on others it's near surface facets. These weak layers are getting stronger, but avalanches last weekend near Big Sky, in Hyalite, and Tepee Basin as well as a partial burial in Taylor Fork are good reminders the snowpack has lingering instabilities (photo, photo, video).

In addition to buried weak layers, the wet snow avalanche danger will increase on mid and low elevation terrain as temperatures warm. Pay attention to signs of instabilities such as pin wheels and point releases. Also, if you step off your skies or sled and sink past your boot top in soft-slushy snow, it's a good idea to avoid steeper slopes.

Today, weak layers and wet snow make human triggered avalanches possible and the avalanche danger is rated **MODERATE**.

### Bridger Range

In the Bridger Range a lack of fresh snow, no wind-loading and above freezing temperatures has created generally safe avalanche conditions. Today's forecasted winds and cloudy skies will help keep wet avalanche activity to a minimum, at least during the morning hours. As temps rise throughout the day, the wet snow avalanche danger will also increase. If surface layers become soft and slushy, steep slopes should be avoided. Outside of the wet snow avalanche danger, the snowpack is generally stable.

Under these conditions, the avalanche danger will start out  $\underline{LOW}$  this morning, but rise to  $\underline{MODERATE}$  as temperatures warm.

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

<u>Taylor Fork, Sunlight Basin Avalanche</u>: On Sunday, a snowmobiler was partially buried in an avalanche that was triggered by another rider traversing above him (<u>photo</u>) as he filmed from the runout zone. A thick wind slab avalanched at the ground on depth hoar on a very steep (> 45°) northeast facing slope. The filmer dove for his sled and hung on as the avalanche hit. He was tumbled and his airbag deployed on its own (go figure). He was uninjured and lucky to be alive (<u>photo</u>). The person who triggered it rode to safety. The avalanche debris dumped onto flat terrain making 15' piles of hard slab debris. The rider held onto his camera and shared his **video**. Eric and I also made a **video** and took some pictures (**overview**, **debris**).

<u>Crazy Mountains Avalanche</u>: On Sunday, a snowmobiler triggered a large avalanche up Trespass Creek in the Crazy Mountains (photo). Luckily, no one was caught.

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 <a href="mailto:mtavalanche@gmail.com">mtavalanche@gmail.com</a> 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.

#### Bozeman

February 17-19, **Bozeman Split Fest**, rescue clinic/avy conditions talk on Friday. More info <a href="here">here</a>.

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