

## **GNFAC Avalanche Forecast for Sun Feb 5, 2017**

Good Morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Advisory issued on Sunday, February 5<sup>th</sup> at 7:15 a.m. Today's advisory is sponsored [Bridger Bowl](#) and [Spark R&D](#). This advisory does not apply to operating ski areas.

### Mountain Weather

Since yesterday morning the mountains near Big Sky and Bozeman got 1-2" of new snow, the mountains near West Yellowstone got 3-4", and Cooke City received 8-12". Wind has been out of the southwest at 20-25 mph with gusts up to 50 mph. Temperatures are in the low 20s F this morning and will be in the 20s to low 30s F today. Strong wind will continue out of the southwest at 25-35 mph today with mostly cloudy skies and light snow showers. Snow through tonight will favor the southern mountains with 6-8" near West Yellowstone and Cooke City by tomorrow morning, 2-4" in the mountains near Big Sky, and a trace to 1" near Bozeman.

### Snowpack and Avalanche Discussion

[Cooke City](#) [Southern Madison Range](#) [Southern Gallatin Range](#)

#### Lionhead area near West Yellowstone

The mountains near Cooke City got almost 1.5" of [snow water equivalent](#) (SWE) since yesterday morning, in addition to .8" of SWE Friday night. The mountains near West Yellowstone and south of Big Sky received 1-1.5" of SWE since Friday. Strong wind out of the southwest has formed wind slabs 2-3' thick near ridgelines and on convex terrain features. Snow and wind-loading will continue and these slabs are likely to fail naturally or be easily triggered by a skier or rider. Avoid wind loaded slopes today and give cornices a wide berth. Avalanches could run far into flat terrain and exposure to avalanche runout zones should be minimized.

Weak layers buried 1-3 feet deep could produce avalanches on steep slopes, whether wind loaded or not. Surface hoar has been found on some slopes near West Yellowstone and Cooke City. Skiers near Cooke City experienced collapsing and found unstable results on this layer yesterday. This layer is not widespread, which makes it difficult to assess. A layer of facets over an ice crust has been found on southerly facing slopes, and Doug found unstable results on this layer near Daisy Pass on Friday ([photo](#)). Careful snowpack evaluation is essential before riding any steep slopes.

The avalanche danger today is [HIGH](#) on wind loaded slopes and [CONSIDERABLE](#) on non-wind loaded slopes.

[Bridger Range](#) [Northern Madison Range](#) [Northern Gallatin Range](#)

In the mountains near Big Sky and Bozeman, strong wind out of the southwest has not had much recent new snow to transport. Wind slabs still formed near ridgelines and are possible to trigger by a skier or rider today. These slabs are likely small and not sensitive to triggers, but should be approached with caution. Small slides can be deadly above cliffs and trees. Assess the consequences of terrain before riding steep slopes.

Weak layers of surface hoar and facets buried about one foot deep could produce avalanches. Look for and assess these weak layers before committing to steep slopes, and monitor their distribution and behavior as more snow falls. On Friday, Eric and I found a thin layer of facets above an ice crust on a SE facing slope in Hyalite.

This layer did not propagate in stability tests, but we felt it could produce avalanches with a heavier load ([video](#)). Doug found Surface Hoar on Mt Ellis on Thursday ([video](#), [photo](#)) and skiers found it on Chestnut Mountain yesterday.

Wind slabs and weak layers make avalanches possible to trigger and the 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.

#### **BOZEMAN**

February 7, **Sidecountry and Avalanche Awareness**, 6-7:30 p.m., Beall Park.

February 8, **1-hr Avalanche Awareness**, 7-8 p.m., Roskie Hall, Montana State University.

February 10 and 11, **Companion Rescue Clinic**, REI and field day, more info and register [here](#).

#### **WEST YELLOWSTONE**

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

#### **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.