

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

Good Morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Advisory issued on Sunday, March 5<sup>th</sup> at 7:00 a.m. Today's advisory is sponsored by [World Boards](#) and [Buck Products](#). This advisory does not apply to operating ski areas.

### Mountain Weather

Flurries of snow yesterday piled up 1-2" in the Madison Range and a trace to 1" elsewhere. Wind overnight was south-southwest at 15-25 mph with gusts around 40 mph. Gusts reached 73 mph at Big Sky and 61 mph near Cooke City. Temperatures this morning are 20s to low 30s F. Temperature won't warm much before cold air moves in with temperatures in the teens F, possibly early this afternoon. Wind will remain south-southwest at 20-40 mph this morning, and shift west at 20-30 mph this evening. Skies will be mostly cloudy with scattered snow showers through tonight. The mountains will get 3-5" with up to 9" near West Yellowstone by morning.

### Snowpack and Avalanche Discussion

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

[Lionhead area near West Yellowstone](#) [Cooke City](#)

Strong wind and warm temperatures the last three days sculpted the snow surface to a different quality than last week's powder frenzy. Wind scouring, minimal snowfall, and a melt-freeze of the surface have promoted stability, but created variable riding conditions. Good skiing and riding is found on sun and wind sheltered slopes, but expect to encounter some challenging conditions. Wind and sun crusts can unexpectedly take control of a ski with slight change in a slopes exposure to sun or wind. Fortunately, these issues will change for the better this week.

Besides hazards of the variable snow surface, avalanches could be triggered on wind loaded slopes. Recent strong wind has scoured snow more than it formed drifts, and fresh wind slabs near ridgelines are small. However, larger wind drifts that formed earlier in the week are possible to trigger. A natural avalanche observed yesterday on a heavily wind loaded slope behind Saddle Peak is strong evidence to avoid obvious drifts and slopes below cornices. Cornices have grown monstrous over the course of the season and should be given a wide berth along the ridgelines and on slopes below. Outside of wind loaded slopes, the snowpack is mostly stable. On Friday, we found the weak layer buried 1.5-3' feet deep in the southern ranges is getting stronger ([video](#)).

Yesterday my partner and I skied the west side of the Bridger Range and were surprised by multiple large, rumbling collapses as we ascended a northwest facing slope ([video](#)). A prior pit at the top of our run revealed a relatively strong snowpack, and without avalanches on persistent weak layers in recent memory we felt comfortable skiing non-wind loaded slopes. After the multiple breath-taking "whumphs", a thorough re-assessment led us to believe we found instability isolated to this terrain, but not to be ignored. Last week's cold smoke powder settled into a dense 1.5' deep slab above an ice crust with weak snow below. This unstable structure is less likely outside of similar terrain, but is an example of a significant instability within a large region of mostly stable snow. Overall, this reinforced the importance of vigilant snowpack assessment and safe travel practices regardless of lowered avalanche danger.

Today, human triggered avalanches are possible on wind loaded slopes which have a [MODERATE](#) avalanche danger. Non-wind loaded slopes have a [LOW](#) avalanche danger.

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 ([photo](#)).

### **COOKE CITY**

Next weekend, March 10 and 11, **UYSC 21<sup>st</sup> Annual Hog Roast**, More info [here](#). Free avalanche rescue practice on Saturday.