

## **GNFAC Avalanche Forecast for Mon Dec 19, 2016**

Good Morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Advisory issued on Monday, December 19<sup>th</sup> at 6:45 a.m. Today's advisory is sponsored by [\*\*Yellowstone Arctic Yamaha and Yamaha Motor Corp\*\*](#) in partnership with the Friends of the Avalanche Center. This advisory does not apply to operating ski areas.

### Mountain Weather

The southern mountains received a trace to 1" of new snow over the past 24 hours, and the northern mountains did not receive any new snow. Temperatures this morning range from single digits below zero F near Cooke City to low teens above zero near Bozeman. Wind near Bozeman and Big Sky has been out of the west to northwest at 25-35 mph with gusts in the 40s. In the southern mountains, wind has been out of the west at 10-15 mph with gusts in the 20s. Today, temperatures will be in the teens to low 20s F. Wind will be out of the west-southwest with speeds increasing to 30-40 mph this afternoon. The mountains will receive 2-3" of snow by tomorrow morning with more during the day tomorrow.

### Snowpack and Avalanche Discussion

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

#### Lionhead area near West Yellowstone

Yesterday Doug and I went riding in Taylor Fork where we saw recent avalanches, and of course, got our sleds stuck once or twice ([photo](#)). The new snow was supportable, but without enough speed our sleds would break through the underlying weak sugary snow to the ground. This is a clear sign of a poor snowpack structure. We saw recent avalanches that broke on this weak snow ([photo](#)), and experienced cracking of fresh wind slabs ([photo](#)). If this isn't enough evidence of instability we also found unstable stability test results in the new snow and the facets near the ground.

Skiers near Cooke City reported similar observations to ours: Avalanches breaking in the new snow and on facets near the ground, collapsing and cracking, and unstable test results. See our [photo page](#) for a look at some of the avalanches. Yesterday a snowmobiler triggered a 2-5' deep avalanche north of Daisy Pass. He was able to pin the throttle and ride off the slab, then self-arrest on the bed surface while his sled took a ride.

A poor snowpack structure is still adjusting to recent heavy snowfall and wind-loading, and it won't be difficult to trigger a large avalanche today. Fresh wind slabs could also be triggered. Avoid steep and wind loaded slopes, and practice conservative decision making. Avalanche danger today is [\*\*CONSIDERABLE\*\*](#).

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

Strong winds continue to form fresh drifts that will be easy to trigger today. Wind slabs will be found on the leeward side of ridgelines as well as lower on slopes below cliff bands, convexities, or other zones of deceleration. Avoid these areas or travel cautiously near them.

Over the last week ski patrols triggered large avalanches that broke on weak facets near the ground ([photo](#), [photo](#), [photo](#)), and a few natural avalanches broke on this layer. Wind-loading will add weight to a poor

snowpack structure and fail to give the snowpack a reprieve from recent stress. Deep avalanches on persistent weak layers often occur after heavy wind-loading.

Avalanche danger today is **CONSIDERABLE** on wind loaded slopes and **MODERATE** on all other slopes.

Doug will issue the next advisory tomorrow morning at 7:30 a.m.

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## **Henderson Mountain Avalanche Fatality Report**

The report on the December 11 avalanche fatality outside Cooke City is complete. You can read it [HERE](#).

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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.

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## **Upcoming Events and Education**

### **COOKE CITY**

Every Friday and Saturday, **Weekly rescue training and snowpack update**, 6-7:30 p.m., location TBA.