

GNFAC Avalanche Advisory for Thu Feb 18, 2016

Good morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Advisory issued on Thursday, February 18, at 7:15 AM. Today's advisory is sponsored by the [Yellowstone Club Community Foundation](#) and [Beartooth Powder Guides](#). This advisory does not apply to operating ski areas.

Mountain Weather

The mountains have not received any new snow in the last 48 hours. Temperatures this morning are in the high 20s to low 30s F, and winds are out of the southwest at 15-30 mph with gusts exceeding 50 mph in Hyalite and Big Sky. Temperatures will be in the low 30s F this morning and cool to the low 20s F this afternoon. Wind will blow 30-40 mph out the west-southwest with stronger gusts this morning. Expect rain in the valleys this morning turning to snow at all elevations this afternoon. The southern mountains will receive 7-10" of snow and the northern mountains will receive 3-5" by tomorrow morning.

Snowpack and Avalanche Discussion

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

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

Strong winds this week scoured snow from windward slopes and deposited dense slabs of snow on leeward slopes. A lack of snow to continue growth of these wind slabs combined with warm temperatures makes them more difficult to trigger, but it remains a possibility ([photo](#)). Wind slabs and slabs of recent snow will be easier to trigger where they rest over buried weak layers.

Buried surface hoar has been observed in Cooke City and the Southern Madison Range ([photo](#)), and Doug found it near West Yellowstone last Sunday ([video](#)). Near Cooke City, skiers triggered an avalanche on this layer on Monday, and snowbikers triggered a few small slides yesterday ([photo](#), [photo](#)). Doug and I were riding near Taylor Fork yesterday and found a layer of facets, buried 6-8" deep, which was unstable in our tests ([video](#)). It doesn't matter what the crystal type is, these weak layers are shallow and easy to dig for, and it will be possible to trigger an avalanche on them today.

It is still possible to trigger an avalanche on depth hoar near the ground and facets buried 2-3 feet deep. Doug and I investigated an avalanche that failed on depth hoar, which was triggered by a snowmobiler last Sunday in the Taylor Fork ([video](#), [photo](#)). Avalanches on these layer have become harder to trigger, but this event shows they are still possible. Eric found these facets and had unstable results in stability tests last weekend in Beehive ([video](#)). Areas where it is more likely to trigger an avalanche on these deeper buried weak layers are where the snowpack is shallower, recently wind loaded, or the slab depth varies and shallow trigger points exist.

Today, buried weak layers make it possible to trigger an avalanche and the danger is rated [MODERATE](#).

I will issue the next advisory tomorrow morning by 7:30 a.m. If you have any snowpack or avalanche observations to share, drop us a line at mtavalanche@gmail.com or leave a message at 587-6984.

EVENTS and AVALANCHE EDUCATION

A complete calendar of classes can be found [HERE](#).

West Yellowstone: Saturday, February 20, 7-8 p.m., *1-hr Avalanche Awareness for Snowmobilers* at the Holiday Inn.

Bozeman: Wednesday, February 24, 6-7 p.m. *1-hr Avalanche Awareness*, Roskie Hall, MSU.