



[GNFAC Avalanche Advisory for Sun Jan 13, 2013](#)

Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Sunday, January 13 at 7:30 a.m. Today's advisory is sponsored by the **Northern Lights Trading Company** and **Lone Peak Brewery**. This advisory does not apply to operating ski areas.

Mountain Weather

Over the past 24 hours a trace to one inch of snow has fallen in the mountains. This morning temperatures are ten to fifteen below zero F and winds are light out of the NW blowing 5-10 mph. Today, high temperatures will be in the single digits above or below zero F under mostly cloudy skies and winds will stay light out of NW. A weak weather disturbance will bring light snow showers to the mountains where a trace to one inch is possible. A stronger system is forecasted to impact the area tomorrow night into Tuesday.

Snowpack and Avalanche Discussion

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

[Lionhead area near West Yellowstone](#)

Yesterday, Mark and I went to the Lionhead area near West Yellowstone expecting to find widespread signs of instability on the layer of facets that formed during the first week of January. After digging multiple snowpits and observing miles of avalanche terrain, it became apparent this layer gained strength and handled the most recent load surprisingly well. We did observe a few natural avalanches off the Lionhead Ridge that occurred due to wind loading, but these slides did not propagate far and stayed confined to small starting zones ([photo](#)).

However, the area we covered was only a small piece of real estate in a very large development. The Bottom Line: There is a known weak layer throughout this portion of our forecast area which now is now capped by a slab 12-14 inches thick ([photo](#)). I expect this layer is still capable of producing avalanches; primarily on wind load slopes or slopes steeper than 35 degrees. If you are heading into avalanche terrain pay close attention to signs of instability such as cracking and collapsing and thoroughly assess the snowpack before committing to steeper slopes.

Today, cautious route finding and conservative decision making are essential on wind loaded slopes and slopes steeper than 35 degrees which have a [CONSIDERABLE](#) avalanche danger. All other slopes have a [MODERATE](#) avalanche danger.

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

[Cooke City](#)

Today, the primary avalanche concern for the mountains around Bozeman and Big Sky is wind slabs. Periodic intervals of swirling and gusty winds have formed shallow but stiff slabs on isolated slopes. Yesterday, the Bridger Bowl Ski Patrol triggered wind slabs in mid-elevation terrain during control work. Skiers in the northern Gallatin and Northern Madison Ranges also found wind slabs to be the primary avalanche concern. The best bet today is to stay off steep slopes that are slabby and grabby move into areas that are softer and less wind affected.

There has been little avalanche activity in mountains around Cooke City. This can be attributed to the lack of widespread persistent weak layers. There are a few exceptions, especially in mid to lower elevation areas where the snowpack is thinner. Earlier in the week, a skier got unstable results during stability tests on a mid-elevation SE facing slope. This problem is not widespread, but something to consider when riding around creek beds or steep gullies. There is also the possibility a skier or rider could trigger a wind slab in upper elevation terrain.

Today, for the Mountains around Bozeman, Big Sky and Cooke City – The avalanche danger is rated **MODERATE**.

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

EDUCATION

Wednesday, January 16, 7:00 p.m. “The Sidecountry is Backcountry” at **MSU**’s Procrastinator Theater in Bozeman, a free 1-hour presentation.

Saturday, January 19, Rescue Clinic for Snowmobilers in **Cooke City** starting at Cooke City Motorsports. This 6 hour clinic teaches how to use avalanche rescue gear and perform an avalanche rescue. Registration is required. For more info and to sign up, visit: <https://www.ticketriver.com/event/4980-companion-rescue-clinic-for-snowmobilers>

Saturday, January 19, 6 -7 p.m., 1-hour Avalanche Awareness at the **Cooke City** Community Center.

Wednesday, Thursday, and Saturday, January 23, 24, and 26. MSU Introduction to Avalanches with Field Course. Wed and Thurs evenings and all day Saturday. For more information and to register, visit: <https://www.ticketriver.com/event/4970-introduction-to-avalanches-w--field-course>