

GNFAC Avalanche Forecast for Sun Jan 19, 2014

Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Sunday, January 19 at 7:30 a.m. [Alpine Orthopedics](#) and [Northern Lights Trading Company](#), sponsors today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

High pressure will remain parked over the region for the next few days making for spring like conditions. This morning temperatures are barely below freezing with the exception of the Lionhead area and Cooke City where temps are in the teens F. Wind increased over night and are blowing 10-25 mph out of the west with gusts in the 40s being recorded in the Bridger Range and Hyalite. Today, temperatures will warm into the upper 30s to low 40s F under mostly sunny skies. Winds will decrease through the day blowing 10-20 mph out of the west. Above average temperatures and a quiet weather pattern will remain in place for the next few days.

Snowpack and Avalanche Discussion

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

Lionhead area near West Yellowstone

Today there will be a variety of avalanche problems to contend with.

Persistent weak layers buried less than a meter deep can be found throughout the advisory area and are the primary concern. This problem is most prevalent in the mountains around West Yellowstone and Big Sky.

Yesterday, my partner and I toured up Yellow Mountain near Big Sky and found facets near the ground in every snowpit. Each one of our stability tests indicated this layer was capable of propagating a fracture ([photo](#), [video](#)). We kept our terrain choices conservative and did not ski slopes steeper than 35 degrees. The Big Sky Patrol also reported widespread natural activity on east through north facing slopes in the backcountry around the ski resort.

These weak layers can also be found in the Bridger Range, but have a slightly smaller distribution here due to consistent snowfall throughout December. A good example of an avalanche triggered on this layer was the slide in the Hourglass Chute in the Bridger Range on Friday ([photo](#)).

In some areas, weak layers are buried more than a meter deep creating the potential for deep slab avalanches. This problem mainly exists on east through north facing slopes that received heavy wind-loading during last week's wind event.

Deep slabs are often triggered from shallower areas of the snowpack - areas to look out for include steep rocky terrain and areas where the margins of the slab are thinner such as scoured ridgelines and rock outcroppings. Many of these slabs are hard and supportable and will allow skiers and riders to travel well onto them before they break. They may also be connected with cornices.

Today, the avalanche hazard is rated [CONSIDERABLE](#) on slopes steeper than 35 degrees that received a wind load earlier in the week. All other slopes have a [MODERATE](#) danger.

Cooke City

The primary avalanche concern in the Cooke City area is deep slab avalanches. On Friday a snowmobiler was fully buried four feet deep in a massive slide on Mt. Henderson outside of town. The slide broke over 10' deep and propagated over 500' wide ([photo](#), [photo](#)). The rider was uncovered in less than 10 minutes but required CPR upon recovery. Amazingly he recovered on site and was able to ride his snowmobile out. This is an incredible story of companion rescue - big props to his partners for acting quickly and saving his life.

These slides are becoming increasingly difficult to trigger but they still have the potential to create large and devastating avalanches. Impacting the weak layer that these slides are running on will be easiest where the slab is less than a meter deep - scoured ridgelines and thinner rocky terrain are two examples of prime areas to tickle the beast.

A few days without a new snow or wind loading may boost confidence and create a false sense of security. Remember – tracks on a slope do not indicate stability and riders should always be thinking about the consequences of an avalanche.

Today, the avalanche danger is rated **CONSIDERABLE** on slopes steeper than 35 degrees that have received a previous wind load. All other slopes have a **MODERATE** avalanche danger.

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.

MONTANA ALE WORKS FUNDRAISER DINNER, Wednesday, January 22

On Wednesday, January 22, Montana Ale Works is hosting the 6th Annual Fundraiser Dinner for the Friends of the Avalanche Center. Chef Roth is creating an elegant, multiple course menu. His culinary creation will be paired with wines from the Ale Works cellar. Seating is limited to 40. Get your tickets early.

<https://www.ticketriver.com/event/9572>

BACKCOUNTRY SKIERS AND RIDERS NEEDED FOR MSU SURVEY

This project aims to collect GPS location information and survey responses from backcountry skiers and riders to better understand what types of terrain decision we make. The focus is on backcountry skiers and riders of all abilities and experience. You need not be an expert backcountry skier to participate in this research. For more information and to sign up: www.montana.edu/snowscience/tracks

ANDROID APP

If you have an android phone or tablet, you can download our new free app. It's a slick way to get the advisory. [Search Google Play for GNFAC](#). An iOS version is coming soon. Stay tuned.

EVENTS/EDUCATION

January 18 & 19, BOZEMAN: Saturday, 12-4:30 p.m. Bozeman Public Library; Sunday, all day in the field, **Snowmobiler Introduction to Avalanches with Field Course**. Pre-registration is required:

<https://www.ticketriver.com/event/8565-bozeman--snowmo-intro-to-avalanches-w-field>

January 22,23 & 25, BOZEMAN: Wednesday and Thursday 7-9:30 p.m.; all day Sunday in field, **Introduction to Avalanches with Field Course**. Pre-registration is required: <https://www.ticketriver.com/event/7113>

January 25, WEST YELLOWSTONE: Saturday, 7-8 p.m. at Holiday Inn, **1-hour Avalanche Awareness** lecture.

More information our complete calendar of events can be found [**HERE**](#).