

## **GNFAC Avalanche Forecast for Sat Jan 18, 2014**

Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Saturday, January 18 at 7:30 a.m. **Montana FW&P Recreation Trails Grant**, in partnership with the **Friends of the Avalanche Center**, sponsors today's advisory. This advisory does not apply to operating ski areas.

### Mountain Weather

A ridge of high pressure parked over the region will deliver sunny skies and mild temperatures today. This morning temperatures are in the 20s F except for West Yellowstone where temps are in the teens F. Winds are blowing 10-20 mph out of the west with a few localized gusts reaching 30 mph. Today will be another beautiful day with highs climbing into the mid to upper 30s F under clear skies and winds will continue to blow 10-20 out of the west. No snow is expected over the next 24 hours.

### Snowpack and Avalanche Discussion

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

#### Lionhead area near West Yellowstone

Today, the primary avalanche concern will be a layer of facets about a foot off the ground. This layer has produced many natural and human triggered avalanches over the past few weeks. From Bozeman to Big Sky to West Yellowstone, this faceted layer is widespread.

There are two problems with this layer. (1) It is now buried 3-4 feet deep and avalanches that occur on this layer will be large and dangerous. (2) This layer is slowly gaining strength which is making snowpack assessment more complicated.

We found this out first hand on Thursday when we were surprised by an avalanche in the Dogleg chute north of Bridger Bowl. The slide was triggered by a cornice drop that impacted the weak layer where the slab was thinner. The weak layer propagated into deeper portions of the pack releasing nearly the entire season's snowpack. The scary part about this slide was there were old tracks going down the chute and all of our snowpits prior to the avalanche pointed to good stability ([video](#), [photos](#)). In the Bridger Range, assume this layer exists on all slopes until proven otherwise.

In areas around the Lionhead and southern Madison Range this layer is very weak and obvious on many slopes. Several avalanches have been triggered in these areas over the past week ([photo](#), [photo](#)). Similar conditions exist in the mountains around Big Sky.

Good places to find buried facets will be in steep, rocky terrain ([photo](#)). Slopes that have received a wind load will be especially prone to human triggered avalanches.

As the days tick by without a loading event, avalanches will become harder to trigger. This will boost confidence and create a false sense of security. Remember – tracks on a slope do not mean it's stable and always be thinking about the consequences of an avalanche.

For today, the avalanche danger is rated **CONSIDERABLE** on all wind-loaded slopes AND on all slopes steeper than 35 degrees. Lower angled slopes without a wind-load have a **MODERATE** danger.

## Cooke City

Yesterday, a snowmobiler was fully buried in a massive slide on Mt. Henderson outside of Cooke City. The slide occurred on a heavily wind loaded slope and failed on a layer of facets near the ground. The crown was upwards of ten feet deep and hundreds of feet wide.

The rider was buried up to four feet deep, but was dug out quickly by his partners and fortunately survived. Details are limited, but it certainly sounds like a very close call.

This type of event is not the norm in the mountains around Cooke City; however, it's poignant reminder of what's possible.

A more likely scenario will be a skier or rider triggering smaller avalanches in wind loaded terrain. Yesterday, a skier observed multiple natural slides in upper Goose Creek ([photo](#)). These slides were a few days old and occurred on east facing slopes that were heavily wind loaded.

Today – wind loaded slopes, specifically those in steep-rocky terrain will be the most likely to produce human triggered avalanches.

For this reason – The avalanche danger is rated **CONSIDERABLE** on all wind loaded slopes. Slopes without a wind load 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](mailto: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](http://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 GNFAAC](#). An iOS version is coming soon. Stay tuned.

## **EVENTS/EDUCATION**

TODAY, January 18, COOKE CITY: Saturday, 6-7 p.m., Community Center, **1-hour Avalanche Awareness** lecture.

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 22 & 23 &26, BILLINGS and COOKE CITY: Wednesday and Thursday 6-9 p.m.; all day Sunday in field, **Snowmobiler Introduction to Avalanches with Field Course**. Pre-registration is required: <https://www.ticketriver.com/event/9380>

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](#).