

[GNFAC Avalanche Forecast for Tue Jan 21, 2014](#)

Good morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Tuesday, January 21 at 7:30 a.m. **Montana Ale Works** sponsors today's advisory and is hosting [tomorrow night's fund raiser](#) for the Friends of the Avalanche Center. This advisory does not apply to operating ski areas.

Mountain Weather

Under clear skies mountain temperatures are in the low 20s with westerly winds blowing 20-30 mph. Today will be sunny and warm with temperatures reaching the mid-30s. Skies will become partly cloudy tonight and winds will increase ahead of a cold front pushing through on Wednesday. No snowfall is expected in the next 24 hours, but scattered snow showers may tease us tomorrow.

Snowpack and Avalanche Discussion

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

Lionhead area near West Yellowstone

No snow, no wind-loading and no natural avalanche activity. There's a correlation here: the weak facets at the ground are not getting stressed with a load which is giving the snowpack a rest. However, the sugary, weak facets are still there and they're still a problem. On steep, rocky, thinly covered slopes skiers and riders can still trigger avalanches. Mark and Eric found this north of Bridger Bowl in Dogleg Chute on Friday when a cornice drop released the gully below ([photo](#), [video](#)). On Sunday in the Lionhead area, a snowmobiler triggered a slide on a wind-loaded slope. It was estimated to be 150 feet wide and broke on facets near the ground ([photo](#)). Facets are on most slopes and will continue to be a headache for some time to come. Eric wisely explains the situation in this [video](#) he made Saturday on Yellow Mountain near Big Sky.

As backcountry users it's important to note that we are solidly in the realm of human triggering. Signs of instability are not obvious and stability test results are wobbly and unreliable...they are showing stable results when it's not with more frequency. Both skiers and snowmobilers are occasionally triggering slides. For today, the avalanche danger is rated **[MODERATE](#)**.

Cooke City

Cooke City has facets near the ground too, but in these mountains they are deeply buried under seven feet of snow. They are slowly getting crushed and are bonding to one another giving them strength. This is good news. But there's some bad news too: on slopes with thin snow cover facets are still large and weak and can be trigger points for large avalanches. A skier or snowmobiler will not trigger an avalanche riding over facets buried seven feet deep, but if those same facets are connected to a shallow area, then it becomes very possible. A group of six snowmobilers found this out on Friday when one rider triggered a slope. He was not caught, but unbelievably as the slope began to crack and buckle, another rider came over the ridge and inadvertently found himself on the breaking slab. He was fully buried, quickly dug up by his partners, given CPR and revived. Articles in today's [Bozeman Chronicle](#) and [Billings Gazette](#) outline the story. A [video](#) of the avalanche investigation and [4 photos](#) are on our website too.

We have a deep slab avalanche problem (see below). Facets under hard wind-slabs can break. It's getting harder to trigger slides, but when they release they will be deep and probably unsurvivable. Not everyone will be as

lucky as the rider on Friday. For today, the avalanche danger is rated [MODERATE](#).

DEEP SLAB INSTABILITY...an analogy

To help us understand deep slab problems, picture a football field. Now picture a cafeteria tray tossed onto the field. The field represents an open avalanche slope and the tray represents a weak zone (typically thinner snowpack), the only spot on the football field where you can trigger it. You can ride and ski to your hearts content on that field as long as you don't hit the tray, which is hidden like a buried mine. If you do, you'll trigger the entire slope. A snowmobiler on Friday hit the tray and released a large avalanche. Many slopes in our area have snowmobile and ski tracks on them. The tracks look inviting, yet beware the cafeteria tray. A skier can hit it just as easily as a snowmobiler and the result is the same...a deep and potentially unsurvivable avalanche.

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.

12 SEATS LEFT!!

MONTANA ALE WORKS FUNDRAISER DINNER, Wednesday, January 22

This 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. <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 22,23 & 25 or 26, BOZEMAN: Wednesday and Thursday 7-9:30 p.m.; all day Saturday or 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.

January 29, 30 & February 1, BOZEMAN : Wednesday and Thursday 7-9:30 p.m.; all day Saturday in field, **Advanced Avalanche Workshop with Field Course**. Pre-registration is required: <https://www.ticketriver.com/event/7114-asmsu-advanced-avlanche-workshop-w-field-course>

January 31, February 1, BOZEMAN: Friday 6-8 p.m., Saturday 10-2 p.m; **Companion Rescue Clinic**. Pre-registration is required: www.rei.com/stores/bozeman.html

February 6, BOZEMAN: Thursday, 6-8 p.m., Beall Park; **Women's Specific Avalanche Awareness Class and Transceiver Practice.**

February 8, BUCK RIDGE: Saturday, 10 a.m. to 4 p.m., **Companion Rescue Clinic for Snowmobilers**, Pre-Registration is required. <https://www.ticketriver.com/event/9446>

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

February 12, BOZEMAN: Wednesday, 6:30-7:30 p.m., MSU Procrastinator Theater, **Sidecountry IS Backcountry** lecture.

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