

## **GNFAC Avalanche Advisory for Mon Jan 20, 2014**

Good morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Monday, January 20 at 7:30 a.m. **The friends and family of Tyler Stetson** sponsor today's advisory. Tyler was killed in an avalanche in Beehive Basin on this day in 2008. This advisory does not apply to operating ski areas.

### Mountain Weather

If you are enjoying March-like weather in January, you'll love today: sunny skies and mountain temperatures in the thirties. Ridgetop winds are light at 15-20 mph out of the west and will remain so throughout the day. Wednesday looks to be wintry with snow and wind, but if you're actually enjoying this spring weather, don't despair; more sunny warmth is coming on Thursday.

### Snowpack and Avalanche Discussion

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

### Lionhead area near West Yellowstone

The snowpack has gotten a much needed breather. There has been no new snow in seven days and wind-loading is non-existent since everything that could be blown around already has. Natural avalanches and widespread signs of instability have diminished (i.e. cracking and collapsing). The likelihood of triggering an avalanche has also gone down; however, the trickiness of determining the stability of a specific slope has gone up.

Here is the problem: a persistent weak layer of facets near the ground can still propagate fractures and avalanche. Both skiers and snowmobilers can trigger slides on slopes that are steep, rocky and have a thinner snowpack. Mark and Eric found this first-hand on Friday in the Bridger Range when they triggered a slide near the Hourglass Chute in the Dogleg. ([photo](#), [video](#)). Eric found lots of facets in every snowpit on Yellow Mountain near Big Sky on Saturday ([photo](#), [video](#)) as did skiers in Beehive Basin yesterday. The mountains south of Big Sky to West Yellowstone are no better. With time weak facets are gaining strength, but like a repeat criminal offender, full rehabilitation might be wishful thinking.

As avalanches become increasingly difficult to trigger it becomes important to manage the terrain as best you can. Avoid steep, rocky and thin starting zones; a stability test showing propagation is a warning to stay off of steep slopes; only expose one person at a time to avalanche terrain. For today, the avalanche danger on all slopes is rated **MODERATE**. Strictly defined, this means it is possible for us to trigger avalanches although natural slides are unlikely.

### Cooke City

On Friday a snowmobiler triggered a deep slab avalanche. It broke 4-12 feet deep, 500 feet wide and ran 300 feet vertical. He survived, but used up every one of his nine lives. He was buried near the side edge of the avalanche, was dug up, revived with CPR (which is very, very rare) and rode back to town. I went to the site yesterday to investigate the avalanche and found facets underlying a hard wind slab. This specific problem is termed "deep slab instability" ([video](#), [4 photos](#)). These are hard to trigger, but if you do, pray you're as lucky as the guy on Friday.

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. The snowmobiler on Friday hit the tray and released a large avalanche. Around Cooke City many slopes 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.

For today, the avalanche danger is rated **MODERATE** on all slopes. But let's face it; it's a damn scary 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](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**

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-avalanche-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](http://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](#).

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