

## **GNFAC Avalanche Advisory for Thu Jan 23, 2014**

Good morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Thursday, January 23 at 7:30 a.m. **Montana Import Group** sponsors today's advisory which is dedicated to **Andrew Greicar** who was killed in an avalanche outside Cooke City eleven years ago yesterday. This advisory does not apply to operating ski areas.

### Mountain Weather

Yesterday's storm delivered only 1-3 inches of new snow with a little more falling south of Bozeman in Hyalite Canyon. With the snow came colder air and this morning temperatures were in the teens and single digits F. Winds were blowing all around the compass averaging 10 mph gusting to 15 mph. Sunny skies will return today. Winds may increase just a little and high temperatures should reach the mid to upper 20s F.

### Snowpack and Avalanche Discussion

Bridger Range Gallatin Range Madison Range

#### Lionhead area near West Yellowstone

Yesterday my partner and I toured in the Bridger Range in the trees low on Saddle Peak and the day before we were in the northern part of the range near Frazier Lake. The snowpack is generally 4-5 feet deep and dense. The main concern is a layer of facets about a foot above the ground. In many places, like meadows where we typically dig snowpits, this layer has gained a lot of strength and often does not break in stability tests. The problem is that it remains weak in many of the steep and rocky avalanche starting zones. This layer is slowly gaining strength, but I don't trust it much at the moment.

In other areas south of Bozeman, near Big Sky and near West Yellowstone, this layer remains weak on most slopes and also exists about a foot above the ground. The last reported avalanche on this layer was a snowmobile triggered slide on Lionhead on Sunday ([photo](#)). Without the stress of new snow or wind-blown snow during the last week, avalanches have gotten harder to trigger, and today's new snow and light winds shouldn't change the situation. For today, with a layer of weak facets lingering in the snowpack, triggering an avalanche is possible making the avalanche danger **MODERATE**.

#### Cooke City

The snowpack around Cooke City is deeper (averaging 6-7 feet) and stronger than any other area in our forecast region. It's possible to find slopes with weak facets near the ground like a group of riders found last Friday when they triggered a large slide that fully buried one of them ([photo](#), [video](#)). Fortunately his partners performed at text book rescue and saved his life. Another slide was triggered on Saturday on a slope that is a perfect example of where you'd expect to find a thinner snowpack containing weak facets near the ground ([photo](#)). Look closely at the photo and notice how the snowpack tapers to bare ground not far above the crown.

We can ride safely in avalanche terrain on many slopes near Cooke City. The scary part is the possibility of triggering a large, deep slab avalanche (read below), especially in places where the snowpack is relatively thinner. For this reason, it is important to watch your partners from a safe location and always be ready to perform a rescue even on slopes covered in tracks. 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](mailto:mtavalanche@gmail.com) or call us at 587-6984.

## **GVSA POKER RIDE on BUCK RIDGE**

This Saturday, the Gallatin Valley Snowmobile Association is having their annual Poker Ride on Buck Ridge. Dale Gullett will be teaching transceiver skills, so stop on by. Registration will be from 9 AM - noon at the Buck Ridge parking lot just south of the Corral Bar and Steakhouse on Highway 191 (5 miles South of Big Sky). Each hand costs \$5.00. The last draw will be held at the Corral at 4:00 PM. Chili and cornbread will be provided. If you have any questions, contact Wes at (406) 600-6063.

## **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 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](#).