

## **GNFAC Avalanche Advisory for Fri Dec 27, 2013**

Good morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Friday, December 27 at 7:30 a.m. **Grizzly Outfitters** in partnership with the **Friends of the Avalanche Center** sponsors today's advisory. This advisory does not apply to operating ski areas.

### Mountain Weather

If you like warm weather, today's your day. This morning near Bozeman temperatures were near 30 degrees F, near Big Sky in the 20s F, and near West Yellowstone and Cooke City in the teens F. Winds in most places were averaging 15 mph and gusting to 30 mph in a few different directions but mostly from the S and W. Today will have sunshine and temperatures in the 30s F with a few places like the Bridger Range possibly reaching 40 degrees F. Cold air and some snow will come from the NW on Saturday.

### Snowpack and Avalanche Discussion

Bridger Range Gallatin Range Madison Range

Lionhead area near West Yellowstone

Let's review the bull's eye information. There has been widespread avalanche activity. Browse photos [here](#). In many places there is a layer of weak facets about 1 foot above the ground on which many of these slides have been breaking. Slides have been observed in Beehive Basin and [Yellow Mountain](#) near Big Sky, the Bridger Range especially the west side, and throughout [Hyalite Canyon](#) including two naturally triggered avalanches that skiers on Mt Blackmore watched happen yesterday!

Yesterday, Doug and I investigated a skier triggered slide on Mt. Ellis just south of Bozeman that occurred on Christmas day ([video1](#), [video2](#), photos [1](#), [2](#), [3](#), [4](#)). One of the guys involved came with us to learn from his experience and we dug snowpits in the same locations where he and his partner had dug on the day of the avalanche. There were several lessons learned. (1) Mt Ellis would be a deadly place to get caught in an avalanche. (2) Snowpits and stability test results need to be put in a larger context. In a bad season with poor stability, don't believe stable results. Be a skeptic. (3) Make sure to cleanly isolate columns with a saw and/or knotted cord so that you get accurate results that show instability. Don't use tests to show stability.

I would not enter avalanche terrain today. In fact, given the structure of the snowpack, I will be avoiding avalanche terrain for weeks to come. However, we can carve powder all day long on slopes less than 30 degrees in steepness as long as they don't have a steeper slope above them. What about the warm weather, is that helping? NO. The only thing that can help is lots of time and more snow to bury these weak layers. For now warm temperatures as well as recent winds have turned the new snow into a more cohesive slab.

Today has dangerous avalanche conditions. Human triggered avalanches are likely, natural avalanches are possible, and the avalanche danger is rated [CONSIDERABLE](#).

Cooke City

Eric and his partner are riding and skiing near Cooke City where the snowpack also contains weak facets 1-2 feet above the ground. They did not see any recent avalanche activity yesterday, but their stability tests confirmed that these faceted snow crystals can fracture and produce an avalanche. Initiating a fracture on these facets is

slowly getting harder to do. The danger is dropping a little each day without new snow but not as quickly as we would like. For today the danger remains **CONSIDERABLE** on any slope steeper than 35 degrees OR any wind loaded slope. Slopes less than 35 degrees and lacking wind drifted snow have a **MODERATE** danger.

Eric 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.

## **EVENTS/EDUCATION**

January 4, BOZEMAN: Saturday, 10:30 a.m. at Bridger Bowl, **Free Avalanche Transceiver Workshop**, next to rental shop at Jim Bridger Lodge.

January 7, BILLINGS: Tuesday, 6:30-8:30 p.m. at High Mountain Recreation, **90-Minute Rescue Presentation**.

January 8, BOZEMAN: Wednesday, 6:30-8 p.m. at REI, **Sidecountry IS Backcountry** lecture.

January 9, BOZEMAN: Thursday, 6-7 p.m. at Mystery Ranch, **1-hour Avalanche Awareness** lecture.

January 9, HELENA: Thursday, 6:30-7:30 p.m. at Exploration Works, **1-hour Avalanche Awareness** lecture.

January 11, COOKE CITY: Saturday, 10 a.m. to 4 p.m., **Companion Rescue Clinic for Snowmobilers**, Pre-Registration is required. <https://www.ticketriver.com/event/9445>

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