

## **GNFAC Avalanche Advisory for Wed Dec 26, 2012**

Good morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Wednesday, December 26 at 7:30 a.m. Today's advisory is sponsored by Javaman and Onsite Management. This advisory does not apply to operating ski areas.

### Mountain Weather

At 6 a.m. it just started snowing around Big Sky with an inch falling. Mountain temperatures are 5-10F with southwest winds at 15-25 mph. The Bridger Range is calmer and warmer with 5-10 mph winds and temperatures in the teens. Today will be cloudy as temperatures rise into the upper teens with light to moderate southwest winds. Tonight winds will switch to the northwest, but speeds will not increase much. Scattered snow showers will drop 1-3 inches by morning.

### Snowpack and Avalanche Discussion

Bridger Range Madison Range Gallatin Range

Lionhead area near West Yellowstone Cooke City

Light winds have stopped fueling wind-drifts. Yesterday, ski patrols could trigger soft wind slabs with ski cuts, but they were not propagating far. I expect these drifts to be more stubborn today.

A lot of slopes in the backcountry have a stable snowpack ([photo](#)). Even with faceted grains near the ground, these slopes are not propagating fractures in stability tests. This fact alone is not enough to point to stability, but when these tests are performed multiple times on the same slopes over the course of weeks, coupled with loads of new snow followed by minimal avalanche activity, we begin to feel confident in our assessment.

Although many slopes are stable, some are not. The difference between the two is not obvious; however there are two things to look for. The first is that slopes thinner than three feet deep seem to be the weakest. Second, clean fractures in our stability tests signal unstable conditions ([photo](#), [video](#)). Finding just one unstable result is enough evidence to wave the white flag of surrender and stick to slopes less than 30 degrees.

Eric skied [Mount Ellis](#) in the northern Gallatin Range on Saturday and found two feet of weak, faceted snow, but without the overburden of a slab, its structure was not unstable. The variability of conditions are on full display in the Bridger Range where the Football Field of [Saddle Peak](#) and [Truman Gulch](#) had stable test results, but further north near [Frazier Basin](#) they were unstable ([snow pit](#)). This variability requires careful evaluation and is the reason today's avalanche danger is rated MODERATE on all slopes throughout our advisory area.

### NEW WEAK LAYERS FORMED

Last week's period of cold, sometimes clear weather, turned the top few inches of snow into weaker, small grained facets. These did not form everywhere, and to further complicate their distribution, strong winds on Friday scoured them from some slopes too. This layer is now capped by the recent snows. It is not deep enough to be a grave avalanche concern yet, but we'll be looking for it since these layers tend to persist.

Mark 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.

## ARTICLES

At the GNFAC we write articles for various publications: Carve, Montana Snowmobile Association Newsletter, The Avalanche Review. We also post these on our website, so if you are interested in reading more about avalanches check out [“Our Articles” on the “Education” page](#). Recent ones include:

- Temperature Induced Dry Snow Avalanches
- Why dig a Snowpit?
- Professional Secrets for a Quick Avalanche Rescue
- Time: The Deciding Factor

## EDUCATION

Friday, December 28, World Premier of “Snow Guardians” at 7:00 p.m. at the Emerson Cultural Center. More information here: <http://www.snowguardians.com/>

Thursday, January 3, 6:00 p.m., 1-hour Avalanche Awareness lecture at 406 Brewing Company, Bozeman.

Tuesday, January 8, 7:00 p.m., 1-hour Avalanche Awareness at Big Timber High School.

Wednesday, January 9, 6:30 p.m., 1-hour Avalanche Awareness at REI, Bozeman.

Saturday and Sunday, January 12 and 13, Snowmobiler Introduction to Avalanches with Field Course. For more information and to sign up: <https://www.ticketriver.com/event/4979-snowmobiler-introduction-to-avalanches-w-field>