

GNFAC Avalanche Advisory for Wed Jan 29, 2014

Good morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Wednesday, January 29 at 7:30 a.m. **Montana Ale Works** in partnership with the **Friends of the Avalanche Center**, sponsor today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

Knock, knock...a storm is approaching. Under cloudy skies a trace to one inch of snow has fallen in many mountain locations. The next 24 hours will be snowy and breezy. Currently mountain temperatures range from 10F in the southern areas to 20F in the north. Wind speeds are averaging 20-25 mph with gusts of 40 from the west to southwest. A moist Pacific storm is approaching from the west bringing slightly colder temperatures, steady westerly winds and much needed snowfall. By tomorrow morning I expect 8-12 inches and maybe a little more in our southern areas. Just to be safe, you might want to develop an illness today so you can call in sick tomorrow. Just saying...

Snowpack and Avalanche Discussion

Bridger Range Gallatin Range Madison Range

Lionhead area near West Yellowstone Cooke City

The avalanche danger will rise throughout the day as snow falls. Today's storm will bury a new weak layer formed at the old snow surface. Last week's couple inches of new snow metamorphosed into small-grained facets during the cold clear nights and warmer days. This process is called diurnal recrystallization ([article](#)). These facets will not bond to the new snowfall and could become reactive if it gets loaded today and tonight, especially in wind-loaded areas ([video](#)). This layer has been found in all our mountain ranges. I'm expecting a half to one inch of [water weight](#) falling which is not an enormous load, but enough to cause avalanches.

The snow structure is still suspect. There is plenty of weak faceted snow near the ground which will be stressed from the new snow load. This layer is weakest around Lionhead and gets slightly stronger towards Big Sky and around Bozeman. The mountains around Cooke City are the strongest, but even there folks have been able to trigger a few slides on steep, rocky, thinly covered slopes ([photo](#), [photo](#)).

If you find the new snow cracking as you ride or ski today, especially if those cracks shoot out yards ahead of you, it means the newly buried facets are dangerously close to avalanching and you should stick to lower-angled slopes. If the storm materializes as predicted the avalanche danger will worsen with new snow and wind. This morning the avalanche danger is starting out as [MODERATE](#), but will likely rise to [CONSIDERABLE](#) towards the end of the day.

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 or call us at 587-6984.

KING AND QUEEN OF THE RIDGE

Saturday, February 15th is the **12th Annual King and Queen of the Ridge Hike/Ski-a-thon** fundraiser to support avalanche education in southwest Montana. Collect pledges for one, two or the most ridge hikes you can do in the five hours of competition. 100% of the proceeds go to the Friends of Gallatin National Forest

Avalanche Center. Kids and families are encouraged to hike too! Hike as an Individual or Team. [Make a Pledge](#). [Sign Up](#). [More Info](#).

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

TONIGHT: 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

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.