

GNFAC Avalanche Forecast for Tue Feb 15, 2011

Good morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Tuesday, February 15, at 7:30 a.m. Gallatin County Search and Rescue in cooperation with the Friends of the Avalanche Center, sponsors today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

Yesterday was gorgeous with sunny skies, mountain temperatures in the mid thirties and westerly winds at 20-30 mph. Today will start out sunny, but clouds will roll in late this afternoon. Mountain temperatures will reach 40F in the mountains from the high 20s this morning. Winds increased overnight and are currently blowing west to southwest at 30 mph with gusts reaching 50 mph. Wind, warmth and sun will hopefully give way to cold, clouds and snow sometime tomorrow. The mountains could use a facelift.

Snowpack and Avalanche Discussion

The Bridger Range, The Madison and Gallatin Ranges, the Lionhead area near West Yellowstone, the mountains around Cooke City and the Washburn Range:

I am sad to report that a 22 year old male snowboarder died in an avalanche yesterday. He and his partner ascended Truman Gulch on the west side of the Bridger Range ([picture](#)). They stopped about 200 feet from the ridgetop, dug two snowpits and decided to stay on the northern edge of the large avalanche path at the head of the drainage since this side was not wind-loaded. The partner descended first. The victim came second and skied toward an adjacent gully to the north where he triggered a hard wind slab. The avalanche reportedly broke 2-3 feet deep, 40-50 feet wide and ran at least 700 feet down the steep gulley. The victim was located and probed by his partner. Bridger Bowl Ski Patrol assisted digging him out, but he did not survive. We will be investigating the avalanche site today and post a detailed accident investigation later in the week.

Hard slabs of wind deposited snow formed during the hurricane force winds on Saturday through Sunday morning. ([video](#)) There were many natural avalanches during this wind storm with many north to east aspects getting loaded at all elevations. These slabs of dense, chalky snow are on many slopes, but they are bonded and unmovable on a great percentage of these--but not all. Eric only found thin wind slab avalanches releasing in Lionhead, which was similar to what a skier saw outside Cooke City. It's imperative to test the exact slope you intend to descend. A hard slab in one gully may be stuck in place while an adjacent one will avalanche. With the slabs getting harder to trigger, the avalanche danger is decreasing. We are happy to see this, but without obvious signs of instability analyzing the slope is important.

Although wind-loading is our paramount concern, there are two lesser ones to keep in mind too. A layer of facets one to two feet under the surface is visible to the naked eye. This layer has strengthened and has not propagated a fracture in our stability tests lately, but it could still surprise us. The other concern is on thin snows less than four feet deep where the lower half of the pack is nothing but unbonded, sugary facets. Sinking to the ground with a simple step is a big clue to head elsewhere. I found this in one of my three pits near Taylor Fork in the southern Madison on Sunday ([snowpit profile](#)). Skiers touring in the southern Gallatin Range on Sunday experienced collapses on a thin snowpack too.

Wind-loaded slopes should be approached with caution since hard slab avalanches are a nasty beast. It's still possible to trigger slides and the avalanche danger is rated [MODERATE](#).

Wet Avalanche Danger

Mountain temperatures are expected to reach 40+ degrees today. The snow on sunny, south facing slopes will get moist at the surface. I expect wet point release avalanches on slopes getting direct, intense solar radiation today. Rock outcroppings absorb the heat and are prone to moisten the snow around them at a fast clip.

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 or call us at 587-6984.

3rd Annual Montana Ale Works Fundraiser

When & Where: March 1, Tuesday at 6:00 p.m. in the Railcar.

Cost: \$20 to benefit the Friends of the Avalanche Center

Details: Chef Roth at Montana Ale Works is creating tapas style servings that will be paired with select beer from Lone Peak Brewery. More information [HERE](#).

Upcoming Education

Saturday, February 19, West Yellowstone

The Friends of the Avalanche Center will offer a FREE Basic Avalanche Awareness Workshop at the Holiday Inn in West Yellowstone, MT. 7-8 p.m. (next to the bar) Topics include: terrain, mountain weather, snowpack, rescue procedures, and recent avalanches in local riding areas.