

GNFAC Avalanche Advisory for Tue Dec 7, 2010

Good Morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Tuesday, December 7, at 7:30 a.m. **Team Bozeman**, in cooperation with the **Friends of the Avalanche Center**, sponsor today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

Late yesterday, a brief snow shower dropped 1-2 inches from West Yellowstone to Big Sky with Cooke City getting a trace to 1 inch. In the past 24 hours mountain temperatures remained in the high teens to low 20s with light westerly winds at 5-10 mph. Today will be mostly sunny and calm with temperatures reaching the mid 20s. This high pressure system will begin to break down tonight with increasing clouds and moderate southwest winds, although no precipitation is expected until tomorrow.

Snowpack and Avalanche Discussion

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

I spent the last two days in the mountains around Cooke City and found mostly stable snow. It was sunny, calm and warm; perfect pit digging weather. My partner and I shoveled on six slopes and could not find any persistent weakness. At the higher elevations, most notable on northerly facing slopes, we could find densely packed sugary facets near the ground but they were not breaking consistently in our tests. After touring around I concluded that triggering a small avalanche on steeper, thinner areas of a slope is not out of the question. On Friday, Eric visited the northern Bridger Range and left with similar stability concerns ([photo](#)). We both agree that these represent isolated areas. Over the last three days a few point release avalanches were noted in the Bridgers and northern Gallatins ([photo](#)) along with older, isolated wind slabs breaking at ridge lines ([photo](#)). Yesterday, Eric skied Hyalite Peak under calm, sunny skies and found four to five feet of stable snow in his pits.

The weekend was busy in the backcountry and people sent in their observations and pit data from the Bridgers, Blackmore, Hyalite, Big Sky, Portal Creek, Dudley Creek and Bacon Rind. All this data helps create a body of evidence that supports our conclusion that the snowpack has generally good stability. Without new snow or wind loading, plus very little avalanche activity, for today, the avalanche danger is rated **MODERATE** on slopes steeper than 35 degrees and **LOW** elsewhere.

But wait, there's more.

Surface hoar and facets formed on almost all aspects and elevations of our advisory area (see multiple photos [here](#)). From Big Sky to West Yellowstone (and possibly Cooke City) it just got preserved under 1-2 inches of snow. Surface hoar is a persistent weak layer and as it gets loaded I expect to see avalanches. There's a race in the northern areas to see if it'll survive long enough to be buried; sun and warmer temperatures could destroy it today. Around Cooke City, besides an ocean of surface hoar, I found a rarer surface weakness formed from radiation recrystallization ([video](#)). Regardless of the type of facets formed, the avalanche danger could rise rapidly throughout southwest Montana with more snow.

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.

Upcoming Avalanche Education

1hr Avalanche Awareness - Tue, December 7, 6:30pm – 7:30pm @ REI Bozeman

Join Lucas Zukiewicz from the Montana Snow Survey for a FREE presentation/discussion on the SNOTEL system in SW Montana. The discussion will cover how to access SNOTEL information and interpret the data for snow and weather conditions. Sat, December 11, 7:30pm – 8:30pm at World Boards.

Other News

This year REI has chosen Friends of GNFAC as their charity of choice. By making a donation through REI you can help The Friends continue to support the Avalanche Center and promote avalanche education throughout southwest MT.