

GNFAC Avalanche Advisory for Sat Dec 1, 2012

Good morning. This is Doug Chabot with early season snowpack information issued on Saturday, December 1 at 7:30 a.m. Today's information is sponsored by The Outlaw Partners in partnership with the Friends of the Avalanche Center. Please remember that uphill traffic is not allowed at Moonlight Basin ski area. It is permitted at Bridger Bowl, but backcountry conditions exist within the ski area boundaries. This information will be updated tomorrow morning.

Mountain Weather

Since yesterday morning the southern mountains got 8-12 inches of dense new snow. The Bridger Range picked up four inches, Big Sky received one to two inches and the northern Gallatin Range got a dusting. Ridgetop winds are west to southwest at 20-30 mph, but gusting to 40 mph outside Cooke City. Mountain temperatures are in the mid to high 20s. More snow is on track for later this afternoon with another storm due Sunday. By morning the mountains will see 2-4 inches of new snow in the north and 4-6 inches in the south.

Snowpack and Avalanche Discussion

The line between snow and rain was a moving target, but above 7,500 feet snowfall was the primary precipitation type. The snow water equivalent (SWE) was substantial even if the snowfall amounts were not. One inch of SWE fell in the Bridger and southern Madison Ranges including the area around Cooke City. West Yellowstone got close to 2 inches of SWE in some areas. Even though this snow is dense, the ridgetop winds will have no problem blowing it around creating wind drifts.

The weakest snow we've found is in the northern Madison Range near Big Sky. Eric took a tour up Beehive and found a snowpack one to two feet deep with the facets developing in the lower 2/3. His [snowpit](#) reveals the weakness, especially when compared to the relatively sturdy snow structure Mark found outside Cooke City ([snowpit](#), [photo](#)). However, the Big Sky region did not get much snow, so the stability remains good. All of us toured north of Bridger Bowl on Thursday where we dug a couple of pits. We found a few layers of facets, but they were not very reactive in our stability tests ([photo](#)).

The new storm snow is our primary avalanche concern today. It fell onto a relatively strong snow pack in most areas, but on many slopes the old snow surface had a thin layer of faceted snow that formed during the clear weather. This new/old snow interface is where you should put your snow assessment energies since this is where avalanches will likely break. Wind-loading will make our concern more acute. Mark outlines our concerns well in a [video from Cooke City](#). His message is applicable throughout our forecast area.

The season is young and we are visiting many areas for the first time. We spend a lot of time digging snowpits to paint a picture of snow structure and stability. I recommend the same for everyone else headed into the backcountry. Dig, look, test.

Eric will issue the next advisory tomorrow morning at 7:30 a.m. We will begin issuing daily advisories and avalanche danger ratings soon. If you have any snowpack or avalanche observations to share, drop us a line at mtavalanche@gmail.com or call us at 587-6984. Thank you.

EDUCATION

Snowmobiler Introduction to Avalanches at Greenup Performance in Black Eagle near Great Falls, MT, 9 a.m. to 2 p.m. FREE.

Snowmobiler Introduction to Avalanches with Field Course in Billings at Hi-Tech Motor Sports on December 12 and 13, 6-9 p.m. and the field course on January 20 in Cooke City. Sign up for this class [HERE](#)

Snowmobiler Introduction to Avalanches with Field Course in West Yellowstone on December 20 and 21. Sign up for this class [HERE](#).

FREE 1 hour lectures:

December 3, Northern Lights Trading Company, Bozeman, 7 p.m.

December 12, REI in Bozeman, 6:30 p.m.