

GNFAC Avalanche Advisory for Wed Dec 5, 2012

Good morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Wednesday, December 5 at 7:30 a.m. Today's advisory is sponsored by Grizzly Outfitters in partnership with the Friends of the Avalanche Center. Bridger Bowl opens Friday and is conducting avalanche control, so be careful traveling inside the ski area boundaries. Our next advisory will be issued tomorrow morning.

Mountain Weather

Unseasonably warm temperatures reached the mid-thirties at 8,000 feet. The new snow was on the cusp of being rain. The southern mountains picked up .7 to 1 inch of [Snow Water Equivalency \(SWE\)](#) which measured 3-6 inches of new snow. Around Bozeman .2-.3 inches of SWE fell measuring only a trace of snow while the Big Sky area got two inches. Winds are averaging 15-25 mph out of the west to southwest with gusts of 40 mph. Later this afternoon, temperatures will drop into the low 20s with gusty winds and 2-3 inches of snow falling in the southern mountains.

Snowpack and Avalanche Discussion

[Southern Madison Range](#) [Southern Gallatin Range](#) [Cooke City](#)

[Lionhead area near West Yellowstone](#)

It has snowed six of the last seven days in the southern mountains. [SNOTEL](#) sites are showing four inches of SWE during this time, an impressive amount of weight. If the temperatures were colder instead of hovering around freezing, this would have translated into 4-5 feet of powder snow instead of a soggy two feet. The southern mountains lack a widespread weak layer; however, the amount of snow water that fell is enough to be a problem. Lots of new snow, especially with winds building cornices and meaty drifts, will create unstable conditions.

For today, the avalanche danger is rated [CONSIDERABLE](#) on all wind-loaded terrain. All other slopes will have a [MODERATE](#) avalanche danger.

[Bridger Range](#) [Northern Madison Range](#) [Northern Gallatin Range](#)

The storms over the last week have mostly glanced the northern mountains: SWE totals are .6 inches up Hyalite, one inch around Big Sky and two inches in the Bridger Range. Most areas have a snowpack 1 ½ to 2 feet deep. Weaker snow (sugary facets) can be found at the ground on a few upper elevation, northerly facing slopes. On Sunday a snowmobiler remotely triggered a 700-foot wide avalanche south of Big Sky on Buck Ridge on this layer ([video](#), [pictures](#), [snowpit](#)). Avalanches are all about timing, and the timing was perfect—immediately on the heels of a snowstorm that heavily wind-loaded this ridge. Yesterday, Moonlight Basin Ski Patrol did their first avalanche control on similar high elevation, north-facing slopes. This was a chance to test a backcountry snowpack with explosives. Their results: avalanches were releasing only 10 inches deep instead of breaking at the ground. This is evidence that facets are strengthening and losing their ability to propagate. Further north at Bridger Bowl the ski patrol did not get deep avalanches either, but a few patrollers got a scare when suburban-sized cornices broke away from the ridge much closer than they anticipated. Cornices are great triggers for avalanches, but also pose serious physical danger to backcountry travelers when they unexpectedly break.

It's still possible to trigger avalanches in wind-loaded terrain, thus, for today, the avalanche danger is rated [MODERATE](#). On slopes without a wind-load, the danger is rated [LOW](#).

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. Thank you.

[EDUCATION](#)

Snowmobiler Introduction to Avalanches at Greenup Performance in Black Eagle near Great Falls, MT, December 8, 9 a.m. to 2 p.m. FREE. No sign up required!

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