

GNFAC Avalanche Forecast for Fri Mar 11, 2011

Good morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Friday, March 11, at 7:30 a.m. Montana Import Group, in cooperation with the Friends of the Avalanche Center, sponsors today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

Last night's powerful storm delivered more strong winds, snowfall, and some lightning. 7 inches of snow fell near Cooke City and West Yellowstone, 4-5 inches in the Gallatin and Madison Ranges, and 2 inches in the Bridger Range. Yesterday S and SW winds blew 30-40 mph with gust of 70-80 mph. As snowfall started around 9pm, temperatures were near freezing and winds shifted to the W at similar speeds. This morning W winds were blowing 20-40 mph and temperatures had dropped into the teens.

Today, temperatures will rise into the mid 20s F and W winds slowly decrease to 10-20 mph. Skies should have a mix of sun and clouds, and a trace of snow may fall in the southern half of the advisory area. More snowfall should come Saturday evening.

Snowpack and Avalanche Discussion

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

The last 24 hours of weather will control today's avalanche issues which involve wind and new snow. This problem is easy to manage by watching for fresh deposits of wind-blown snow. Avoid these drifts and pillows, and you can mostly avoid avalanches. Yesterday, the Moonlight Basin Ski Patrol observed two small avalanches on wind loaded slopes, one natural and one skier triggered. More snow and wind overnight means similar slopes should see more avalanches today. With some lightning and hail reported last night, I suspect there may be some graupel under the new snow. These pellet-shaped snow particles can act as a temporary weak layer that should gain significant strength as early as this afternoon, but could be sensitive this morning.

The good news: On most slopes the snowpack is very strong and avalanches breaking in deeper layers of the snowpack are unlikely. Yesterday while riding near Lionhead, Doug and I felt very comfortable climbing and sidehilling across big slopes where we found a dense and supportable snowpack. Also, last night's storm started warm and finished cold, a "right-side up" storm.

Unfortunately 5-7 inches of new snow and strong winds mean human triggered avalanches are likely on steep, wind loaded slopes. Today the avalanche danger is [CONSIDERABLE](#) on wind loaded slopes > 35 degrees and [MODERATE](#) on all other slopes.

The Bridger Range:

The Bridger Range experienced similar weather as other areas but only received 2 inches of new snow. With less snow – less avalanches. Today the avalanche danger is [MODERATE](#) on wind loaded slopes > 35 degrees and [LOW](#) on all other slopes.

Heads up: Cornices have grown very large in recent weeks. These monster blocks of snow now severely overhang ridges. It's hard to know when or where they will break, but these tumbling blocks of dense snow are a

hazard by themselves. Approach them with caution whether walking on a ridge or skiing or riding beneath them. Additionally, falling cornices make great triggers for avalanches.

Eric 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.

“How To” Video Tutorials

We created three videos on the [Stability Tests](#) page describing how to perform a Compression Test, an Extended Column Test, and how to choose a snowpit location.