

GNFAC Avalanche Forecast for Fri Apr 15, 2016

Good evening. This is Alex Marienthal with late season snowpack information issued on Friday, April 15th at 8:00 p.m. This information does not apply to operating ski areas. Bridger Bowl is closed for the season and backcountry conditions exist.

Mountain Weather

Over the past 24 hours heavy snow has impacted the mountains. By 2 p.m. on Friday the Bridger Range picked up 18" of new snow while the mountains near Big Sky received over a foot. The mountains near Cooke City and West Yellowstone received 6-8 inches. The northern ranges could see an additional 3-6 inches before the storm is over. The southern mountains could see another 1-3 inches. Winds are 15-25 mph out of the W-NW and temperatures are in the 20s F. Tonight, snow will taper off and temperatures will drop into the mid-teens to low 20s F. Winds will shift to the N-NE. Tomorrow will be dry and temps will warm into the 40s F under partly cloudy skies. Winds will remain light to moderate out of the N-NE.

Snowpack and Avalanche Discussion

Bridger Range Madison Range Gallatin Range

Lionhead area near West Yellowstone Cooke City

The primary avalanche concern is new snow instabilities. Wind slabs, storm slabs, and loose snow avalanches are all likely this weekend. Skiers at Bridger Bowl on Friday triggered many dense, soft slab avalanches that were failing 8-16" deep within the storm snow ([photo](#), [photo](#), [photo](#)). These slides were large enough to carry or potentially bury a skier or rider, and some ran long distances over cliffs and through trees. Slabs could be 2-3 feet thick on wind loaded slopes. Human triggered avalanches are likely on wind loaded slopes, slopes steeper than 35 degrees and slopes with convexities. Travel on lower angle, non-wind loaded and planar slopes. These instabilities need at least one more day to adjust.

This afternoon I measured nearly 3" of SWE in 18" of snow at Bridger. That's an enormous load for any snowpack to withstand. Temperatures dropped below freezing during the storm, and there is a supportable 2-3" melt freeze crust below the new snow ([photo](#)). However, this crust will have a difficult time supporting such a heavy load. The lower snowpack is wet and weak, and depth hoar at the ground still exists on many slopes. Avalanches could fail at or near the ground. These conditions are similar to those that produced a large wet slab avalanche cycle at Bridger Bowl in the spring of 2012 ([photo](#)).

Wet avalanches will become more of a problem as early as Saturday afternoon, and will become the primary concern during warm temperatures later this weekend and early next week. Wet loose avalanches are likely when the new snow warms up, and could be very large. Wet slab avalanches are also possible when the new snow becomes wet, and when the crust below the new snow melts and becomes unsupportable. This could happen quickly, and wet slab avalanches could fail at the ground similar to early last week ([photo](#), [photo](#), [photo](#)).

This weekend will be a dangerous time to ski or ride in avalanche terrain. Slides have the potential to be large and dangerous. Cautious route finding and conservative decision making will be essential for safe backcountry travel. Other people may be travelling on slopes adjacent or below you. Be courteous and aware of your surroundings.

We will update this bulletin as conditions change. If you have any snowpack or avalanche observations to share, drop us a line at mtavalanche@gmail.com or leave a message at 587-6984.