

GNFAC Avalanche Forecast for Thu Mar 31, 2011

Good morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Thursday, March 31, at 7:30 a.m. **Alpine Orthopedics**, in cooperation with the **Friends of the Avalanche Center**, sponsors today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

The current weather pattern continues to deliver warm temperatures, rain, and snow. Since yesterday morning Bridger Bowl and Big Sky received an additional 2-3 inches of snow. In many places with temperatures near or above freezing, it's difficult to tell how much precipitation fell as rain and how much fell as snow. Hyalite Canyon and the Taylor Fork area received 0.5 inches of water which should be 5 inches of snow above treeline. The mountains near Cooke City received 0.9 inches of water or 9 inches of snow above treeline. Freezing levels have been between 8000 and 9000 feet.

Yesterday westerly ridgetop winds blew 30-50 mph. They decreased to 20-40 mph this morning with temperatures hovering near 32 F. Winds will remain strong today and temperatures will rise into the upper 30s and low 40s F. More snow and rain will fall though the current storm is ending. Spring storms are somewhat unpredictable, but most areas should receive an additional 1-3 inches of snow today while Cooke City should get 4-5 inches.

Snowpack and Avalanche Discussion

The Bridger Range:

What separates the Bridger Range from other areas is precipitation. Since Sunday, about 3 inches of **SWE** (the amount of water you would get if the snow melted) has fallen. The 2 week total is over 5 inches of **SWE**, a very heavy load. The Bridger Bowl Ski Patrol reported rapid cornice growth from this snow and yesterday's strong winds. Another natural avalanche, about 5-6 feet deep, was reported on Sacajawea in the northern Bridger Range. Large avalanches breaking deep in the snowpack are a low probability/high consequence situation. It will be difficult to trigger one, but if you do, it will be deadly. Recent snow, strong winds, and a large recent avalanche are warning signs not to be ignored for today.

Prior to this storm cornices were already massive. Rapid growth and warm temperatures may push these monsters to their breaking point. Although large avalanches are possible the primary concerns are fresh wind slabs and large cornices near ridgetops. Today the avalanche danger is rated **CONSIDERABLE**.

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

Most other areas received 1-1.5 inches of **SWE** since Sunday. Deeper layers in the snowpack should support this load. The primary avalanche concerns exist within the storm snow. New snow, wet snow, rain and strong winds concern me and could create weird conditions. On many slopes warm temperatures may help the new snow bond quickly but don't trust it too much. The Moonlight Basin Ski Patrol reported a noticeable lack of obvious warning signs like cracking even though they were able to trigger new snow avalanches with ski cuts. Cornices are also a major concern. They have likely experienced rapid growth and should be near their breaking point today.

For today, the avalanche danger is rated **CONSIDERABLE** on all wind loaded slopes. With weird weather conditions today, non wind loaded slopes deserve a careful evaluation and have a **MODERATE** avalanche danger.

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.

Ride in honor of Steve Green

This Saturday, April 2nd, is a memorial ride on Buck Creek Ridge in honor of Steve Green who died in an avalanche last April in McAtee Basin. Meet at 9:30 a.m. at the Buck Creek parking lot near the Corral. Click [HERE](#) for more information.

Last Advisory

The last avalanche advisory of the winter is Sunday, April 10th. That will be our 145th advisory of the season—more than any other in our 21 year history.