

## **GNFAC Avalanche Forecast for Tue Apr 5, 2011**

Good morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Tuesday, April 5, at 7:30 a.m. Big Sky Ski Patrol, in cooperation with the Friends of the Avalanche Center, sponsors today's advisory. This advisory does not apply to operating ski areas.

### Mountain Weather

In the past 24 hours the mountains outside Cooke City picked up 10 inches of new snow while West Yellowstone got 6 inches. The snow tapered off to the north as 2-4 inches fell around Big Sky, an inch in the northern Gallatin, and nada in the Bridger Range. Temperatures are in the high 20s, their warmest in 24 hours. West to southwest winds were strong yesterday and remain so with speeds averaging 30 mph and gusting to 50 mph. By this afternoon winds will decrease to 20-30 mph and the freezing level will drop to 5,000 feet. By this evening the southern mountains will get another 6-8 inches of snow with 2-3 inches around Big Sky and 1-2 inches near Bozeman.

### Snowpack and Avalanche Discussion

#### The Bridger, northern Gallatin and northern Madison Ranges:

Snowfall since Saturday has totaled 7- 10 inches in the northern mountains. Most of this fell onto a frozen snow surface. Yesterday's winds and additional snowfall added to the size of cornices and loaded pillows under the ridgelines. Most wind-loaded slopes around Big Sky required explosives to loosen the snow, but the Moonlight Basin Ski Patrol were able to release two foot thick wind slabs with ski cuts on steep terrain. Wind-loaded slopes are my primary avalanche concern today.

The last three weeks have been stormy with the mountains getting close to five feet of dense snowfall (4-6" of SWE). This is a lot of weight and a great test of snow strength. Other than a few deep and impressive avalanches around Sacajewea last week, activity has been limited to new snow. Our ski tours in the Bridger Range and Eric's brave trip to Mt Ellis on variable, yet stable snow ([snowpit](#)), confirms the current avalanche danger is limited to the most recent snowfalls. For today, the avalanche danger is rated [MODERATE](#) on all wind-loaded terrain and [LOW](#) elsewhere.

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

Someone forgot to tell Cooke City that winter is over. Ten inches of new snow with strong winds is the avalanche story in a nutshell. The same goes for West Yellowstone and the mountains south of Big Sky; new snow + wind = avalanche activity. Mark found a few sizeable slides riding around Lionhead on Friday ([photos](#)). Since then, new snow and strong winds have increased the avalanche danger. Yesterday, my partner and I skied Bacon Rind in the southern Madison Range. At 7,800 feet on a southeast facing slope the snowpack was moist to the ground while up higher at 9,000 feet the pack was dry ([snowpits](#)). Regardless, most aspects were capped with a thick, supportable ice crust with no significant buried weak layers. Wind loaded slopes will be the most susceptible to avalanching today. I expect drifts to be 2-3 feet thick and will likely run long distances given the hard, icy bed surface on many aspects. For today, the avalanche danger is rated [CONSIDERABLE](#) on all wind-loaded slopes and [MODERATE](#) on all others.

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](mailto:mtavalanche@gmail.com) or call us at 587-6984.

#### Last Advisory

The last avalanche advisory of the winter is this Sunday, April 10<sup>th</sup>.