

## **GNFAC Avalanche Advisory for Fri Apr 9, 2010**

Good Morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Friday, April 9, 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. Bridger Bowl is now closed for the season and backcountry conditions exist.

### Mountain Weather

Over the past 24 hours a powerful low pressure system has brought a few inches of new snow the northern ranges of our advisory area as well as Cook City, but most notably has delivered the strongest winds we have seen all season. Yesterday, winds were blowing consistently at 25-50 mph out of the S-SW with gusts up to 96 mph being recorded at the Yellowstone Club. These intense winds have gradually decreased overnight and are now blowing at 10-30 mph out of the S-SW.

Currently, skies are mostly clear and mountain temperatures are in the single digits to low teens. Today, temperatures will remain slightly below average with highs reaching into the low forties F and winds will remain steady out of the S-SW at 10-30 mph under mostly clear skies.

### Snowpack and Avalanche Discussion

#### **Wet Snow Avalanche Danger**

This morning's cold temperatures and strong winds today should limit significant warming and wet snow avalanche activity. However, intense solar radiation this time of year can drastically change snow conditions in a matter of hours. With new snow and sunshine, the wet snow avalanche danger could rise to **MODERATE** this afternoon on all slopes with direct exposure to the sun.

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

We aren't in Kansas anymore. This thought consistently entered my mind yesterday as we battled our way into Beehive Basin against gale force winds, which was similar to hiking in the rotor wash of a helicopter taking off ten feet away. These intense winds were blowing out of the S-SW, transporting large amounts of snow and increasing the avalanche hazard on N-NE facing slopes ([video](#)). The most rapid loading was occurring near ridgelines where the potential for triggering a wind slab avalanche will be the most likely.

Areas of wind drifted snow are now adding additional stress to buried weak layers 1-3 feet below the surface, which have been responsible for several natural and human triggered avalanches over the past week (summary in [Tuesday's advisory](#)). In some cases, avalanches initiated as isolated wind slabs, but quickly stepped down to these deeper layers creating more dangerous avalanche conditions. Although wind slabs are our primary avalanche concern, triggering a slide on a non wind loaded slope remains a possibility. Yesterday, Mark and I found this layer of weak faceted snow 1-3 below the surface in every snow pit we dug. Although it is taking more force for this layer to fail in stability tests, I would not be surprised to hear of avalanche being triggered on this layer.

Wind slabs, buried weak layers, and the unstable history of this season's snowpack all lead to the consensus that skiing in avalanche terrain is like taking a hit on 14 when playing Black Jack. You might get away with it, but if

you're not careful you may get that unlucky draw and bust. For today, human triggered avalanches are probable on all wind loaded slopes steeper than 35 where the avalanche danger is rated [CONSIDERABLE](#). All other slopes have a [MODERATE](#) avalanche danger.

Doug will issue the next advisory tomorrow morning at 7:30 a.m. If you get out in the backcountry let us know what you find. You can reach us at 587-6984 or email us at [mtavalanche@gmail.com](mailto:mtavalanche@gmail.com).

**Last Advisory:** This Sunday, April 11, we will issue the final advisory for the 2009/2010 season.