

## **GNFAC Avalanche Advisory for Sat Apr 3, 2010**

Good Morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Saturday, April 4, at 7:30 a.m. **Bridger Bowl**, in cooperation with the **Friends of the Avalanche Center**, sponsors today's advisory. This advisory does not apply to operating ski areas.

### Mountain Weather

Yesterday's blue sky and gorgeous weather has been replaced by yet another storm system. Overnight, 3-5 inches of new snow has accumulated in the mountains throughout our advisory area and winds have been blowing 10-20 mph out of the W-SW. Currently temperatures are in the mid to high teens, but will rise into the low thirties by this afternoon. Today, we will see lingering snow showers with an additional 1-2 inches of accumulation and winds will remain out of the W-SW at 10-20 mph with stronger gusts felt along the ridgetops.

### Snowpack and Avalanche Discussion

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

Over the past seven days, the mountains of our advisory area have experienced some of the best skiing and riding conditions of the season. But in the same breath, our long awaited snow storms have also heightened the avalanche danger. Since Monday, over 2 feet of snow has accumulated in the mountains around Cooke City while 1-1.5 feet has fallen elsewhere. This snow is adding a tremendous amount of stress to an already ailing snowpack.

This new load has been deposited over various weak layers of surface hoar and near surface facets, which are now buried 1-3 feet deep. These layers have the potential for failure and should be taken very seriously ([video](#)). Although weak layers closer to the surface remain our greatest concern, facets near the ground remain widespread and should not be fully trusted. High winds associated with these storm systems have pushed the avalanche potential even higher by loading leeward slopes and adding additional stress to these weak layers.

Yesterday, a group of snowmobilers near Cooke City triggered an avalanche that did not run a long distance, but propagated and estimated 1,000 feet across. When avalanches propagate long distances it is a telltale sign that buried weak layers are prevalent in the snowpack. This weak layer was also the culprit in three separate human triggered avalanches in the Cooke City area on Wednesday. A group of snowmobilers triggered the avalanches, one which broke close to three feet deep.

Another obvious sign of high instability is the large amount of natural activity that has been observed throughout our advisory area. Natural avalanches have been observed on Woody Ridge near Cooke City ([photo](#)), Fan Mountain near Big Sky ([photo](#)), Argentina Bowl near Saddle Peak, and Frazier Basin in the northern Bridger Range. When natural avalanches are occurring it is very important that slope aspect and elevation are noted and that all slopes with a similar orientation are avoided.

With a fresh bout of snow and wind last night, the probability of finding a slope with unstable snow continues to rise. For today, human triggered avalanches remain probable on all wind loaded slopes steeper than 35 degrees where the avalanche danger is rated **CONSIDERABLE**. All other slopes have a **MODERATE** avalanche danger.

I 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).