

## **GNFAC Avalanche Advisory for Sun Apr 11, 2010**

Good Morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Sunday, April 11, at 7:30 a.m. This is the last avalanche advisory of the season and it expires on Monday Morning. **This last advisory is dedicated to you, our reliable readers and listeners.** We would not be here without you.

### Mountain Weather

Yesterday, a ridge of high pressure produced a beautiful spring day with temperatures reaching close to 50 degrees under perfectly clear skies. During this time winds were blowing out of the S-SW at 10-20 mph. Over the past 12 hours this ridge has started to flatten under the influence of a powerful low pressure system now sitting off the coast of California.

Currently, skies are cloudy and mountain temperatures are in the mid to high twenties. Winds are starting to pick up out of the S-SE and are now blowing at 15-25 mph. Today, mountain temperatures will climb into the high thirties to mid forties F and winds will continue to blow out of the S-SE at 10-20 mph. We will continue to see an unsettled weather pattern through the first half of this week with the possibility of heavy precipitation arriving Monday night into Tuesday.

### 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*

From the first major snowfall of the season on November 12th, to the closing days of the local ski resorts, this season has been an eventful one. When frigid cold temperatures in early December turned the November snows into knee deep sugary facets, it set up a recipe that turned this winter into the most active avalanche season the forecast center has ever seen. Amazingly, avalanche fatalities were limited to two in southwest Montana, despite the fact avalanche incidents were double this year compared to last.

With winter slowly coming to a close, it is becoming easier to forget the events of the past and act on our intuitions of the present. This can lead to bad habits, which generally fall upon the assumption that the snowpack is more stable in the springtime, making it easier to let our guard down. With buried weak layers existing 1-3 feet below the surface as well weak faceted crystals making up the foundation of our below average snowpack, now is no time for assumptions.

Recent storms and very strong winds have deposited a thick layer of snow over our entire advisory area, creating unstable conditions on steep slopes, specifically slopes that have received recent wind loading. Due to strong S-SW winds over the past week, slopes with north and east aspects have received the heaviest loading, making them the most susceptible to wind slab avalanches ([picture](#)). Yesterday, the Big Sky Ski Patrol observed several natural avalanches in the Cedar Mountain area, all of which took place on north facing slopes. These slides produced crown faces 3-6 feet deep and likely failed on the weak faceted layer near the ground.

Due to the unreliable and unstable nature of our snowpack coupled with recent storms and strong winds, a **CONSIDERABLE** avalanche danger exists on all wind loaded slopes steeper than 35 degrees. All other slopes have a **MODERATE** avalanche danger.

This final advisory concludes our 20<sup>th</sup> season of operation. Thanks for all your support.