

GNFAC Avalanche Forecast for Thu Apr 1, 2010

Good Morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Thursday, April 1, at 7:30 a.m. **ProLite Gear**, in cooperation with the **Friends of the Avalanche Center**, sponsors today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

Since yesterday morning most areas south of Bozeman received a trace to 1 inch of snow and the Bridger Range remained dry. This morning temperatures were in the mid to low teens F with N and NW winds blowing 5-15 mph. Today will be mostly cloudy as more moisture moves northward into the advisory area from Idaho and Wyoming. Temperatures will rise to the mid 20s F and winds will blow 5-15 mph from the N. Most snowfall will occur during the day with 3-5 inches falling in the Madison and Gallatin Ranges and the mountains near Cooke City, 2-3 inches in the mountains near West Yellowstone, and 1-2 inches in the Bridger Range.

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:

Yesterday avalanches were observed near [Cooke City](#), [Big Sky](#) and Bridger Bowl. One occurred in Argentina Bowl just south of Saddle Peak breaking about 2 ft deep. These avalanches followed a major storm that brought the strongest winds of the season and a heavy load of new snow. Most areas received snow containing about 1.5 inches of snow water equivalent ([SWE](#)) while the Cooke City area received 2.2 inches of SWE. We use SWE as a measure of snowfall because it tells us how much weight was added to the snowpack, and in this case the snow contained a lot of water and was heavy.

We know the snowpack has a heavy load of new snow on it. We know avalanches occurred both during the storm on Tuesday and yesterday. We know that this season's snowpack has generally been unstable when compared to other years. We also want to believe that the snowpack is stronger than it was in mid-winter, but it has been heavily stressed, and we shouldn't ignore the obvious clues of instability like recent avalanches. Additionally, my partner and I as well as a regular observer experienced collapsing near Cooke City yesterday, another obvious clue. Karl's stability tests on Mt Ellis yesterday also indicated poor stability ([ECTP 16](#)). Several years ago on this day under similar conditions, I thought I could outsmart the snowpack. I was wrong and got caught in a major avalanche but walked away uninjured and lucky.

What to do? Let go of any major ambitions and store them for another season with a better snowpack. I'd search for slopes less than 35 degrees without any wind loading and enjoy good powder riding. Also, consider the consequences of a slide in case your stability evaluation is wrong, and look for slopes with a run out free of any terrain trap. Today human triggered avalanches are probable on wind loaded slopes steeper than 35 degrees near ridgelines or above treeline 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.