

Fair or foul? The weather of 2010

By **CHRISTINE BATES**
Staff Reporter

MILLBROOK — Despite the scorching days of July and the December chill, which was two-and-a-half degrees colder than normal, 2010 was a pretty average weather year according to Vicky Kelly, who runs the Cary Institute for Ecosystem Studies' Environmental Monitoring Program.

In keeping with current trends, 2010's average temperature of 50.9 degrees was 3.3 degrees warmer than the 30-year average of 47.6 degrees, with a whole week of extra growing days. (See accompanying chart.) Precipitation was just a little bit higher than average thanks to December's blizzard.

Kelly checks the complex instruments at the Cary Institute's weather station site on Fowler Road daily to make certain that the equipment is functioning properly. The station has an impressive array of sensors that measure and record not just temperature, humidity and precipitation, but also air quality, wind speed, stream temperature in the East Branch of Wappinger Creek and soil moisture. Equipment also monitors the

level of ultraviolet radioactivity, which causes skin cancer; the daily readings are available on the Cary Institute's website. On sunny winter days the level hovers around 20 degrees but

See **WEATHER**, Page A10

2010 Weather Summary	
Average 2010 temperature	50.9 degrees Fahrenheit
Historic average temperature	47.6 degrees Fahrenheit
Total precipitation	43.04 inches
Average precipitation	42.57 inches
Growing season days	152 days
Average growing season	145 days

Historic averages are based on a 30-year mean. All data supplied courtesy of The Cary Institute's Environmental Monitoring program in the town of Washington.



PHOTO BY CHRISTINE BATES

Scientist Vicky Kelly, who runs the Cary Institute for Ecosystem Studies' Environmental Monitoring Program, checks the instruments at the institute's weather station.

» WEATHER

rises dramatically in the summer along with CO2 concentrations and ozone levels created by emissions in New York City and Westchester County.

The Environmental Monitoring Program at the Cary Institute is a long-term research program designed to understand how the environment changes overtime. The information gathered allows Cary scientists to influence air quality and climate change

legislation and conduct basic research. For example, since 1988 acid rain has declined, showing the benefits of The Clean Air Act.

The site is also used by Cary Institute partners the New York State Department of Environmental Conservation (DEC), NOAA Satellite and Information Service, the USA National Phenology Network and the U.S. Climate Reference Network.