

Farm Bureau Article: October, 2010  
*National Youth Science Experiment*

*Dear Lynn,*

*My nine year old daughter recently told me that her 4-H club will be participating in the National Youth Science Experiment. Can you tell me more about that?*

*Sincerely, Sarah Green*

Dear Sarah,

On October 6, 2010, millions of young people across the nation will become scientists during the third annual 4-H National Youth Science Day. In this year's experiment, "**4-H2O: Clean Water, Bright Future,**" youth will learn about carbon dioxide and discover how we as a nation can reduce our environmental impact.

This year's National Science Experiment is designed to engage youth around the country in asking the question: *Why is water quality important and why is it important to understand it now?* Water quality is a term used to describe the chemical, physical, and biological characteristics of water. Today, as our population evolves, we face a growing concern that our sources of clean water are becoming contaminated by warming temperatures, carbon dioxide emissions and dangerous run off. These changes in the water quality affect not only our drinking water supply, but also the natural habitats of aquatic plants, animals and organisms.

Through the 2010 experiment and subsequent discussions, 4-H'ers will learn the key characteristics used to observe water quality and measure their own impact through the calculation of their carbon footprint. The experiment is designed to demonstrate the powerful effects of CO<sub>2</sub> on animals, plants, and other living organisms whose habitats are our natural water sources. As we calculate our carbon footprints - like the kind we create with CO<sub>2</sub> emissions from our cars, factories and power plants – we will discover the impact these choices have on our water sources.

To learn more about the National Youth Science Experiment link to: <https://site.4-h.org/NYSD/>, and to find out where the experiment will be taking place in Santa Cruz County, contact 4-H Youth Development Advisor Lynn Schmitt-McQuitty at [lschmittmcquitty@ucdavis.edu](mailto:lschmittmcquitty@ucdavis.edu)