## Terraset PTA TouchPoint

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## The Tank is Full!

If you have visited the school recently or been following the <u>Nature Club Blog</u>, you know about our new fish tank. But you may not know one of the influential figures behind getting the Trout in the Classroom (TIC) program into our school.

George Paine, grandfather to John (2nd grade) and Julia (kindergarten) Thomas, contacted the school early in 2009 to offer this unique opportunity. He is secretary, Fish-with-a-Member chair, raffle organizer, newsletter co-editor and a few other things with the Northern Virginia Chapter of

Trout Unlimited (<u>www.nvatu.org</u>) and they wanted to extend the reach of the TIC program.

TIC was essentially created to make young people aware of the environmental issues that have cost brook trout much of their habitat in Eastern states. "50 years ago there were brook trout in Reston streams!" says Paine. "It also serves to interest young people in fishing, particularly fly fishing for trout. The excitement of fishing inspires them to learn about how trout live and what they need to thrive." and George, pictured here with his grandson John, knows a lot about that!

TIC is a conservation-oriented environmental education program for elementary, middle, and high school students. Throughout the school year, students and teachers:

- Raise trout from eggs to fry;
- Monitor tank water quality;
- Engage in stream habitat study;
- Learn to appreciate water resources;
- Begin to foster a conservation ethic, and;
- Grow to understand ecosystems.



During the year each teacher tailors the program to fit his or her curricular needs. Therefore, each program is unique. TIC has interdisciplinary applications in science, social studies, mathematics, language arts, fine arts, and physical education.

TIC programs have been in place all across the country for more than 20 years, and are the result of numerous collaborations between teachers, volunteers, government agencies, and local organizations like Trout Unlimited. The programs were designed specifically for teachers who wanted to incorporate more environmental education into their curriculum.

While the immediate goal of Trout in the Classroom is to increase student knowledge of water quality and coldwater conservation, its long-term goal is to reconnect an increasingly urbanized population of youth to the system of streams, rivers, and watersheds that sustain them. Successful programs have helped:

- connect students to their local environments and their local watersheds;
- teach about watershed health and water quality, and;
- get kids to care about fish and the environment.





In Virginia, the program is in its third year, and there are aquariums in approximately 55 classrooms throughout the state, ranging from elementary school through high school. Some schools are raising brown trout and some are raising brook trout, all from eggs provided by hatcheries run by the Virginia Department of Game and Inland Fisheries. New programs this year have started in Buena Vista, Waynesboro, Aldi, Winchester and other towns.

The tanks and associated support equipment were ready and waiting at four public and private schools as well as one home school in

Northern Virginia. Eager students and teachers were standing by at Terraset Elementary, South Lakes High School, Lorien Wood School, John Adams Elementary School in Arlington, and the home school to transition the eggs into their tanks. Mr Paine pointed out that "the program has instant appeal with kids, introducing them to a range of environmental issues such as stormwater runoff and acid rain."

On October 8, 2009, George delivered 227 native Brook Trout eggs to Terraset under the Trout in the Classroom (<u>www.troutintheclassroom.org</u>) program. A female brook trout can lay between 100-400 eggs depending on size and age with survival rates varying tremendously due to a range of problems such as fungi. Clean, dechlorinated water is the best insurance against losses. Tank temperature and chemistry are also very important. Feeding is less important than you would think and overfeeding can be a problem as it generates nitrogen. The Nature Club kids are monitoring all these conditions and are excitedly observing as the eggs have hatched and the tiny fish have started to grow.

The local programs were funded by three sources: the Northern Virginia Chapter of Trout Unlimited, a Wetlands Studies and Solutions, Inc. (<u>www.wetlandstudies.com</u>) grant, and Lorien Wood School. Special credit goes to the dedicated Trout Unlimited volunteers, Duane Murphy, Karen Sizelove, William Heresniak, Richard Landreth and Mark Zimmerman who spend hundreds of hours sharing their expertise with each other and orchestrating the program. The Reston program would not be possible without the donation by Mike Rolband, President of Wetland Studies and Solutions.

"Teachers and Nature Club volunteers who do the meticulous work of preparing and maintaining the tanks are qualified for sainthood" says Paine. The leaders at Terraset are PTA volunteers Dianne Rose and Kim Lowther.

The Northern Virginia chapter of Trout Unlimited, a non-profit conservation organization, is also seeking volunteers to assist with this rapidly expanding program. The Reston Nature Center will also start a tank in the coming months. Funds are available under the Wetlands grant for one additional Reston school, preferably an intermediate or elementary school in order to diversify the program.

Getting this program in to Terraset was a real family affair. Heather Thomas alerted her father, George Paine, to Dianne Rose's dedication to nature programs for children. Her own children, John and Julia (pictured with her Geroge) have both fished many times with their grandfather for bass and rainbow trout so she was confident the program would be a hit. Then Linda Paine, George's wife, "babysat" the brook trout eggs in an ice chest over the Blue Ridge--native home of the brook trout--from New Market, Virginia. "Fish are inherently fun and enlightening for kids" says Paine. "They have more innate curiosity than I had anticipated when I volunteered for this program."