WATER ON THE FARM

In 2005, Georgia garden celebrity Walter Reeves was appointed by Governor Sonny Perdue to the Environmental Advisory Council. The Council advises the Governor, the Department of Natural Resources Board and the Environmental Protection Division Director on environmental protection and improvement programs.

Walter is retired from the University of Georgia Cooperative Extension Service, where he worked for 29 years. He grew up on a poultry farm in rural Fayette county, where he cared for the hens and an "enormous" vegetable garden.



Walter Reeves

For the article below, Walter interviewed Dr. Gary Hawkins,

Agricultural Pollution Prevention Specialist for the University of Georgia Cooperative Extension Service. Gary is a Project WET

educator and Adopt-A-Stream volunteer.

1) What percentage of Georgia is considered rural/agricultural land?

approximately 89%

US Department of Agriculture, Natural Resource Conservation Service's (USDA-NRCS) 1997 summary report of the Natural Resources Inventory (revised December 2000)

2) How does Georgia's agricultural industry use water?

Water is used on commercial crops such as cotton, peanuts, and corn. Vegetable and vegetable production typically use drip irrigation to supply water to the growing crop. Other industries using water include aquaculture (fish and shrimp production), livestock production (cattle, chickens, goats, etc.) and sod production. Water is also used to clean and maintain the moisture of fruits, vegetables and meat products before they are packed for use by consumers.



3) Does the agricultural industry primarily use surface or ground water?

Agriculture uses both surface and ground water sources. Typically the source of water is based on the location of the industry. A row crop operation in south Georgia uses groundwater sources due to the limited supply of surface water in that part of the state, while an agricultural operation in north Georgia, primarily uses surface water due to the limited supply of groundwater there.

4) Do we know how many gallons of water the agricultural industry uses each year?

For the production of crops, the agricultural industry uses on average 9.7 inches of water for a growing season (typically May-October). It is estimated that annual irrigation water use fluctuates between 100 and 300 billion gallons. Higher irrigation use generally occurs during periods of lower than normal rainfall. Since this typically coincides with periods when water tables are naturally low, this may present an interesting challenge in managing the state's water resources.

Kerry Harrison, Extension Engineer, University of Georgia College of Agricultural and Environmental Sciences, "Status of Georgia's Irrigation System Infrastructure."

5) How does the agricultural industry impact the water it uses?

Agriculture, like other industries, can contribute to sediment in the surface water supplies. If the soil is not protected, water from either irrigation or rainfall can transport soil and other materials into our surface waters.

Some farmers use conservation tillage systems. This process uses cover crops in the fallow (non-growing) times of the year to reduce soil erosion thereby protecting the surface water sources from sediment and other runoff materials. The cover crop, when killed and left in place during the growing season also reduces runoff and assists the soil in retaining the water that is applied (continued)

River of Words on display at the Georgia Aquarium

70,000 students will view the River of Words exhibit when they visit the Georgia Aquarium this year. Georgia Project WET and Georgia Aquarium staff selected sixty-five creations by young artists and poets to represent the many thousands of students who have participated in the River of Words program since it came to the State in 1997.

The Georgia Aquarium, which opened to the public in November, is the largest aquarium in the world with more than 100,000 animals from 500 species and eight million gallons of fresh and marine water. Visiting school groups will have the opportunity to encounter animals, engage in interactive activities and understand research applicable to real-world situations.

Find out more about the Georgia Aquarium's programs for school groups by joining the educator mailing list at http://www.georgiaaquarium.org/educatorsRegistration/index.aspx.



Preparing Students for River of Words — How One School Does It

For a copy of the Georgia River of Words Teacher's Guide, the Contest Rules, the ROW/Rivers Alive poster, ROW bookmarks, and information about Project WET, Rivers Alive and Georgia Adopt-A-Stream, send your name, address, telephone number, fax number and email address to Petey Giroux at petey giroux@dnr.state.ga.us.

At High Meadows School, an independent school for children age 3 through 8th grade in Roswell, the River of Words program is a perfect fit for their "hands-on, project-based, interdisciplinary approach." Granted, the school has incredible natural resources at its fingertips. The 40-acre wooded campus is a stone's throw from the Chattahoochee River and the Chattahoochee Nature Center. But there are elements of the strategy they use to introduce students to their watershed and individual creativity that any school in Georgia can use. The bottom line seems to be thematic teaching and a team of very enthusiastic and committed teachers. Let their story inspire you to jump into the "River of Words" this year. The story below was contributed by Chris Robie, Envionmental Studies Teacher at High

"A third grader gently glides her canoe through the soft ripples of the Chattahoochee River. She feels at ease because her guide is from the Chattahoochee Nature Center and she has learned the strokes in her physical education class. Ahh, but that was in a pool. When she returns from her hour-long river odyssey she will record her sights, sounds and feelings in her journal. Some of these thoughts may enter her River of Words' poem.

Back at the Chattahoochee Nature Center she will eat lunch with the rest of her class and then enjoy the afternoon with a naturalist guide. She will touch the pelt of a beaver, look for and smell his den. The jewelweed will fascinate her as she explodes its seedpod with just a touch! She will connect discussions of this watershed with classroom discussions and write more notes or questions in her journal. Along the river, she will stretch out on a deck and sketch a picture that she may later use in art class. As part of a small stewardship project, she will help pull privet and weeds at the nature center.

In her Environmental Studies class she will further research what plants and animals live along this precious river. This will guide her in making decisions for her art project that involves foreground, background and using different texture techniques. She will walk and touch the waters of her school's little spring. These waters connect to Willeo Creek which connect to the Chattahoochee which eventually become a part of the Gulf of Mexico and she will feel more connected to this part of her world. She begins to develop a sense of place.

Her thoughts become a more insightful poem because her classroom teachers are studying poetry. After writing it in her environmental studies class, she takes it to the computer lab where her lab teacher instructs her in correctly typing it for the River of Words contest. On Earth Day she proudly stands in front of all her grade level classes, her parents and guests and reads her poem. She points out her artwork among all those displayed. She places a copy of her poem in her journal, along with the picture her friend took, along with some powerful education and some awesome memories....."



RIVER OF WORDS TIMELINE









FEBRUARY 15

Annual deadline for entries

APRIL

National winners announced and State winners selected

MAY

Georgia's National and State Winners recognized at Awards Ceremony

JUNE - DECEMBER

ROW exhibit travels to libraries across the state

AUGUST

Georgia ROW brochure produced and distributed

SEPTEMBER

Georgia ROW Teacher's Guide produced and distributed

NOVEMBER - JANUARY

Georgia ROW Poetry and Art Journal produced and distributed

VISIT THE WWW. EEINGEORGIA. Org CALENDAR FOR THE LATEST INFORMATION ON AVAILABLE WORKSHOPS.

Can your school system coordinate a professional learning opportunity like Gwinnett and Paulding?

In 2005, the Gwinnett and Paulding County school systems coordinated system-wide workshops for teachers that included training in Project WET. In Gwinnett, teachers were trained to use Project WET with their students. In Paulding, teachers were trained to facilitate Project Learning Tree, Project WET and Project WILD workshops for teachers in their schools. We asked the organizers of these workshops, Kathy Barrett, Lead Teacher for Gwinnett's Environmental & Heritage Center and Dawn Hudson, Science Specialist for Paulding Schools how they did it. Let their answers below inspire your school system to train teachers with the Project WET Curriculum and Activity Guide.

1) What was your vision for this workshop? What did you want teachers to get out of it and why? Why did you want teachers to have these resources?

Gwinnett: We wanted to provide teachers with the knowledge and skills necessary for understanding the nature of water as a natural resource and show them hands-on strategies to use with students.



Paulding: To increase environmental education in our schools. Next year we plan to fund books and training for every middle and high school science teacher and most elementary teachers in all 27 Paulding County schools. These resources are fundamental to bringing the curriculum alive for our students. Environmental education is the key to learning in real life contexts. Many state standards may be met by utilizing the materials.

2) What was your source of funding? How can other districts tap this funding source? How did the workshop help you meet the goals for this funding?

Gwinnett: The workshop was funded through the Science Office Staff Development. Teachers were awarded a stipend of \$150 and 1PLU after attending the workshop, teaching a follow-up lesson in their classroom, and returning evidence of student work related to the lesson along with a copy of their lesson plan.

Paulding: State Math Science Partnership funds, ultimately funded by an NSF grant at the federal level.

3) How did you promote it to the schools to ensure that you had a wide variety of participation? How did you schedule it so everyone could attend?

Gwinnett: As contacts for the Science Office, Assistant Principals received an email notifying them of the training opportunity for 3rd-5th grade teachers and middle school earth science teachers. It was scheduled on a teacher holiday that is available for optional staff development.

Paulding: I always have open communication with teachers at my schools via meetings and emails. Approachability is key and truly listening to the teachers and what they want. They were "fighting" in (continued)

MAKE THE GEORGIA CONNECTION

Make fav. b

Make the Georgia Connection provides state-specific background information for some of your favorite Project WET lessons. In this issue we focus on agriculture in Georgia. The information below may be used with Irrigation Interpretation, Sum of the Parts, Water Works and Choices and Preferences.

Irrigation Interpretation p. 254, Sum of the Parts p. 267, Water Works p. 274 and Choices and Preferences p. 367. Project WET Curriculum and Activity Guide

Agriculture and Water Quality

Michelle McLendon • Education Program Specialist • Project WET Coordinator • The University of Georgia Cooperative Extension Service 4-H Program

Our state's economy has long relied on agriculture and while farming methods have changed one constant has remained: agribusiness is the leading industry for Georgia. A 2000 statistic reports that the net value for products leaving the farm (i.e., farm gate value) was \$8.3 billion with a processing value equaling \$30 billion for the state (UGA 2005). 11.1 million acres of state land are devoted to agriculture with an average farm size of 222-acres. Georgia leads the nation in the production of poultry, pecans, peanuts, eggs, and rye and is the number two cotton producer (Georgia.org 2005).

When most think of agricultural uses for water they think of the obvious- watering crops. However, water has many more uses on the farm, ranging from the cleaning of equipment to supplying drinking water to both livestock and farm workers (bookrags.com 2005). Livestock water use equals about 19.4 million gallons per day (USGS 2004).

Irrigation of crops is a major use of water on farms. It is estimated that about 39 percent of all the water used in the U.S. is for irrigation. Georgia alone uses over 1 billion gallons of surface and groundwater a

day for irrigation. Unfortunately most of this water cannot be reused because of evaporation and transpiration so it is important for farmers to use better irrigating techniques. To make irrigation more efficient farmers can use 3 techniques: 1) level fields to make water flow more evenly rather than downhill, 2) surge flooding so water is released at prearranged intervals, and 3) capture and reuse runoff. Efforts have also been made to better an irrigation technique called spray irrigation. In the past spray irrigation led to a great deal of water loss due to the wind blowing the water. Now a gentler spray is used from a hanging pipe, increasing the efficiency of spray irrigation from 60 percent to 90 percent (USGS 2005).

Nonpoint source pollution is a critical issue facing Georgia's' agricultural industry. An example is the effects of the poultry industry on water quality. Chicken manure makes excellent fertilizer, however, the runoff from fields covered in chicken manure can degrade water quality by increasing nitrogen concentration into the water. Agriculture is said to be the leading source of nonpoint source pollution in the U.S. Other ways agriculture leads to nonpoint source pollution is through

grazing, pesticide application and plowing, leading to sediments, salts, pathogens and nutrients being released into the water (EPA 2003).

New technologies to improve Georgia's agricultural impacts are being adapted every day. These best management practices (BMPs) range from soil moisture monitoring to planting beneficial insect habitat plantings in adjacent fields. Cropland erosion can be lessened by techniques such as terracing and planting and preserving riparian buffers. Constructing holding ponds and animal waste utilization can restrict animal waste.

Filter strips and soil testing can control the impact of nutrients being released into the water. Georgia farmers are doing a great deal to lessen their impacts on the environment and with assistance and continued research they can do even more.

Thanks to a Nonpoint Source
Implementation Grant, Section
319(h) of the Clean Water Act, the
UGA Cooperative Extension Service
4-H Program is working in
partnership with Georgia Project WET
to provide training to teachers in rural
schools. For more information on this

effort, contact Michelle McLendon at wetcoord@uga.edu.



Work cited: (all from the web)

"Agricultural Water Use"

www.bookrags.com/sciences/earthscience/agricultural-water-usenews-02.html

"Economic Importance of Food and Fiber Production and Processing in Georgia" www.caed.uga.edu/brochure.htm

"Welcome to the Georgia Department of Agriculture" www.georgia.gov

"Agribusiness"

www.georgia.org/Business/Industries/Agribusiness.htm

"Estimated Use of Water in the United States in 2000" www.pubs.usgs.gov/circ/2004/circ1268/htdocs/text-ir.html

"Managing Nonpoint Source Pollution from Agriculture" http://www.epa.gov/owow/nps/facts/point6.htm information on this effort, see page ?.

Lesson Plan

This exercise is designed to further explore topics addressed in the article entitled *Protecting streams from "fruited plains"*. The article can be found at http://www.epa.gov/owow/nps/nps_edu/pdf/farms.pdf. The activity can be found in its entirety at http://www.epa.gov/owow/nps/nps_edu/farm.htm.



Farmland Fertilizer Dilemma

Grade Level: 6th-8th Grade

Objectives:

Students work through calculations to determine how much fertilizer is needed to meet a plant's nutrient requirements. From these calculations, students draw conclusions about the most cost-effective and environmentally sound farming practices.

Time Required:

Individual exercises are designed to be approximately 1/2 hour to 45 minutes long. These exercises are also ordered progressively: each builds on concepts introduced in the previous.



Curricular Standards and Skills:

Math:

- word problems
- addition
- subtraction
- multiplying decimals
- working with money
- order of operations

Thinking Skills:

deductive reasoning

Language Arts:

• reading comprehension

Vocabulary:

- dead zone
- eutrophication
- pesticides, herbicides, and fungicides
- sedimentation

Why Worry About Old MacDonald?

Old MacDonald has some big decisions to make. In this exercise, you will help him decide how much fertilizer his crops need. At the same time you will help him to keep costs down and prevent nutrient runoff into nearby lakes and streams.

Old Macdonald has a small farm. The cows graze in a 15-acre pasture, and he grows corn to feed his chickens, pigs, and cows in a 35-acre field. Altogether, Old MacDonald's animals produce about 170 tons of manure every year! That manure contains 1,200 pounds of nitrogen and 800 pounds of phosphorus. Old MacDonald knows that manure is an unbalanced fertilizer for corn because it has too much phosphorus and not enough nitrogen. Corn plants use 5 to 20 times as much nitrogen as phosphorus, and there is less than twice as much nitrogen than phosphorus in manure. Farmers usually apply manure to fulfill the nitrogen requirements for crops. Because crops do not use up the phosphorus in the manure, the result is an overapplication of phosphorus. This phosphorus then builds up in the soil until a rainstorm washes it into nearby streams or rivers, where it can cause water quality problems and threaten aquatic life.

Solving the Problem

Old MacDonald wants to fertilize his pasture and cornfields with the manure that his cows, chickens, and pigs produce. After all, it's free, and he doesn't have to haul it from somewhere else! And commercial fertilizer is expensive-nitrogen costs 15 cents per pound and phosphorus costs 50 cents per pound.

However, his choice is not easy. Either he spreads enough manure so that the crops get enough nitrogen (leaving large amounts of leftover phosphorus that could run off into streams and lakes), or he spreads only enough manure so that the crops get the right amount of phosphorus (but not enough nitrogen).

After testing the soil, Old MacDonald is able to determine that the pasture requires 80 lb/acre of nitrogen and 5 lb/acre of phosphorus for the best growth. He also discovers that his corn crop needs 125 lb/acre of nitrogen and 25 lb/acre of phosphorus for the best growth.

Fill in this table with information from the preceding paragraphs.

	NUMBER					
	NUMBER	UNITS				
Pasture size						
Cornfield size						
Commerci size						
Manure produced						
Nitrogen in manure						
Phosphorus in manure						
Cont. for an interest to a second						
Cost for extra nitrogen						
Cost for extra phosphorus						
Nitrogen needed to						
fertilize pasture						
Phosphorus needed to						
fertilize pasture						

Nitrogen needed to fertilize corn						
Phosphorus needed to						
fertilize corn						

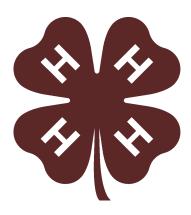
Working for Clean Water

This recurring section of the Dragonfly Gazette highlights water professionals, their careers, expertise and educational experiences.

MICHELLE McLendon, Education Program Specialist, Project WET Coordinator The University of Georgia Cooperative Extension Service 4-H Program

Hello, my name is Michelle McClendon, the new Georgia Project WET coordinator for the University of Georgia Cooperative Extension Service 4-H Program. My position is unique in that it was created from a federal section 319(h) grant as a partnership between the Department of Natural Resources (DNR) and UGA. The Cooperative Extension Service has had an active role in shaping our state's agricultural practices since 1916, while Georgia 4-H has helped shape our state's youth to become better leaders since 1955. It was realized that although there has been extensive WET training in the metropolitan areas of Georgia the rural areas of the state needed more attention. The strong presence of Cooperative Extension and 4-H throughout the state made the agency a perfect candidate for bringing water education to all of Georgia.





One of the most important aspects of Project WET is that it can help build relationships between schools and communities. WET activities in the classroom can be paralleled to issues in the student's own backyards. All workshops facilitated in connection with this grant's statewide initiative will highlight local water issues such as major water users in the area and nonpoint source pollution. The workshops will also highlight opportunities for partnerships between the school and those working to protect the community's water resources such as Adopt-A-Stream and Rivers Alive.

The goals of this grant are ambitious- a minimum of 20 Project WET workshops over the next two years, reaching 400 educators. However, with your help this can be achieved! For more information on Project WET contact me at (706) 484-2830 or wetcoord@uga.edu.

Editor's Note:

Michelle has a Bachelor's degree in Recreation Resource Management from the University of Georgia and a Master's degree in Environmental and Outdoor Education from the State University of New York at Cortland. Previously she worked as a naturalist at a New York nature center and as an environmental education instructor at the Jekyl Island 4-H Center. Michelle has taught many classes on macroinvertebrates and water quality and marsh and barrier island ecology.

WATER ON THE FARM

{continued from page 1}



Dr. Gary Hawkins

either from irrigation or natural rainfall. This retained water will eventually infiltrate to the groundwater and help maintain our surface water supplies.

6) What does the UGA Cooperative Extension Service recommend to farmers? How can farmers lessen their impacts on water resources?

Farmers can work with County Extension Agents to get irrigation audits to insure that their systems are as efficient and uniform as possible. This will assist farmers/producers in applying water more efficiently and thereby reducing energy costs and conserving water. The uniformity tests help the farmers/producers apply water evenly across the fields so they do not have to apply more water through their system to reach areas that require it while drowning other areas. Typical suggestions include changing the irrigation package to use correct nozzles, switching from high to low pressure systems, converting the system from "sprays-on-top" to "sprays-on-drops", repairing the end-gun shut-off system, etc. Drip irrigation is suggested in vegetable and fruit production because the technology often allows for better application and a reduction in water losses.

The UGA Cooperative Extension Service also works with farmers/producers on conservation tillage systems. This process involves the use of cover crops to help reduce runoff, increase infiltration, and build better soil.

For more information on how to protect our surface water resources, please download a copy of the UGA Extension Bulletin number 1217 "Protecting Georgia's Surface Water Resources" http://pubs.caes.uga.edu/caespubs/pubcd/B1217.htm.

Thanks to a Nonpoint Source Implementation Grant, Section 319(h) of the Clean Water Act, the UGA Cooperative Extension Service 4-H Program is working in partnership with Georgia Project WET to provide training to teachers in rural schools. For more information on this effort, contact Michelle Mclendon at wetcoord@uga.edu.

CAN YOUR SCHOOL SYSTEM DO THIS?

{continued from page 3}

some cases to get in! I paid for subs, so as long as I didn't interfere with testing, all was okay. Scheduling the PLT, WET and WILD coordinators on the same dates was a challenge.

4) Anything else you would recommend that someone in your shoes consider before taking something like this on?

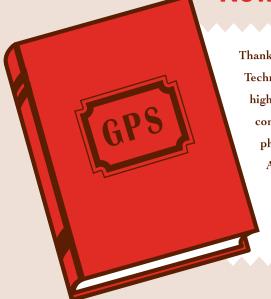
Gwinnett: The organizers should make sure they have sufficient space to allow for active participation should the weather prevent outside activities. They should also take refreshments into consideration. Our participants brought snacks assigned by schools such as sweet, salty or sodas. We provided hot chocolate and coffee.

Paulding: The only thing I would recommend is quit waiting and DO IT!



Project WET Curriculum and Activity Guide Correlated to

New Georgia Performance Standards



Thanks to a contract with the Oconee River Georgia Youth Science and Technology Center, educators will soon be able to receive spreadsheets that highlight the GPS objectives they meet through Project WET activities. The correlations will become available over a five-year-period, following the phase-in schedule of the standards. The K-8th grade English/Language Arts, 6th grade Math, 6 and 7th grade Science, 9-12th grade English/Language Arts and 9-12th grade Science are available now. To receive an electronic or hard copy please email Monica Kilpatrick at Monica_Kilpatrick@dnr.state.ga.us.

Environmental Education Alliance of Georgia's Annual Conference Green with EE: the Art, Science and Business of Environmental Education

March 17-19, 2006

At the Simpsonwood Conference and Retreat Center on the Chattahoochee River in Norcross with a special visit to the Georgia Aquarium Visit www.eealliance.org for registration materials. Early bird deadline is: February 10, 2006.

--- WELCOME ABOARD JO ---

Alea Giles, Environmental Outreach Assistant, Georgia EPD

Project WET welcomes our newest member—Jo Adang. Jo will join the Environmental Outreach Unit as a new Georgia Project WET Coordinator. She has many years experience as an elementary classroom teacher, a teacher of the gifted, and as an Educational Program Specialist at the University of Georgia where she helped facilitate the Georgia Science & Engineering Fair. The skills that she brings to us will come in handy as we promote, organize, and make possible



different events through Project WET in the future. Jo's educational background shows how much she is devoted to the environment and teaching. In her free time Jo paints and volunteers as head of Plein Air Georgia, an organization of artists from all over Georgia who love to paint outside. We look forward to working with her on many projects. We also can't wait to see her energy as one of Mamma Bass's Mudsliders. Welcome to the team, Jo!

Soaking Wet

This section of the Dragonfly Gazette recognizes Project WET Facilitators, Teachers and Schools and provides a place for them to share their ideas and accomplishments.

Splash Water Festival at North Habersham Middle School

Alea Giles, Environmental Outreach Assistant, Georgia EPD



The Project WET Crew Splashed into North Habersham Middle School in Clarkesville, Georgia on Friday September 23rd, where the seventh and eighth graders participated in 2005 Make A Splash with Project WET water festival. As the Georgia Project Wet School of the Year, North Habersham received \$3,000 to host this interactive water event. Brenda Hunt, a 7th grade life science teacher, did a wonderful job organizing the Splash extravaganza.

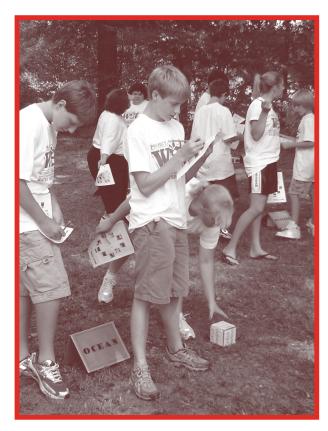
During the opening ceremony the 7th and 8th grade chorus performed a song. There was a special appearance by the Georgia Project WET's Mamma Bass and the Mudsliders who got the students involved in singing a song. They also helped make it rain from the thunderstorm activity in the Project WET Curriculum. This was a great way to start off the activities.

Many water-related activity stations were set up for interactive, educational fun. One activity, Sum of the Parts, gave the students the chance to design their own property and see what happens to their land that was built on a river when pollution occurs. Enviroscape, a plastic model of a watershed, allowed the 7th and 8th graders to see where the pollution goes when it rains. A Drop in the Bucket took a closer look at how much water is on earth, where it is, and what we really use as a resource. Various other water-related topics were also explored during this national day of water education.



The Splash celebration takes place in schools annually all over the United States giving students an opportunity to learn about water issues in a fun environment. If you would like to nominate your school for the 2006 Georgia Project WET School of the Year award and host next year's Make A Splash with Project WET water festival, complete the form on the next page and submit it by the postmark deadline of February 16, 2006.

Remember to keep on learning and having fun by splashing with water.



Soaking Wet





Each year Georgia Project WET recognizes a School and Teacher of the Year at an Awards Ceremony at the Environmental Education Alliance of Georgia's annual conference. The Georgia Project WET School of the Year also receives funding and organizational assistance to host a "Make a Splash with Project WET" Water Festival. To nominate a school or teacher, complete the forms below, answer the questions on a separate sheet and submit to:

Georgia Project WET, 4220 International Parkway, Suite 101, Atlanta, Georgia 30354.

POSTMARK DEADLINE FOR NOMINATIONS IS FEBRUARY 15, 2006.

education?

Please note: Elementary, Middle and High Schools are eligible.

SCHOOL NOMINATION Name of Project WET School of the Year Nominee School address ___ City State Zip_ Phone: Day (Evening () Email address _ Your name, phone # and e-mail address (optional) 1) Why do you feel your school deserves to be the School of the Year? 2) What kind of water education projects or programs have your students engaged in? How many students are in your school? How many of them have been involved in these projects or programs? 3) Have any of your teachers received water education training (i.e., Project WET, Adopt-A-Stream, River of Words, etc.)? How many teachers are at your school? How many of them have been involved in this type of training? 4) Is the Project WET Curriculum and Activity Guide being used at your school? If so.

by how many teachers?

School address			
City State Zip			
Evening (
Email address_			
Fax			
Your name, pho			

1) Why do you feel this person deserves to be honored for their teaching in water

2) How does this person involve their students in learning about our water resources?

What kind of water education projects or programs has this teacher engaged students in? How many students are involved in learning about water through this teacher?

4) If Project WET certified, how does this person use the curriculum in their teaching?

3) What kind of water education training does this person have? (Project WET,

Adopt-A-Stream, River of Words, etc.)?

Walter Shed...
a scarecrow

across Georgia



The Atlanta Botanical Garden has hosted the Georgia River of Words
Awards Ceremony for several years now, but in October 2005, the
garden played host to another Project WET creation, Walter Shed.
Walter was one of 54 imaginative scarecrows that 31,000 visitors
saw on display throughout the garden. Never wanting to miss a
chance to creatively educate people about water quality issues,
Walter's ensemble highlighted the work of the Adopt-A-Stream,
Rivers Alive, River of Words and Project WET programs. Many
thanks to Environmental Outreach Assistant, Alea Giles for
bringing Walter to life.









What's Inside this Issue?

Water on the Farm with Walter Reeves and Dr. Gary Hawkins

ROW Exhibit at the Georgia Aquarium

Gwinnett and Paulding Coordinate Systemwide WET workshops

Background information on Georgia Agriculture for WET lessons

Lesson Plan: Middle-Schoolers do the math to determine how much fertilizer is needed

UGA Cooperative Extension 4-H Hires WET Coordinator

North Habersham Middle School Hosts Make A Splash Water Festival

Nominate the Georgia Project WET School and Teacher of the Year

WET Guide Correlated to Georgia Performance Standards

Register now for the annual EE Conference

Georgia Project WET welcomes Jo Adang