## 2010 Annual Report



Durham Soil & Water Conservation District 721 Foster Street Durham, NC

Summer 2010

### Durham SWCD named District of the Year

The North Carolina Association of Soil and Water Conservation Districts named the Durham Soil and Water Conservation District the 2010 "District of the Year" for the state of North Carolina. The award was presented to the District Board Members and staff at the State Association's Annual Meeting held January 3-5 in Raleigh. Each year the Association selects a Soil and

Water Conservation District who excels in Environmental Education and Projects.

Durham SWCD received this award for the various Environmental Education Projects done throughout the year: Farmland Preservation Workshop, Tour with local officials, R.N. Harris Elementary School Stream Restoration and Stormwater project., Teacher Workshops, Pond Workshop,



Pictured left: Steve Bennett, Lynwood Faison, Eddie Culberson, Jennifer Brooks, Robert Rosenthal, Lisa Marochak & Talmage Layton

Annual Awards Banquet and Completion of Phase III and IV (Reach 1) of the Stream Wetland Assessment and Management Park (SWAMP) with Duke University, just to name a few.

### Inside this issue:

Lick Creek Restoration

Project Completed

2

Unnamed Tributary to Lake Michie Stream Resto-	2
Sandy Creek Project	3
Envirothon	3 & 9
Annual Pond Clinic	4
Community Conservation Assistance Program	4
Rain Barrels, Compost- ng Bins, Bird Boxes, Tree Seedlings	5
Ag Cost Share Program	5
Farmland Tour	6 & 7
Ourham County Big Sweep	6
Performance Indicators	7
Environmental Education	8-9
Newest addition to Durham SWCD	10
Piedmont RC&D	10 & 1
ISDA-NRCS	11

Annual Banquet

12

## Lynwood Faison Retires after 31 years



Roger Hansard = Associate Supervisor

After 31 year of service with NC Soil & Water Districts Lynwood Faison retired on April 30, 2010. Lynwood worked for the Durham district for 20 years as the Soil Conservationist in charge of the AG Cost-share Program.

The Durham Soil & Water Conservation District gave a retirement party to Lynwood on April 15, 2010. Over 100 guests attended the celebration. The

Durham Soil & Water District Board and staff wish Lynwood a happy retirement.

### **Board Members & Staff**

Board Supervisors	Staff		
Talmage Layton =Chairman	Eddie Culberson = Director		
Robert Rosenthal = Vice Chairman	<b>Lisa Marochak</b> = Administrative Officer		
Danielle Adams = Secretary/Treasurer	Jennifer Brooks = Soil Conservationist/		
Raymond Eurquhart = Board Supervisor	Environmental Education Coordinate  Mike Dupree = Ag Development/Watershed		
Curtis Richardson = Board Supervisor	Conservationist		
2001 de ouper visor	Matt Kinane = NRCS District Conservationis		
<b>Beecher "Gus" Gray</b> = Associate Supervisor	Julie Elmore = Piedmont RC&D Coordinator		
Kathryn Spann = Associate Supervisor	Steve Bennett = DENR-Area IV Coordinator		

Page 2 2010 Annual Report

## Lick Creek Stream Restoration Project—completed

Construction to restore 3,550 feet of Lick Creek began in February and was completed in June of this year. This stream restoration project began at the bridge off Olive Branch Church Road and proceeded east for 3,550 feet towards the controversial Falls Lake. The project's design, permitting and construction were funded through two Clean Water Management Trust Fund (CWMTF) grants totaling \$636,000. There was additional funding secured (\$35,500) by the Soil and Water staff through the Upper Neuse Clean Water Initiative (UNCWI) for the transaction cost of the three conservation easements that were donated in perpetuity. The Durham Soil and Water Conservation District will hold and monitor these easements to assure compliance.

This section of Lick Creek had significant vertical instability problems (incision and

bank slumping) which elevated sediment levels downstream to the sum of 230 tons/year.

Sediment is a significant pollutant to water quality and aquatic habitat. The restored channel is a tributary that flows into Falls Lake, and eventually the Neuse River. Channel incision and bank erosion had compromised the adjacent riparian buffer that was located mostly within an open pasture and forested area and within an area that is becoming an urban dominated watershed. As in most cases increased runoff from urbanization, changes in land use, incision, and channelization rarely yield stable stream systems. The subdivisions and impervious surfaces located upstream have significant runoff that contributed sediment through overland flow into the tributary, since there was not adequate groundcover and root density. In addition to stabilizing bank erosion and vertical instability, the project also added a greater than 50 feet of herba-



Pictured above: Cherri Smith CWMTF, Eddie Culberson-Durham SWCD, Will Patterson- River Works, Josh White-Baker Eng., Will Summers- CWMTF, Kevin Boyer- CWMTF

ceous and riparian buffer and a permanent conservation easement (approximately 13.6 acres) on each side of the stream to help capture and filter the overland runoff from the site. Water quality is expected to continue to improve as the riparian buffer matures.

In June of this year a tour was conducted for Durham County's State Legislators, some local official and state resource representatives.

## Unnamed Tributary to Lake Michie Stream Restoration Project- Completed

In the spring of this year the Durham Soil and Water Conservation District completed this stream restoration project on 1,950 feet located on Mr. Gerald Thacker's farm, north of Bahama. This Unnamed Tributary is just up stream from one of Durham's drinking water supplies, Lake Michie. The project was funded through a Clean Water Management Trust Fund grant (\$275,000) and the overall cost of the project was \$313,000. The District hire Baker Engineering firm for design, layout and observation of the project and RiverWorks was contracted for the construction. The project success was elevated by the cooperative manner in which Mr. Thacker worked with the District. Also, he donated a conservation easement (7.76acres) that will remain as such for perpetuity.

The project's original goal was to improve water quality, stabilize vertical incision and lateral migration, reduce sediment runoff, exclude livestock from accessing the stream channel, establish a large vegetated riparian buffer, and but not lest provide habitat. This was accomplished by lowering the floodplain along the upper reach and raising the streambed along the lower reach while using several types of in-stream structures that provide adequate habitat for aquatic organisms, as well as stability. The incorporation of wood with j-hooks and steps provided better habitat for the aquatic organisms. Wood logs were used as part of the arms of the j-hook instead of boulders. By utilizing the on-site debris the finished product's appearance resembled a more natural one. Since construction, the stream has had a few low to medium discharge

events, but only one bankfull event has reached the floodplain. The channel was the most venerable to erosion and instability the day that it was constructed because the vegetation had not rooted at that point. As of today the channel has had no problems during any rain events and given the vegetated cover that now exist chances are it will not.

The District has showcased this project on some of its tours and the landowner has repeatedly expressed his approval of the project.



A new channel was constructed during this priority 1 restoration! Volume 1, Issue 1

## Sandy Creek Project- Reach 1/Phase IV (completed)

Construction on approximately 1,600 feet of stream restoration, along with the planting of the vegetation material was completed on Phase IV Reach 1 of Sandy Creek this fiscal year. Reach 1 begins at HWY. 751 and flows into the wetland impoundment that was completed in Phase I of the overall watershed project. Before the construction, this reach had an incised channel with eroding banks that were claiming some of the hardwoods located at the banks edge. This project provided an excellent opportunity to raise the streambed and reconnect the channel overflow back to the abandoned forested floodplain. This was accomplished by

constructing a new channel and now all flood flows will spread onto the mature bottomland hardwood forest that is located in the floodplain. The trees that had to be removed for the new channel were used as root wads, cover logs, log vanes and floodplain habitat. This helped reduce the overall cost of the project and research has shown that the use of wood in stream restoration projects have dramatically increased the diversity of aquatic life. The finished project will enhance water quality entering Upper Sandy Creek and eventually, Jordan Lake. This is particularly important since the North Carolina Department of Environment and Natural Resources (DENR) list these water bodies as impaired by fecal coliform, excess chlorophyll a and habitat degradation. Due to the funding received through a Division of Water Resources grant (\$243,636), the District was able to implement the project. The overall cost was of the project was \$403,604.



1600 feet of the highest level of restoration (priority 1) was completed on Sandy Creek

### **Envirothon**

The Durham Soil and Water Conservation District has been working hard since the spring of 2009 on its 2009-2010 Envirothon Program. Staff has devoted many hours training student teams and organizing and hosting an Area competition that brought in over 500 students and teachers to Durham County.

The Envirothon is a hands-on, natural science academic event that challenges and engages students to think critically about the natural world and their role in it. The teams, each consisting of five students, demonstrate their management, knowledge and problem-solving skills in a competition centered on five categories: soils/land use, wildlife, forestry, aquatics, and current environmental issues.

On March 26, 2010 the Durham Soil and Water Conservation District hosted the Area IV Envirothon competition. Over 375 students from across the upper piedmont gathered at the Little River Community Complex for a day of competition and awards. The Area IV Envirothon is open to all middle and high school students in the counties of Durham, Edgecombe, Franklin, Granville, Halifax, Johnston, Nash, Vance, Wake, Warren and Wilson. Counting all the students, teachers, volunteers and sponsors, almost 500 people were on hand at the Little River Community Complex for the event.

Durham County was well represented in the Area 4 Envirothon by eleven teams from five different schools and school groups. Schools to have Durham teams for this year's competition were Voyager Middle School, Northern High School, NC School of Science and Math (NCSSM), Durham County homeschool clubs and the Durham Public School's Scientifica program. Teams that competed were:

Middle School	Cactus Huggers, Durham County Homeschool	Flying Acorns, Durham County Homeschool	Enviro Vikings, Voy- ager Academy		
High School	Juan-Pablo's, Northern HS	Ninjas, Northern HS	Cypress Knees, NCSSM	Killer Kudzu, NCSSM	Durham Public School's Scientifica Club
	Crazy Rabid Squirrels, Durham County Homeschool	5 Musketeers, Durham County Homeschool	Vicious Vipers, Dur- ham County Homeschool		

### **Annual Pond Clinic**

On June 5<sup>th</sup> the Durham Soil and Water staff held its annual pond clinic. This year the event was hosted by Barbara and Allen Powell on Hamlin Rd.

There were 81 people who attended the event, which was the largest number of participants in this event to date, demonstrating a growing popularity with the Durham residents.

The event is part of the Environmental Education program that is offered by the staff of Durham Soil and Water conservation District and participants were exposed to information and expertise in pond construction and pond management. The staff of Foster Lake and Pond Management presented a two hour session on pond site selection, construction, and management. One of the highlights of the program was the use of the "Shock Boat" which is used to stun the fish temporarily allowing the staff to analyze the size, species and population density of the

aquatic system. This technique is important in determining if the balance of species is appropriate for the size of the aquatic system. Foster Lake and Pond Management staff donated their time,



expertise and equipment to the district for this event.

## **Community Conservation**

The NC Community Conservation Assistance Program (CCAP) celebrated its second anniversary in Durham County in the spring of 2010. The NC CCAP is a voluntary based program targeting urban and suburban water quality issues. Similar to the successful NC Agricultural Cost Share Program, the CCAP is available to help homeowners and community groups install Best Management Practices (BMPs) on their property to address stormwater &/or erosion issues.

In July 2010, the NC legislature allocated \$4,565 to use in Durham County. The District also had a remaining \$23,792 from a Clean Water Management Trust Fund grant allocation it was awarded in 2008. By June 1, 2010, the District has allocated 100% of both funds to various projects in Durham County, including diversions, grassed swales, cisterns, rain gardens, bioretensions and pet waste receptacles. Many of these projects were started in the spring of 2010 and expect to be completed by this fall. The District staff has been busy working with each of these, providing technical assistance and

guidance.

On June 1, 2010, the District welcomed a new employee to take over the administration on the District's CCAP, Mike Dupree, Ag Development and Watershed Conservationist. Mike will be taking over coordination of CCAP from Jennifer Brooks who moved into leadership of the Agriculture Cost Share Program for Durham County. Mike brings more than 20 years of experience in urban gardening and drainage issues to the District and will be an asset to the Community Conservation Assistance Program.

Please contact Mike Dupree at <a href="mdupree@co.durham.nc.us">mdupree@co.durham.nc.us</a> or 919-560-0558 with your CCAP needs and questions.



Pictured right:

Pictured left: Rain Garden



### Projects funded during 2009-2010

- 1 Diversions and Grassed Swale at private residence to prevent erosion
- 1 Diversion at private residence to prevent erosion
- 2 Cisterns at SEEDs, Inc to capture stormwater runoff
- 1 Cistern at Watts Montessori School to capture stormwater runoff
- 1 90sqft Rain Garden at private residence to treat stormwater
- 1 123sqft Rain Garden at private residence to treat stormwater
- 20 Pet Waste Receptacles for City parks to prevent polluted stormwater runoff
- 1 Cistern at Central Park School for Children to capture stormwater



Volume 1. Issue 1 m Page~5

### Rain Barrels, Composting Bins, Bird Boxes, Tree Seedlings

**Rain barrel** are still a big seller in our office.

Just added this month customers can now pay with credit card when they pay online.



The barrels are 65 gallon made from 100% recycled plastic. Easy to install with a screen trap in the top to keep debris and bugs out, with a child resistant lid with built in lock channels.

Please call our office if you are interested in purchasing a barrel at 919-560-0558 or www.co.durham.nc.us/departments/ swcd. NEW

#### **Composting Bins**

New this year we added a composting



bin to our items for sale. The composting bin is 12 cubic feet and sales for \$70. We accept cash or check only for this items. Please call our office if you are interested in purchasing a composter at 919-560-0558.

**Bird Boxes** Cypress Duck Boxes for \$42, basic framed Blue Bird Boxes for \$12, A-framed Bird Boxes for \$14, Med Bat Boxes for \$32, Blue Bird Feeders for \$32 & Tall feeder for \$25

Wildflower Seeds Our wildflower seeds come in 3 varieties: bird & butterfly, shade & low growing. Each packet covers 400 sq. feet. The seeds sell for \$10 pack.

**Tree Seedling Sale** FY 2010 we sold over 600 tree seedlings and gave away over 1,000 tree seedlings to local elementary schools.

We will begin taking orders for our FY 2011 Tree Seedling sale the end of August. Please check our website or the call Lisa Marochak @ 919-560-0558 for more information.

## NC Agricultural Cost Share Program

The NC Agricultural Cost Share Program (NC ACSP) has been an active fixture in Durham County for 25 years. First introduced in Durham County in 1984, the NC ACSP allows the NC Division of Soil and Water Conservation and County Soil and Water District's to administer state funds and technical assistance to address water quality and soil erosion concerns on farms. The ACSP is voluntary based and helps farmers install best management practices (BMPs) on their land that targets natural resource concerns. From 1984 to 2010, the Durham District has allocated and installed approximately \$852,126 of BMPs on 5,342 acres of land and prevented approximately 74,974 tons of soil loss from occurring.

In 2010, the Durham District was allocated \$47,012 from the state legislature in July 2009. By June 1, 2010 \$46,483 had been re-allocated to Durham County farmers for various BMP's such as crop-

land conversion, livestock watering systems, grassed waterways, field borders and pond renovations. The cost-share staff was also busy coordinating the installation of BMPs paid for by special FY 2009 Drought appropriated funds on numerous contracts.

2010 also saw a change in leadership of the Durham County ACSP. Lynwood Faison, Soil Conservationist, retired on April 30, 2010. Lynwood had 20 years of service with Durham County and an additional 10 years of service with the Wake District. On May 3, 2010, Jennifer Brooks, formerly the Watershed Conservationist with the Durham District, was appointed the new Soil Conservationist for Durham County and will be the staff specialist for the NC ACSP.

If you have any NC ACSP questions or needs, please feel free to contact Jennifer at <a href="mailto:jbrooks@co.durham.nc.us">jbrooks@co.durham.nc.us</a> or

919-560-0558.

### Projects funded during the 2009-2010 Program Year



- 12.2 acres Cropland Conversion to Grass
- 3.5 acres in Grassed Waterways
- 0.23 acres in Field Borders
- 1 well for livestock watering system
- 0.25 acres in Grassed Waterways
- 1.15 acres in Field Borders
- 1 Pond Renovation/Restoration

Page 6

### **Farmland Tour**

On June 11, 2010 the District held a legislative tour to highlight its conservation and agricultural efforts in the county. Special guests this year included two of our County Commissioners, Ellen Reckhow and Brenda Howerton. Also in attendance were four members of the North Carolina General Assembly; Senator Bob Atwater, Chairman of The Agriculture/ Environment/Natural Resources Committee; Representative W.A. Wilkins, Chairman State Government/ State Employees Vice-Chairman Appropriations Subcommittee on Natural & Economic Resources; Representative Henry M. Michaux Jr., Senior Chairman Appropriations Committee and Representative Paul Luebke, member of the Environment and Natural Resources Committee. These guests had an opportunity to



**Pictured left:** Eddie Culberson speaking to the tour group about Lick Creek Project

challenges facing Durham County, with District Board Supervisors and Farm Protection Advisory Board members.

The tour began with stops at two stream restoration projects; R.N. Harris Elementary and Lick Creek. These two projects were funded with the state's Clean Water Management Trust Fund (CWMTF) and Division of Water Resources (DWR). These water quality improvement projects emphasized the challenges facing Durham in being a good steward of two of the State's most important water resources, Jordan Lake and Falls Lake. Durham County has a unique responsibility in protecting and preserving the reservoirs and the assembly members were able to relate the appropriations to the CWMTF and how the Durham Soil & Water District is

using those funds to improve water quality in these reservoirs. The tour then visited five farms in order to highlight the **Durham County Farmland Protection** Program adopted by the Durham County Commissioners and implemented by the Farmland Protection Advisory Board and the Durham Soil and Water Conservation Department. The guests were able to interact with farm owners and farm managers and see that Durham county farms provide economic, environmental, cultural, fiscal and esthetic benefits to the local community and the state. Three of the farms have been preserved using state and federal funds by putting these properties into conservation easements which will protect these lands in perpetuity for agricultural uses.

Continued on page 7.....

## **Durham County Big Sweep**

The Durham Soil and Water Conservation District again coordinated the Annual NC Big Sweep Clean up event for Durham County this past fall. This year's events, sponsored in part by the City of Durham, Stormwater Services Division, along with Keep Durham Beautiful, Inc., focused on removing litter from Durham's streams and watersheds. Trash disposal assistance was provided by Durham County's General Services Department and the City of Durham's Solid Waste Department.

The Durham County Big Sweep is part of the NC Big Sweep, a state-wide event to clean our state's beaches, streams, rivers and lakes. Big Sweep has expanded in the last few years to encompass the whole watershed clean up approach. Since trash left on sidewalks, streets, parks, etc... can be washed or blown into near by waterways, it only makes sense to grab the trash at it's source rather than wait for it to reach the water.

Participation reached a record high at the 2009 event. Durham County had a great turnout with 387 volunteers! Those 387 volunteers cleaned 13 different sites that encompassed an estimated 16.6 miles. Other big totals from the various clean-

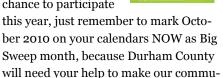
ups were: 13 total tires found, 1 large appliance, 20 bags of recyclable, 239 bags of waste and numerous unbaggable items. All together the esti-

large
bags
239
and
as. All
esti-

mated total weight of trash collected was 6,415 pounds.

### **Great job Durham!**

If you didn't get a chance to participate



To volunteer, contact Jennifer Brooks at jbrooks@co.durham.nc.us or 919-560-0558.

nity a healthier and cleaner place.



**Pictured left:** Mike & Cheryl Shiflett (Big Sweep Special Achievement Award) Volume 1, Issue 1 Page 7

## Farm Tour- continued from p. 6

Durham has a unique history in agriculture and has had a very important cross-road with regard to managing urban development and transitioning to a technology-based economy in Research Triangle Park while promoting more local food production and farmland preservation. The farms visited, illustrated the diversity and heritage of our farmers and the importance of preserving farm families and the struggle that Century Farms have had in the past and the problems that they face in the future.

The final stop in the tour was a visit to a



Pictured (left): 4H youth group

4-H youth group that was preparing and training for a

dairy cow show to be held in downtown Durham. Agriculture and education must be put into the forefront in order to protect Durham's Farms. If we do not train the next generation of farm owners and farm managers, we will not be able to preserve the contribution of farming to our economy and our heritage.



**Pictured above:** Jane Korest with Open Space & Trails speaks to the group about the Carrington Farm.

### **Performance Indicators**

<b>Program Indicator</b>	2009-2010
Stream Restoration and Stormwater Grants	\$1,275,900
Tobacco Transition Program	\$1,274,828
State Agricultural Cost Share Contracts	\$46,483 - 5 contracts
State Community Conservation Cost-Share Contracts	\$4,565 - 12 contracts
Federal Dollars Allocated	\$55,288
Durham Farmland Protection Program	Parcels-3, Acres-39
Environmental Consultants Assisted	65
Environmental Education	59,000
Drainage Erosion/Inventory and Evaluation	49 sites
Pond Inventory & Evaluation	68 sites
Sediment and Erosion Control Plans reviewed	35 plans
Development Review Board (DRB) Plans Reviewed	15 plans
Big Sweep Program	Volunteers- 387
	Pounds of Trash– 6,415
	Miles of Stream - 16.6

Page 8 2010 Annual Report

### **Environmental Education**

The Durham SWCD has a very active and growing environmental education program. From July 2009 to June 2010, the District has been actively engaged in holding workshops, programs, contest and activities for all age groups and grade levels. Some of the highlights of the year include:

Project Food, Land & People
Teacher's Workshop – The Durham
SWCD held their 2nd annual Project
Food, Land & People (FLP) teacher's
training workshop on August 12-13,
2009. Thirteen area teachers and educators participated in the 2 day workshop
and received training on the FLP curriculum.

The FLP lesson plans are 55 hands-on exploration for teachers and students into a variety of topics addressing our food, the land it's grown on and how different cultures relate to it all.

The workshop was held at For Garden's Sake Nursery off of Hwy 751 in southern Durham County. When participants weren't training in the manual, they had the opportunity to tour the Garden grounds and learn about some of their educational endeavors. Day 2 of the workshop was tour day. Participants and the District staff traveled to Elodie Farm in Bahama, NC where we were treated with a behind the scenes tour of the goat cheese operation at Elodie Farms. Lunch was enjoyed on the front porch of the old farm house on site. After lunch, everyone loaded back into the van for a short trip to NCSU's Hill Forest where we were given a lesson on tree id from the Durham County Forestry Rangers.

**Project FLP National Committee Farm Tour** – Over 30 people from across the nation serve on the Project

FLP Committee, overseeing the curriculum and program. In April, North Caro-

lina hosted the committee's annual meeting in Raleigh, NC. The Durham District was



asked to put together a short tour of local farms for the committee to enjoy one evening. On April 30<sup>th</sup>, the committee participants were led by District staff to two local farms.

The first stop was to King's Mill Dairy off Page Rd. Besides being the only dairy remaining in Durham County, King's Mill Dairy has a world renowned breeding and embryo harvesting program. The project coordinator for the breeding program gave the tour participants a brief talk about their work and then a tour of the barns and milking parlor while the cows were being milked. The second stop was to Page Strawberry Farm where participants were treated to a hay wagon ride, a discussion about the conservation practices installed on the farm and an opportunity to pick fresh North Carolina strawberries. A dinner of grilled chicken and strawberry shortcake was prepared on site and served picnic style. All participants walked away commenting on the wonderful tour provided.

The District would like to thank King's Mill Dairy and the Page Farms for opening up their operations to us.

**Field Days** – The annual Durham County Environmental Education Field Days event was October 13 & 15, 2009. The event was held at Twin Lakes Park off of Chandler Rd in eastern Durham County. The weather on October 13<sup>th</sup> couldn't have been better suited for a fun day outdoors with a group of 5<sup>th</sup> graders from Holt Elementary School. Approximately 120 students, teachers and parent volunteers enjoyed lessons on soils,

aquatics, wildlife, forestry and more. The second day, Oct 15<sup>th</sup>, dawned very cold and wet and unfortunately the field day had to be cancelled for fear of exposing the kids to the extreme



weather. After a couple of years with perfect weather, it was inevitable that we'd have a bad day sooner or later.

Despite the disappointment of the second day, the District would like to thank the Durham Cooperative Extension Service, the City of Durham Water Management, the City of Durham Stormwater Services, the City of Durham Parks and Recreation, Durham County General Services, the NC Division of Soil & Water Conservation, the NC Forest Services and the Eno River Association for their participation as presenters and supporters.

# **Contest** – Each year the Durham District sponsors Conservation Education contest for Durham County students in a variety of grade levels. The District's con-

Poster, Essay and Public Speaking

variety of grade levels. The District's contests are part of a statewide contest event sponsored by the NC Association of Soil and Water Conservation Districts. The contests consist of a Poster Contest for  $3^{\rm rd}-6^{\rm th}$  grade; an Essay Contest for  $6^{\rm th}$  grade; and a Public Speaking Contest for  $7^{\rm th}$  and  $8^{\rm th}$  grade. This past year's theme (chosen by the state association) was "The Living Soil".

Continued on page 9.....

Volume 1, Issue 1 Page 9

## Environmental Education-continued from p8

Durham County students from 3<sup>rd</sup> to 8<sup>th</sup> grade participated in the contest geared for their respective grade level. 1<sup>st</sup> and 2<sup>nd</sup> winners (and in a few cases Honorable Mention winners) were chosen from each category and honored at the District's Annual Awards Banquet (see Banquet article for more information). 1<sup>st</sup> place winners received \$50 and a plaque, 2<sup>nd</sup> place winners received \$25 and a certificate and Honorable Mention recipients received a certificate. Also, teacher of the 1<sup>st</sup> place students in each category received \$30 to be used towards school supplies.

Because the Contest is part of a statewide program, the opportunity didn't end in Durham County. The 1<sup>st</sup> place winners from each category advanced on to an area-wide competition. At the area competition, our 6<sup>th</sup> grade Poster entry won

2<sup>nd</sup> place! Congratulations to Carrington Middle School student Amber for this honor.

**RCW** – In June the Durham District awarded a scholarship to Ryan Sutton from the NC School of Science and Math to attend the NCASWCD's 2010 Resource Conservation Workshop (RCW). The RCW is a week-long camp held on the campus of NCSU for high school students interested in studying natural resource related topics in college. Part college fair, part job fair, the RCW introduces participants to many degree and career options that they might have never heard about or thought of. Students who are interested in the environment and might like to pursue a career in it one day learn about soils, wildlife, forestry and more during the RCW. At the end of the week students are tested on what they learned and scholarships are available

for the highest scores. Ryan Sutton placed  $3^{rd}$  overall on the test and received a \$100 scholarship!



**Pictured Above:** Ryan Sutton receiving a \$100 scholarship

## Envirothon-continued from p3

The top seven scoring high school and top seven scoring middle school teams from the Area IV event advance on to the next level of competition at the statewide NC Envirothon. Of the eleven Durham County teams, five scored in the top seven of their category and moved on to the state event. Also, Durham County had the 1st place Area winner in the High School division. The five to advance on were; the 'Cactus Huggers', the 'Cypress Knees', the 'Killer Kudzu', the '5 Muskateers', and the 'Vicious Vipers'. The 'Vicious Vipers' took the 1st place high school team honor at the Area 4 event on March 26th, scoring a big win for Durham County.

**Pictured above:** 1st State Envirothon winner! The Vicious Vipers

At the Statewide event on April 23-24, 2010 at Cedar Rock Park in Burlington, NC, Durham County's teams continued to shine. 49 High School teams and 48 Middle School teams from across North Carolina competed at the event. Durham County had another outstanding year of placements. The Middle School team the 'Cactus Huggers' placed 15<sup>th</sup>. On the High School side the 'Cypress Knees' placed 13<sup>th</sup>; the 'Killer Kudzu' placed 12<sup>th</sup> and won the medal for top scoring Aquatics test; and the '5 Muskateers' placed 8<sup>th</sup>. Durham County's big win came when the 'Vicious Vipers' took 1<sup>st</sup> place medals in the state of NC. Besides winning 1<sup>st</sup> overall, the 'Vicious Vipers' also won medals for top scoring Current Environmental Issues, Wildlife and Soils tests.

Because they won 1st place at the NC event, The 'Vicious Vipers' will be representing NC this summer at the North American Canon Envirothon in Fresno, CA. The 'Vicious Vipers' will be competing against teams from many US States, US territories, and Canadian Providences. The Durham Soil and Water Conservation District has been hard at work getting the team ready to compete and represent Durham County and North Carolina well. The Canon Envirothon will be August 1-6, 2010.

Page 10 2010 Annual Report

### Newest addition to Durham SWCD



Pictured above: Mike Dupree

Mike Dupree is the new Watershed Conservationist and Agriculture Economic Development Coordinator for the District. He has worked in Durham for the last 23 years as an educator and as a General Manager of a Nursery and Landscaping company. He has a Masters of Science in Life Sciences Degree from La Tech University and a Certificate of Advanced

Study in Agriculture Education from NCSU.

Mike will be administering the Community Conservation Assistance Program (CCAP), the watershed reporting and the Durham County Agriculture Development and Farmland Preservation Plan.

## Piedmont Resource Conservation & Development involvement in Durham County

### • FabLab coming to Durham County

Phase I Funding for FabLab Carolinas A
Fab Lab, or fabrication laboratory, is a
small workshop designed to "make almost anything." The labs bring invention
and creation capabilities back to local
communities by providing high-tech
equipment in an open-source environment. The main goal is to encourage
community and economic development
by enabling access for individuals to tools
for digital fabrication. The overarching
goal of Fab Lab Carolinas will be to

bridge the widening technology and economic gap by fostering innovation in the general public by offering simplified technology and instruction to benefit underserved communities. Piedmont Conservation Council recently acquired a \$70,000 grant from Z. Smith Reynolds to charter the first fabrication laboratory in North Carolina and the Southeast U.S. The grant money will be used to initiate MIT participation, to leverage other state, local, and federal grants, and to seek out

corporate sponsorship and volunteers to build the FabLab. The FabLab will be located in Durham at a location to be determined.



### •Piedmont Local Food

Phase I Funding for Piedmont Local Food
Coalition PCC obtained funding to assist
the Piedmont Local Food Coalition in
building and increasing the local food
market. The grant was obtained from the
Z. Smith Reynolds Foundation for
\$30,000. Grant money will be used to
hire a program assistant who specializes
in marketing local food to restaurants

and commercial purchasing opportunities. Coordination of events is vital to the success of Piedmont Local Foods because it increases awareness, connects farmers to consumers, and generates interest in local foods and the many benefits provided by local food. The coordinator will design, plan, and implement various events throughout the year including

competitions for chefs and caterers who use local foods and farmers' market events.



Program will help bridge gap between farmer and market Volume 1, Issue 1 Page 11

### • Funding For Clean Energy Durham

<u>Phase I Funding for Clean Energy Durham</u>: PCC secured \$13,587 in funding for



Clean Energy
Durham from
the NRCS Outreach Grant.
The funding will

support a project designed to foster neighbor-to-neighbor energy education outreach in Northeast Central Durham. It will teach neighborhood volunteers how to do no-cost and low-cost energysaving measures themselves and how to recognize the most cost-effective services fered by professionals. It will engage neighbors in learning, doing, and then teaching other neighbors. The goal is to create a strong and ongoing group of neighbors committed to neighbor-to-neighbor education beyond the project period.

of-

## **USDA-NRCS** Conservation Program Activities

USDA-Natural Resources Conservation Service (NRCS) program activities remained steady in Durham County this past fiscal year. Interest of eligible Durham County landowners in cost share opportunities continues to increase. NRCS's natural resources conservation programs help people reduce soil erosion, enhance water supplies, improve water quality, increase wildlife habitat, and reduce damages caused by floods and other natural disasters. Public benefits include enhanced natural resources that help sustain agricultural productivity and environmental quality while supporting continued economic development, recreation, and scenic beauty. During the past year, the Durham Field Office received applications for Environmental Quality Incentives Program (EQIP), Wildlife Habitat Incentives Program (WHIP), Agricultural Water Enhance-

ment Program (AWEP), and Farm and Ranch Land Protection Program (FRPP). Three of the programs, EQIP, WHIP, and AWEP, address resource concerns on a farm and can provide 50 percent to seventy-five percent cost share to install best management practices to address the resource concerns on the farm. This past year, NRCS Program contracts totaling \$6,946.00 were approved and funded for Durham County participants. Implementation of the Best Management Practices in these contracts will provide conservation benefits to 99 acres of cropland, pasture, and forest. The fourth program, FRPP, provides matching funds to help purchase development rights to keep productive farm and ranchland in agricultural uses. During the past year, the Durham County has referred 3 significant parcels of agriculture land to be entered into the FRPP. Two of the submitted

applications have been granted approval for funding and are moving ahead to place a conservation easement on these properties.

Conservation activities are on the move in Durham County. To learn more about these and other conservation programs in Durham County, contact the Durham Soil and Water Conservation District.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audio tape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).



## **Annual Banquet**

This years Annual Awards Banquet was held at the Redwood Ruritan Club on Friday May 21st at 6:30pm. There were 105 people in attendance. Ole NC Bar-B-Que prepared the meal for everyone.

Several Awards were presented at the banquet as follows:

### **Gold Star Award**

Foster Lake &

Pond Management



3rd grade 1st place

Jatavian H.



### 2010 Urban Conservationist Award

Toll Brothers, Inc.

6th grade 1st place

Amber M.



3rd grade 2nd place

Mia G.



### Forester of the Year

Lloyd & Francis Shore

6th grade 2nd place

Jarod D.



### **Public Speaking**

### **Big Sweep Special Achievement** Award

Mike & Cheryl Shiflett



5th grade 1st place

5th grade 2nd place

Jacob F.



7th grade 2nd place

7th grade 1st place

Luke R.

Jarod K. and

Chase F.

### **Envirothon Teams** Middle School

Cactus Huggers

Audrey D.



8th grade 1st place

Katie R.

**High School** 

Vicious Vipers-1st place Area IV & State

5 Muskateers

Killer Kudzu

Cypress Knees

4th grade 1st place Garrett S.



8th grade 2nd place

Kevin D.

### **Essay**

4th grade 2nd place Aubrey F.

8th grade - 1st place winner (district)

Jarod D.



### Thank You

Durham Soil & Water would like to thank everyone that was involved in making the 2010 banquet a huge success. A special thanks to the Redwood Ruritan for the use of their facility.