# Gonservation conversation

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CONSERVATION DISTRE

864-467-2755

www.greenvillesoilandwater.com

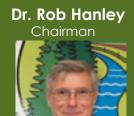


#### Our Mission

Our mission is to protect natural resources through education, programs, and cooperative efforts with partner organizations to achieve common goals for the benefit of all citizens of Greenville County with efforts in promoting:

Urban and Land Use Planning | Conservation Awareness | Sustainable Agriculture

#### Commissioners District











#### Introducing Commissioner Sean Dogan



Sean Dogan of Greenville, South Carolina has been appointed as the newest commissioner to the Greenville County Soil and Water Conservation District (GCSWCD). He is a Clemson University graduate and attended the Shaw School of Divinity in Raleigh, NC. Dogan currently serves as the senior pastor at Long Branch Baptist Church and has played an important role in bettering the community through his participation in Greenville Health System, United Way, Greenville Forward, Livewell Greenville, Senior Action, Generations Group Home, and other local organizations. A graduate of The Riley Institute Diversity Leadership Initiative, Mr. Dogan is interested in helping the youth of the county adopt strong values of environmental stewardship. He states that "from an environmental standpoint our youth aren't aware of the things they can do to help the environment. I want to help them learn."

#### Introducing Associate Commissioner Ashley Clark



Ashley Clark is a 2012 graduate of Clemson University and the co-owner/operator of Kilwins Chocolates, Fudge & Ice Cream in Downtown Greenville. In addition to owning her own business, Ashley is very active in the community. She serves as the Co-Chair of Downtown Greenville Holiday Happening, volunteers as a Girls on the Run Coach, and is an Area Organizer for CAKE&WHISKEY. She also serves as the Area Chairman for Ducks Unlimited. Ashley is married to Landon Clark. Together, they enjoy volunteering at The White Horse Academy, a residential treatment center for boys age 13 to 17. There they coordinate special events, care for the organic garden, and teach a weekly class on personal finance.

#### Staff Directory

Kirsten Robertson Linda Creel Lynn Pilewski Maddi Phillips Lynne Newton Collin Buckner **Drew Williams** 

District Manager	Extension 110
Administrative Support	Extension 111
Education Program Coordinator	Extension 103
Community Relations Coordinator	Extension 107
NRCS District Conservationist	Extension 108
NRCS Soil Conservationist	Extension 102
DNR Program Coordinator	Extension 109

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## 2015 Interns

Greenville County Soil and Water Conservation District is pleased to welcome our 2015 summer interns!

#### College Level Intern Program

Each semester, GCSWCD offers one college student (or recent graduate) the opportunity to work with our Education Staff and learn the ropes of public outreach and work on a project of personal significance.

This summer Ben Lam is working on a documentary video about one of the District's recent projects in a local neighborhood. This video will be presented at the SENACD meeting in August. Additionally, it will be used as part of an NACD webinar this fall and will be available on our website and YouTube channel.

Ben is a 2015 Clemson University graduate with a BS in Wildlife and Fisheries Biology. In addition to his GCSWCD internship, Ben is working with the Department of Natural Resources on fisheries programs.



Ben Lam, Clemson University

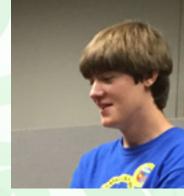
#### High School Summer Intern Program



The District also offers a summer intern program for high school students. This volunteer internship is designed to help students learn about stormwater and public outreach. Three students were selected for the 2015 program based on a rigorous application and interview process. We were lucky to get the best of the best for this year's class. They attended a one day "Intern Camp" and have participated with education staff at local events. They've even created a Yucky Ducky jingle and have prepared a radio



**Linda Cortes Wade Hampton High** 



**Hans Robertson Southside High** 



Will Taylor **Riverside High** 

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Summer Interns

#### 2015 Education Award Winners

#### **ESSAY CONTEST WINNERS**

This year marked our 72nd Annual Conservation Essay Contest. Our theme was "Local Heroes, Your Hardworking Pollinators". With so many wonderful entries, it was hard to choose winners!



#### 6th GRADE WINNERS

Olivia Corvin Riverside Middle
Anna Hickey Riverside Middle
Cameron Tsai Sterling School

## TEACHER GraceJohnson Richane Robbins Jennifer Johnston

#### 7th GRADE WINNERS

Ryan Chapman Caleb Gosnell Christopher Marbut Riverside Middle Northwest Middle Northwest Middle Cindy Woody Cynthia Brandeis Margaret Dacko

8th GRADE WINNERS

Anthony Cinquemani Rachel Enggasser Arnav Lal Sterling School Sterling School Sterling School John Burdick John Burdick John Burdick

## CONGRATULATIONS WINNERS!

## Outstanding Contribution to Environmental Education Darrell Harrison

Mr. Harrison has spent a lifetime facilitating science and conservation education in Greenville County.

The School District of Greenville County teachers and administrators had a vision for a science center that could provide the district's 68,000 students with innovative opportunities to experience hands-on science enrichment activities. In 1983, the school board hired Darrell Harrison as director to pursue the science center's future.

Under his direction, the council proposed a comprehensive master plan that included facilities to teach life, earth, and physical sciences. He furthered the goals of the science center until his retirement 2002. The science center now offers a planetarium, a butterfly garden, a teaching farm and many other educational opportunities for Greenville County residents. The Harrison Hall of Natural Science is named after him.



Mr. Harrison also served Greenville County Soil and Water Conservation District as a commissioner from 2006-2014. When asked what he feels is his greatest accomplishment, though, it isn't a professional achievement. "My 50 years of marriage to the same person and my two sons are what I am most proud of."

#### Conservationist/Cooperator of the Year

## Urban Conservationist of the Year Mill Village Farms

Mill Village Farms began in the spring of 2012 when 25 volunteers gathered to break ground on a new urban farm model. The concept is simple: build small, sustainable, organically-managed farms that promote holistic development in our communities.



Many mill village communities have been labeled as food deserts. This means residents have wide access to heavily processed foods and limited, often expensive, access to fresh, locally-grown produce. Mill Village Farms is working to combat this situation by establishing fruit and vegetable farms on neighborhood street blocks. Neighborhood interns and volunteers then serve as advocates for the community by sharing the fresh grown produce with other neighbors. Aside from increasing access to healthy foods, community farms are promoting physical activity and healthy eating. But these farms are also benefiting the environment: beautifying abandoned properties, managing storm water, and increasing biodiversity.

They operate two urban farms, two rural farms, and have developed Greenville's first rooftop farm on Main Sreet. The organization markets their farm fresh foods through the "Good to Go Mobile Farmers Market", which provides access to local produce in under-resourced, "food-desert" communities where there is little-to-no access to healthy and affordable food options.

## Cooperator of the Year Wilson Farms

The Wilson Farm, as it is known today, traces its history to 1784 with the purchase of 640 acres by Revolutionary War veteran George Salmon. Salmon's log house survives as part of a National Register home on the property. The current owners, Herman, Doug, and John Walker are not related to Salmon, but their grandfather began acquiring parts of the original Salmon tract in the 1950s.



The property is actively farmed and grazed today, including haying, beef cow/calf operations, and intensive produce

farming. Most of the timber on the property is mature hardwood, with some planted pine stands where mature pine was previously harvested. Some areas are maintained in brushy condition for game.

The owners are avid outdoorsmen, and enjoy the challenge of balancing these uses in the best possible way. Wild turkey, deer, bear, dove, duck, woodcock and fur bearing animals seem to be thriving. Over 170 species of birds have been identified on the property. Ongoing challenges include limiting runoff, controlling invasive species, and restoration of Bob White Quail. These are areas where NRCS has provided assistance through the Environmental Quality Incentive and Conservation Stewardship programs, and offers promise for future progress.

Conservation Awards

2015

#### Affiliate and Award Gala

#### **Annual Gala Event**

Our 76th Annual Affiliate and Awards Gala was held on May 14. Guests enjoyed the Luau theme and the weather was perfect for an outdoor event! Even General Yucky Ducky got into the spirit and posed with our guests and award winners!













#### Gala Sponsors

A special thank you to all of our generous gala sponsors. With their help, we were able to give away almost 90 door prizes to attendees!

- 3 Dog Pet Supply
- Canvas One
- The Commerce Club
- Country Boys Nursery
- Earthen Organics
- Embassy Suites
- Fox Carolina
- Greenville Zoo
- Greenbrier Farms
- Grow Journey
- Hyatt Regency Greenville
- Jody Childs
- Keep Greenville County Beautiful
- Kilwins
- Michelin North America
- Padulas Plants
- Pecan Dale Farmstead
- Petco
- Summit Media
- Upcountry History Museum
- Upstate Forever
- Vom Fass
- WSPA

#### Fun at the Luau!



# Affiliate Membership Since 1971, citizens, businesses and educational institution

Since 1971, citizens, businesses and educational institutions in Greenville County have donated tax deductible gifts to the Greenville County Soil & Water Conservation District. The District uses affiliate member funds to provide a wide variety of environmental education programs, demonstration projects and outdoor learning opportunities. **JOIN ONLINE** 

District education programs reach students of all ages, classroom teachers, informal educators, pet owners, homeowners, farmers, contractors, members of the public and elected officials.

#### We need your help to continue these important programs!

- Awards for Greenville County students for photographs, science projects, and essays written on natural resource conservation topics
- Sponsorship of high school students to attend Envirothon and Governors' Institute for Natural Resource Education
- Workshops for educators in Project WILD, Project WET and Project FLP (Food, Land, People)
- Classroom programs for Greenville County schools, reaching hundreds of students each year
- Interactive exhibit displays at area events, fairs, and Earth Day celebrations
- Funding for Outdoor Learning Centers, community rain garden projects, and interactive learning activities
- Funding for mini-grants to schools and organizations for conservation education

#### A Heartfelt Thank You To Our Affiliate Members

#### Leaders

ReWa - Renewable Water Resources

#### Conservationist

Strange Brothers Grading Company, Inc. Padula's Plants and Gardens

#### **Educators**

Darrell & Georgia Harrison

#### **Patrons**

AgSouth Farm Credit
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Mountain View Farm
Ed & Judy Nabers
Nature Walk Photography
Padula's Plants and Garden
Pecan Dale Farmstead

#### Supporters

Bob & Claire Bradbery Arbor Engineering, Inc. Howard Farms Butch & Diane Kirven Green Lakes Properties Dr. Walter McPhail Pooprints of the Upstate

#### Conservation Mini-Grants Awarded

Thanks to the continuing support of our Affiliate Members, the District was able to award five mini-grants in the amount of \$250 each to local school conservation projects. Grants went to:

- Slingshot Movie and Discussion Panel Wade Hampton High School screened a documentary called "Slingshot", which tells the story of Dean Kamen (inventor of Segway) and his water purification technology on March 31. A panel discussion followed made up of water industry experts.
- Whoo's Recycling at Oakview Mural Project This is a large wall mural project created entirely from recycled items collected from the Oakview Elementary school community. The mural is located outside the school's science lab which is the hub of their recycling program.
- Beeswax and Honey Product Development Greenville Tech Charter High School Juniors Group 1 created a line of honey, bee and beeswax related products to create an interest in bees. Funds were used to purchase a small supply of honey and wax for the class's experimental plans and retain the services of a Master Naturalist to consult.
- **Decomposer and Soil Quality Project** Greenville Tech Charter High School Juniors Group 2 set out to discover whether the type of decomposer affects the soil they produce. Students aimed for an improved understanding of how different types of worms affect soil in general and used worm bins for their experiments.
- Trout in the Classroom Slater/Marietta Elementary students raise trout in a classroom setting throughout the year with the goal of releasing them at Table Rock State Park. Teachers are trained by SCDNR and educate all 500 students about giving back and natural resources.

#### For Their Generous Support

Rogers & Callcott Environmental Sprague & Sprague Consulting Engineers

#### Contributors

William N. Gressette, Jr.
Dr. & Mrs. Robert Hanley
Dr. David L. Hargett
Danny & Nan Howard
Ted V. Howie
Grady & Mary Rose Jones
North Greenville University
Pace Building Company
Fred & Kay Payne
Gary & Fran Richardson
J. Randall & Pat Wynn

Universal Cafe/Palms Art Gallery

#### **Event Sponsors**

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Kilwins
Mean Street Motorsports
Rusty Nuts
Tommy Pike Customs
WSPA

Affiliate Membership

#### Caught in the Act!



Is that a 20' Yucky Ducky?



"Connecting the Drops" at **Duke World of Energy** 



This (not a poop) fairy made an appearance at Tails and Trails 5k



Kids learned about water pollution and "Connecting the Drops" at Party for the Planet



Defend Your Drain in the Yucky Ducky Arcade



Over 15,000 people attended the iMAGINE Upstate festival and we saw all of them!



Learning about the water cycle at Parks and Rec Day at Lake Conestee Nature Park



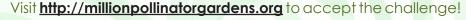
Our biggest fan (literally) wears his "There is No Poop Fairy" button at Yappy Hour

#### **POLLINATOR PROGRAMS**

#### Million Pollinator Garden Challenge

In an unprecedented collaboration, dozens of conservation and gardening organizations have joined together to form the National Pollinator Garden Network and launch a new nationwide campaign – the Million Pollinator Garden Challenge.

Designed to accelerate growing efforts across America, the Network is launching the Challenge to reverse the decline of pollinating insects, such as honey bees and native bees, as well as monarch butterflies.







#### **NRCS Cost Share Funding for Farmers**

Do you grow vegetables or fruits on your farm? Would you like more pollinators buzzing around your crops?



The Natural Resources Conservation Service offers cost share funding through the Environmental Quality Incentives Program (EQIP) to assist farmers in establishing pollinator habitat and many other practices on their farms.

To participate in EQIP, an applicant must be an individual, entity or joint farm operation that meets EQIP eligibility criteria.

Applicants may call the Greenville NRCS office at 467-2755 ext 108 for more information. The application cutoff for 2016 funding is November 20th.

Suppport Our Pollinators

Article by Maddi Phillips, GCSWCD Community Relations Coordinator

If you're reading this article, there's a good chance you have an interest in conservation. Why else would you pick up a magazine called Conservation Conversation? To start the conversation, you must first understand your subject matter. In general, there are two schools of environmentalism: conservation and preservation. While the two terms are similar and often used interchangeably, there are distinct and important differences between them.

We'll start with preservation. In essence, preservation is a hands-off management technique in which land is set aside and left for nature to run its course. It is a "look but don't touch" practice that protects land from development and permanent human settlement. Preservation is a wildernesscentric ideology that ensures sanctuary for wild places and their inhabitants.

The idea of wilderness was solidified on a federal level with Lyndon B. Johnson's 1964 Wilderness Act, which created the National Wilderness Preservation System. This immense system protects lands with the highest level of governmental authority and includes National Forests, National Parks, National Wildlife Refuges, and Bureau of Land Management lands. Today there are 762 Wilderness Areas across America. Luckily for us outdoorsy folks, humans are allowed to visit certain parts of these systems, like hiking trails, camping spots, and nature centers.

Conservation, in contrast, is a more utilitarian approach to natural resources. Like preservation, the end goal is long-term sustainability, but rather than separate man from the process, conservation incorporates him. Like any other species, Homo sapiens rely on Earth's resources to survive. Conservation is an ethic of renewable and responsible resource use. It is using a stock in a way that allows it to be consistently replenished. It is practices such as forestry, farming, and fishing that can utilize Earth's bounty while ensuring our children have access to the same resources in the same abundance. Conservation serves as the scales to the balancing act that is man and nature.

Soil and Water Conservation Districts, such as yours truly, were created in response to the 1930s Dust Bowl, which resulted from a combination of drought and poor land management. In 1937, Congress declared soil and water conservation a national policy and priority, and Franklin D. Roosevelt urged each state to pass legislature to form Soil and Water Conservation Districts. Thus began a movement of applying best management practices to help farmers and land owners sustain and protect their lands from ecological degradation. Today, there are nearly 3,000 Conservation Districts throughout the United States that assist and educate land users.

Personally, I fall somewhere in the middle of these two parties. A preservationist by heart, I want for there to always be beautiful places free of development and human intervention where wildlife and habitat are allowed to exist as they always have. A conservationist by trade, I recognize the need for man to use natural resources, and I want to ensure that is done in a sustainable and kind way. Only by merging these two philosophies into a larger comprehensive practice will we truly find harmony between man and nature.

In the immortal words of conservation pioneer Hugh Hammond

"Take care of the land and the land will take care of you."

#### **Shocking Surveys**

Article by Ben Lam, GCSWCD Summer Intern, who also works with DNR on projects relating to his degree in fisheries and wildlife.

There are about 159 freshwater fish species in South Carolina. Most of these fish go unseen and unknown by many people, because generally, people only know about game species: fish that are caught for sport or for food such as trout or bass.

Since people don't realize how much biodiversity our lakes and streams hold, they often aren't concerned with conserving these habitats and resources.

So how do researchers monitor these evasive critters so that conservation plans can be made? **Electrofishing** is one very effective method that allows scientists to collect data.

There are different types of electrofishers; backpack, tote barge, and boat. Pictured below is the backpack type of electrofisher. The surveyors uses two electrodes to deliver electricity into the water in a small field to stun fish. The electrofisher equipment allows the surveyor to regulate the electricity safely for different situations.

While the fish are stunned, a designated netter will collect the fish for data collection. If done correctly, the fish will be stunned for a couple of minutes and be unharmed and released after the desired information is collected.

While most fish are released, there are cases that require some fish to be sacrificed to obtain otoliths. Otoliths are the ear bones of fish. These bones can be read like tree rings under a microscope to determine age. This data helps scientists to understand how environmental factors can affect the fish's growth rates.

I've only mentioned fish, but there are so many other species that inhabit these waters too. Even though some creatures are elusive, we need

to be aware of the fact that we all share this common resource with them and that our future generations will be using these exact resources in the future.





Elecrtofishing

Surveying

Local Rivers

#### **How Will My Garden Grow?**

Article by Lynn Pilewski, GCSWCD Education Program Coordinator

Can anyone grow their own food? I set out to see if someone with a "black thumb" could do it. I figured if I could do it, anyone could! My grandfather and mother are both amazing gardeners who could grow anything. Grapefruit, oranges, lemons, tomatoes, peppers, avocados, flowers, figs, mangoes, papayas – nothing seemed to wither on the vine. Then there is me. I've never had success with plants, but that is going to change this summer!

Growing food always seemed complicated and difficult. I had a vision of endless weeding and thinning plants, then having a crazy amount of cabbage or something else I wouldn't eat. It really seemed like it was too much effort for little gain. Then my eyes were opened - our District Manager let me borrow her Square Foot Gardening book. Reading it set off a light bulb in my head. Novel ideas - only grow what you are going to eat! If plants should be spaced 6" apart, only plant one seed at that spot! This concept was genius for me. It brought the process down to steps that I could see myself accomplishing. After planting, the time required would be about an hour a week. This makes gardening and growing food feel like it is something I can do.



So, this was the year. My husband and I got ready to grow food. We put in two 4'x4' raised beds, filled them with 6 types of compost, peat moss and vermiculite then started off. After getting great advice, heirloom tomato, cucumber and pepper plants and herbs were purchased locally. Everything else was grown from seeds.

To the right is what one of the beds looked like just after planting in April. Below that, the same bed in July. Successful so far! Some things made it and some didn't, but it has been a real learning experience. I discovered that I can do it and so can you!





I am currently detailing the journey at www.howwillmygardengrow.com. Stop by to see how our garden is doing!

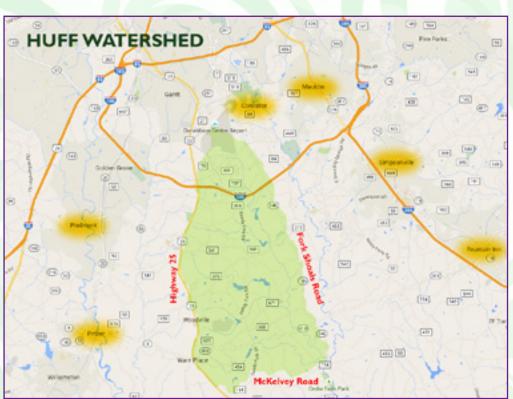
#### Do You Have a Septic Issue?

#### Help may be available!

The Greenville Soil and Water Conservation District is administering a 319 Grant to address septic system problems in the Huff Creek watershed for the **Reedy River Water Quality Group** ("RRWQG"). This two-year project was funded by the US EPA through the SC Department of Health and Environmental Control (SC DHEC). The funds will address failing septic systems at homes and businesses to reduce the amount of bacteria in local waters.



The grant pays 60% and the homeowner pays the remaining 40%. Failing septic systems have been identified as a key pollution source in the Huff Creek area.



Roads show approximate boundary lines of the watershed. Call 467-2755 to see if your property is in the watershed.

Septic systems, if properly installed and maintained, can protect public health, preserve valuable water resources, and maintain economic vitality in a community. Unfortunately these systems are often installed and largely forgotten – until problems arise. According to the EPA, an estimated 10 to 20 percent of these systems malfunction each year, causing pollution to the environment and creating a risk to public health.

The EPA and SC DHEC have realized the negative impact of septic system failures and have therefore offered grants to assist with these repairs and other pollution sources on a watershed scale. Our top water quality concern in Greenville County is bacteria, and these grant funds will enable us to reduce the pollutant load in our waters.

For more information regarding eligibility in the program and watershed boundries, contact Kirsten Robertson at 467-2755 x110

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**Srowing Food** 



#### GREENVILLE COUNTY SOIL AND WATER CONSERVATION DISTRICT

301 University Ridge, Suite 4800 Greenville, SC 29601



### **Upcoming Events**

Save the date for these District events that will be happening over the next several months! Stay tuned for more information!

Wet & Wild Water Camp **Park Hop Closing Event** Cocktails for a Cause @ Commerce Club **Annual Photography Contest** Southern Home and Garden Show Booth for a Cause @ Saturday Market **Get Out Greenville County Wide Yard Sale** 73rd Annual Essay Contest GCSWCD Giddy-Up Gala

July 20-25 Aug 14 Aug 27 **Begins Sept 1 Sept 18-20** Sept 26 Oct 3 Oct 24

**Entries Due March 2016** May 19