Spring 2014

Conservation Innovation Grant: Telling the story of cover crops in SC



etch & Clover Cover Crop Photo by Jason Carter

Richland Soil and Water Conservation District



Left: Jason Carter of Carter Farms in Eastover, SC, has been practicing conservation tillage for eighteen years and recently began using multi-species cover crops. He is participating in a Conservation Innovation Grant project to demonstrate the benefits of these cropping practices in SC. **Right**: Dr. Buz Kloot, a researcher in USC's School of Public Health, and Richland SWCD's Education Coordinator Chanda Cooper sample the above-ground biomass of Carter's vetch and clover cover crop. (Photos by Joey Frazier.)

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Through a Conservation Innovation Grant In February, Carter and fellow CIG farmer (CIG) partnership with the Dillon and Marlboro Soil and Water Conservation Districts (SWCDs), Dr. Buz Kloot from the USC School of Public Health, and five farmers, the Richland SWCD has embarked on a three-year initiative to demonstrate and document the benefits of multi-species cover crops and conservation tillage.

Following fall soil sampling (featured in our Winter 2013 newsletter), cover crop blends composed of at least four species were grown in demonstration fields. In the demonstration field at Carter Farms, owned by Jason Carter, a rye, clover, vetch, and radish blend produced some 9,455 pounds (dry weight) per acre of green stems and leaves, termed "above-ground biomass," by early April. The cover crop also fostered a vibrant community of underground roots and soil organisms, including earthworms. This organic matter and soil fauna is improving soil health and will provide nutrients to the cash crop Carter plants this spring.

-participants shared their personal experiences with cover crops at a Cover Crop and Soil Health Forum sponsored by NRCS in Florence, SC. In March, the Dillon SWCD and Dillon County CIG farmers hosted a Cover Cropping field day. More than 90 people attended to learn about the CIG project and discover how cover cropping is an effective and economical practice to conserve and improve soil health while enhancing crop yields. In April, Carter hosted a contingent of agriculture professionals at his farm to see for themselves how cover crops are improving his soil.

Project partners have created an open Facebook group called the **Carolina Cover Crop Connection** which provides a forum for farmers and agriculture professionals to share news, information, questions, and experiences about cover cropping in the southeast. To participate in the group, visit https://www.facebook.com/groups/ carolinacovercropconnection/.

Richland SWCD Welcomes New Commissioner



Jim Rhodes was sworn in as a Commissioner with the Richland SWCD on April 14, 2014. He retired from AT&T as Area Director in 2007.

Jim Rhodes was appointed to the Richland SWCD Board of Commissioners in April. He replaces Mark Huguley, who was elected Mayor of the Town of Arcadia Lakes in November.

Mr. Rhodes is a native of Birmingham, Alabama and a graduate of the University of Alabama. He served in the US Air Force Strategic Air Command and is a Member of the National Guard Youth Challenge Foundation Board, Past Commander of American Legion Post 6, Training Director for SC ESGR, Member of the Columbia USO Advisory Board, and Colonel on the Joint Services Detachment of the SC Military Department.

Additionally, Mr. Rhodes is Vice-Chairman of Carolina Sunshine, an organization serving children with lifethreatening illnesses.

Mr. Rhodes has served as an Associate Commissioner with the Richland SWCD since 2011. He enjoys golf, cooking, reading, running, bird watching, and collecting stamps and coins. Mr. Rhodes and his wife, Gloria, have two children and two grandchildren.

"I look forward to promoting conservation and protecting our valuable natural resources for future generations," says Rhodes.

In SC, Conservation Districts are governed by boards of five Commissioners. Three are elected in the general election, and two are appointed by SCDNR.

Recent Event: Pasture Management Workshop

The Kershaw and Richland SWCDs partnered to present a Pasture Management Workshop on April 9. Some 75 people attended to learn about soil health and fertility, weed control, grazing management, and resources available to assist pasture managers through NRCS, FSA, Carolina Farm Stewardship Association, and SC Conservation Districts. The workshop was presented through Organic Richland, a cooperative program with NRCS. Slideshows from the workshop are available online at <u>www.rcgov.us/rswcd</u>.



Pasture Fertility: The presence of greener, healthier plants around manure piles in pastures, as in the photo above, indicates fertility deficiency. Soil tests should be conducted in pastures every three years, according to NRCS Agronomist Gordon Mikell. (*Photo from Gordon Mikell*)



Grazing Management: Pastured livestock should be managed to avoid overgrazing. Plants in overgrazed pastures have poor, shallow root systems and are less tolerant of drought than plants in well-managed pastures. Rotational grazing can help avoid overgrazing. (*Photo from Jill Epley*)

Upcoming Events



Environmental Education Association of South Carolina

The Science of Nature: STEM Standards for Environmental Education

EEASC 2014 Annual Conference June 13-15 St. Christopher Camp and Conference Center Seabrook Island, SC

> Details and Registration: www.eeasc.org

Pollinator Habitat Workshop June 4, 2014

Save the date! Details TBA. Clemson Sandhill REC 900 Clemson Rd., Columbia, SC 29229 Sponsored by the Richland SWCD through Organic Richland



Advanced Farming Technologies for Reducing Climate Risk August 12, 2014



Clemson University Edisto REC 64 Research Rd., Blackville, SC 29817

FREE REGISTRATION
<u>http://www.agroclimate.org/seclimate/events/</u>



K-12 Poster Contest Deadline: May 15, 2014

The 2014 National Conservation Poster Contest theme is "Dig Deeper – Mysteries in the Soil" or simply "Dig Deeper." One of these titles must be on the poster for it to be eligible for judging. The Contest is open to public, private, and home-schooled students in grades K through 12. Richland County students should submit their posters to the Richland Soil and Water Conservation District for local judging by **May 15, 2014**; students in other counties in SC should contact their local conservation district for entry deadlines and details.

Cash prizes will be awarded to winners in each gradelevel category, and County winners will progress to the State competition.

> Richland County details and entry form: <u>www.rcgov.us/rswcd</u>

Project Learning Tree at Benedict College



"I am heartwood, I am strong!" "Gurgle, gurgle; slurp, slurp! Water to the tree!"

Tree-chants and interpretive movements brought the group of college students, preK-8 teachers, and informal educators to laughter at the recent Project Learning Tree (PLT) workshop held at Benedict College.

During the workshop, which was sponsored by the Richland SWCD with support from the Richland and Lexington Countywide Stormwater Consortia, The Barclay School, and Benedict College, 19 people were trained to use the PLT preK-8 environmental education curriculum.

Many of the trainees were pre-service teachers who will use the curriculum in their own classrooms. Each participant left with a copy of the PLT Curriculum Guide containing more than 100 ready-to-use classroom

activities.

"My students loved their Project Learning Tree experience Saturday. Their enthusiasm for science, education, and learning have been fired up. I didn't realize how much my students would be impacted," says Jennifer Strickland-Poole, an instructor in Benedict College's Education Department who took part in the training.

The Richland SWCD offers PLT trainings for educators in Richland County and participates in the SC PLT Steering Committee. The SWCD's youth education programs also incorporate PLT activities.

For more information about PLT, visit the PLT website at <u>www.plt.org</u>. To schedule a training for educators in SC, contact SC PLT Coordinator Stephanie Kolok at <u>SKolok@scfc.gov</u>.

PLT educator trainings are active, participatory experiences where educators engage in the preK-8 activities as though they are students. The "Tree Factory" activity (pictured top and center) incorporates science, physical activity, and the performing arts, and it can be conducted indoors or outdoors. Later, in the classroom, trainees and facilitators debrief the activities and discuss ways they might use or modify them to fit specific youth audiences.

Four Schools Receive Conservation Mini-Grants

Four schools have received \$250 Conservation Education Mini-Grants from the Richland Soil and Water Conservation District to support on-campus environmental initiatives. These projects promote natural resource conservation and education while enhancing student learning.

The recipients of Spring 2014 Conservation Education Mini-Grants are:

- Full Gospel Christian Academy (Arleatha D. Simpson)
 School Garden
- Harmony School (Jennifer Mancke) Living Wall Planter

- Heathwood Hall Episcopal School (Jim Morris) In-Vessel Composting
- Hammond School (Dr. Aruna Dasgupta) Reused Plastic Bottle Greenhouse

Faculty and staff members of public, private, and alternative schools in Richland County are eligible to apply for Conservation Education Mini-Grants to support campus conservation projects and youth environmental education initiatives. The next application deadline is October 15, 2014. Details and the application are available online at <u>www.rcgov.us/rswcd</u>.

Richland County Students Win State Contest

Two Richland County students were named state winners in the "Where Does Your Water Shed" conservation poster contest sponsored by the National Association of Conservation Districts (NACD).

Sarah Bobertz, a first grader at A.C. Moore Elementary School, was the winner in the Kindergarten through 1st

Eagle Scout Mini-Grants



The Richland SWCD awarded Eagle Scout Candidate James Foster, pictured above with Chairman John V. Green, a \$250 Eagle Scout Mini-Grant to make improvements to the outdoor classroom at Catawba Trail Elementary School. Foster constructed a circular seating area around a large sycamore tree and extended the school's nature trail by 1/3 mile. At the SWCD's January meeting, Foster presented a report on his service project and thanked Commissioners for the District's financial support.

The Richland SWCD supports Richland County Eagle Scout candidates whose projects promote natural resources conservation or conservation education initiatives. One Eagle Scout Mini-Grant of up to \$250 is awarded each fall and spring. The proposed project must be located in Richland County.

Interested Scouts may apply for funding by completing an application, available online at <u>www.rcgov.us/rswcd</u>. The submission deadline for consideration for fall funding is **November 15**; the deadline for consideration for spring funding is **May 15**.

Grade category. Blythewood High School freshman **Fiona Aldighieri**, who was a student at Longleaf Middle School at the time she submitted her poster, was the award winner in the 7th-9th Grade category. Each student received a \$25 cash prize from the SC Association of Conservation Districts, and their posters have progressed to the national competition.

Youth Programs



Students at St. John Neumann School learn about watersheds and water quality through Enviroscape presentations facilitated by the Richland SWCD.



Richland SWCD Volunteer Heather Barberio leads students in an investigation of soil quality and soil conservation at Satchel Ford Elementary School's Science Day.

NRCS News: 2014 Farm Bill

The 2014 Farm Bill, signed into law in February, is streamlining key conservation programs while investing about \$18.7 billion in conservation programs offered by USDA's Natural Resources Conservation Service (NRCS) over the next five years.

The bill streamlines some conservation programs and consolidates and expands conservation authorities of NRCS, one of the Richland SWCD's partners. "The new 2014 Farm Bill is an excellent way to encourage agricultural stewardship as it continues to consolidate and expand the available conservation opportunities," says Richland's District Conservationist Ajoa Harris.

A comparison of programs included in the 2008 and 2014 bills is at right. Current contracts enrolled in Farm Bill programs are not affected. Key program changes include:

• Financial assistance programs: The Environmental Quality Incentives Program, or EQIP, will absorb the Wildlife Habitat Incentive Program and make similar practices available. The Conservation Stewardship Program and Agricultural Management Assistance will be continued.

• Easement programs: The agency's key easement programs will be merged into a new program called the Agricultural Conservation Easement Program, or ACEP. ACEP includes the former Wetlands Reserve Program, Grasslands Reserve Program and Farm and Ranchlands Protection Program. Funding for wetland and grassland protection expired Sept. 30, 2013, and the 2014 Farm Bill reinstates funding for these critical efforts under ACEP.

• **Partnership programs:** The agency's regional conservation efforts have a home in a new program – the Regional Conservation Partnership Program, or RCPP. Critical conservation areas for this new program will be designated by

Agriculture Secretary Tom Vilsack. NRCS will also select project areas at the state and national level.

To learn about technical and financial assistance available through conservation programs, contact your local USDA Service Center or visit <u>www.nrcs.usda.gov/GetStarted</u>.

Richland and Calhoun County NRCS Field Office

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Below is a quick summary of changes made to conservation programs in the new Farm Bill, enacted on February 7, 2014. These programs are administered by USDA's Natural Resources Conservation Service. The new Farm Bill streamlines conservation programs that enable farmers, ranchers and forest landowners to get assistance.

To get started with NRCS, visit www.nrcs.usda.gov/GetStarted or visit your local USDA service center.

	Previous Farm Bill	vs. New and Streamlined Farm Bill
Financial Assistance	Environmental Quality Incentives Program Wildlife Habitat Incentive Program	> Environmental Quality Incentives Program
		Conservation Stewardship Program
	Agricultural Management Assistance	}·····▶ Agricultural Management Assistance
Easements	Wetlands Reserve Program Grassland Reserve Program Farm and Ranch Lands Protection Program	Agricultural Conservation Easement Program
		> Healthy Forests Reserve Program
Partnerships	Cooperative Conservation Partnership Initiative Agricultural Water Enhancement Program Chesapeake Bay Watershed Initiative Great Lakes Basin Program	Regional Conservation Partnership Program
Other	Technical Service Providers	> Technical Service Providers
	Conservation Innovation Grants	Conservation Innovation Grants
	Agriculture Conservation Experienced Services Program	Agriculture Conservation Experienced Services Program
	Voluntary Public Access and Habitat Incentive Program – administered by Farm Service Agency	Voluntary Public Access and Habitat
	Emergency Watershed Protection Program®	Emergency Watershed Protection Program
		Small Watershed Rehabilitation Program

"EWP and Small Watershed Rehabilitation Program are not Farm Bill programs but are offered by NRCS; Small Watershed Rehabilitation Program was funded through the 2014 Farm Bill An equal opportunity provider and employer.

SCACD News: Dwight Davis, New Officers, and Awards

Lexington SWCD Commissioner **Dwight Davis** was elected to the office of President of the SC Association of Conservation Districts (SCACD) at the annual Conservation Partnership Conference in February. He takes up the mantle formerly held by Sterling Sadler of Florence, who served as President for the past four years.

"I want to thank Sterling Sadler for the many hours and all she has given this State...her leadership has moved [SCACD] and conservation in the direction we needed," Davis said in his address to the Districts.

Richland SWCD Commissioner **Kenny Mullis** was elected as Vice President, Jeff Wilson as Secretary, and Diane Edwins as Treasurer. Bennie Copeland will represent Richland County as East Piedmont Area Representative.

During the Conference, Richland SWCD Education Coordinator **Chanda Cooper** (left) was recognized as SCACD's 2013 District Employee of the Year, and Richland teacher **Melinda Beach** (right) was named Primary Teacher of the Year.



The 2014 Conservation Partnership Conference saw record attendance, with 195 present at the Award Luncheon and 235 (including 46 legislators) at the Legislative Dinner. The 2015 Conference will be held February 24-25 at the Columbia Marriott.

Making Small Farms into Big Business



South Carolinians buy \$11 billion of food each year, but less than 10% is produced in-state. A report released by the SC Departments of Agriculture and Commerce in December, called *Making Small Farms into Big Business* (*MSFBB*), recommends improvements

to SC's farm and food infrastructure to increase the amount of food produced and purchased in-state. These improvements could increase the revenue of small SC farmers by \$1.2 billion annually.

Among the recommendations are proposals for the development of 15 to 20 "nodes" of production, where farmers share production infrastructure such as sorting, packing, and storage facilities and equipment; refrigerated trucks and delivery vehicles; hoophouses and greenhouses; and even irrigation wells and drip irrigation systems.

The study also recommends the establishment of three food hubs—businesses that manage aggregation, distribution, and marketing of local products to satisfy wholesale, retail, and institutional demand. Currently, GrowFood Carolina, located in Charleston, is SC's only food hub.

Through its participation in the Midlands Local Food Collaborative, the Richland SWCD is working with several

partners to facilitate the implementation of the *MSFBB* recommendations throughout the midlands.

For more information about *MSFBB* and its implementation, contact Jack Shuler at (803) 926-3462 or jack@novingerqtr.com.



A network of food nodes and hubs will strengthen SC's food system and increase small farm revenue by \$1.2 billion annually. (*Map by Adam Cox*)

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Thank you for your support!

Richland Soil and Water Conservation District

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