



26032-C Newt Road
Agri-Civic Center
Albemarle, NC 28001
704-986-3059



National Conservation Foundation Envirothon 2018

On Friday, July 27, the 2018 National Conservation Foundation (NCF)-Envirothon competition concluded. Our very own Stanly Montgomery Home School Association team, the Yellow Populars, proudly accepted a check for \$3000 for completing the competition at 7th place.

The weeklong international competition began July 22 on the campus of Idaho State University in Pocatello, Idaho. Students from the United States, Canada and China were tested on their knowledge and skillset in five subject areas: soils/land use, aquatic ecology, wildlife, forestry, and Western rangelands.



NCF-Envirothon is an international environmental education competition for high schoolers sponsored by the National Conservation Foundation and supported by NACD. The top three overall teams received cash awards from Smithfield Foods. Teams placing fourth through tenth received cash awards from Canon U.S.A. Inc.

The nearly 250 students had the opportunity to explore Idaho, touring a potato farm and visiting a geyser. The teams also experienced life on the range, including rope making, calf-roping, butter churning, and blacksmithing. NCF-Envirothon sponsor Smithfield Foods provided a barbecue dinner, and the evening ending with an old-fashioned barn dance.

The 2019 NCF-Envirothon will be hosted in Raleigh, N.C., at the North Carolina State University campus July 28-Aug. 2. The current topic for 2019 will be "Agriculture and the Environment: Knowledge and Technology to Feed the World."

Team members pictured L-R are: Maddy Davis, Malory Rogers, Amber Stiller, Erik Conrad and Lexie Burns



District Board Members

Terry Blalock	Chairman
Curtis Furr	Vice-Chairman
Jody Smith	Treasurer
Aaron Burleson	Supervisor
W. Chester Lowder	Supervisor

District Board Meetings are held the second Wednesday of each month at 7:00 a.m. at the Stanly County Agri Civic Center. All meetings are open to the public.

District and NRCS Staff

Amanda Kirby	District Conservationist
Rita Little	Admin/Education Coordinator
Charles Dunevant	Soil Conservationist
Lin Taylor	Civil Engineer Technician

SOIL HEALTH AND COVER CROP FACTS

Ten Ways Cover Crops *Enhance* Soil Health



Rob Myers, North Central SARE

ABOUT SOIL HEALTH

Soil health is a hot topic these days, one that is justifiably receiving considerable attention from farmers and their farm advisors.

Whereas in the past, soil testing and evaluation focused more on chemical and physical measures, new research has shown that the biology of the soil is very important to its overall health and productivity.

An incredible diversity of bacteria, protozoa, arthropods, nematodes, fungi and earthworms create a hidden food web in the soil that affects how crops grow, how soil nutrients are cycled and whether rainfall is quickly absorbed into the soil and stays where crop roots can access that moisture.

The USDA Natural Resources Conservation Service (NRCS) has identified four basic principles or approaches for maintaining and improving soil health:

- Keep the soil covered as much as possible
- Disturb the soil as little as possible
- Keep plants growing throughout the year to feed the soil
- Diversify crop rotations as much as possible, including cover crops

Farmers can support these principles by using cover crops, which are conservation plantings of fast-growing annuals such as rye, clovers, vetches and radishes. Cover crops protect and improve the soil when a cash crop is not growing. In the case of summer commodity crops like corn and soybeans, cover crops can keep the soil covered in fall, winter and early spring. They make it easier to use no-till or other conservation tillage approaches that disturb the soil less, and they help with weed control. Plant diversity is helpful for soil organisms because it gives them a greater variety of food sources, and cover crops are an easy way to diversify a crop rotation that may otherwise see only one or two crops grown in a field. Adding cover crops to a rotation can greatly increase the portion of the year when living roots are present for soil organisms to feed on.

10 Key Impacts of Cover Crops on Soil Health

Besides contributing to the four basic goals or principles for soil health, there are a number of specific ways that cover crops lead to better soil health and potentially better farm profits.

1 Cover crops feed many types of soil organisms

Most fungi and bacteria that exist in the soil are actually beneficial to crops. Many of these soil fungi and bacteria feed on carbohydrates that plants exude (release) through their roots. In return, some fungi and bacteria will trade other nutrients, such as nitrogen or phosphorous, to the crop roots. While cover crops directly feed bacteria and fungi, many other soil organisms eat the fungi and bacteria, including earthworms and arthropods (insects and small crustaceans like the “roly poly”). Thus cover crops can help support the entire soil food web throughout the year.

2 Cover crops increase the number of earthworms

Earthworms are usually the most visible of the many organisms living in the soil. Cover crops typically lead to much greater earthworm numbers and even the types of earthworms. Some earthworms, like nightcrawlers, tunnel vertically, while other smaller earthworms, like redworms, tunnel more horizontally. Both create growth channels for crop roots and for rainfall and air to move into the soil.

3 Cover crops build soil carbon and soil organic matter

Like all plants, cover crops use sunlight and carbon dioxide to make carbon-based molecules. This process causes a buildup of carbon in the soil. Some of that carbon is rapidly cycled through the many organisms in the soil, but some eventually becomes humic substances that can gradually build soil organic matter. A higher level of soil organic matter improves both the availability of nutrients and soil moisture for crops.

www.sare.org/covercrops

4 Cover crops contribute to better management of soil nutrients

By building soil organic matter, cover crops can gradually impact the need for some types of fertilizer. Just as important to nutrient management is the way cover crops can scavenge or collect any nutrients left at the end of a growing season, such as nitrogen left in the field after corn is done growing. The cover crop will hold that nitrogen rather than letting it escape into tile lines leading to rivers and lakes or drain away into groundwater. Eventually that nitrogen will be released the next season to help the next year's cash crops.

5 Cover crops help keep the soil covered

When it rains on bare soil, the soil is much more likely to erode, form an impermeable crust and then overheat in summer when exposed to direct sun. Some bare soils can reach 140 degrees, hot enough to kill soil organisms and stress the crop from both heat and excessive soil moisture evaporation. The residue of a cover crop like cereal rye can protect the soil while cash crops are getting established and keep it from getting too hot.

6 Cover crops improve the biodiversity in farm fields

Generally, the more plant diversity in a field and the longer that living roots are growing, the more biodiversity there will be in soil organisms, leading to healthier soil. Growing mixes of cover crops or adding a few different cover crop species to an overall crop rotation—such as cereal rye before soybeans, and oats, radishes or crimson clover before corn—improves diversity. Many Corn Belt commodity farmers are adding a third cash crop to their rotation, usually a small grain such as wheat, and then using the earlier harvest of wheat to grow a more diverse mix of covers for several months. They sometimes graze those cover crop mixes for extra profit and because animal manure benefits soil biology.

7 Cover crops aerate the soil and help rain go into the soil

It's not just earthworms that open up soil channels for rain, but also the roots of the cover crops themselves. This is particularly the case where soil disturbance is minimal from tillage. The extra rain that gets into the soil instead of running off can make a big difference for crop yields, such as in mid-to-late summer in the Midwest, when the rain can come fast in thunderstorms and be followed by long dry spells. The extra aeration created by cover crop roots and earthworms also benefits crop roots and other soil organisms.

8 Cover crops reduce soil compaction and improve the structure and strength of the soil

The typical solution to compaction from heavy farm equipment has been more tillage, but that provides only the briefest of benefits while compounding the problem in the long term. Excess tillage destroys soil structure, while cover crops and the soil organisms they feed create the glue (glomalin) that binds soil particles together, leading to better soil aggregation and strong soil structure. Research has shown that cover crops (with an assist from earthworms) help loosen compacted soil even more effectively than subsoiling equipment, which takes a lot of diesel fuel. A field with cover crops and minimal tillage, or better yet no-till, will lead to much better soil structure without compaction issues.

9 Cover crops make it easier to integrate livestock with field crops

Beef cattle and other livestock are usually kept in pastures and out of crop fields, which has some conveniences but is not ideal for soil health. Think of buffalo herds foraging on prairies and you can see how natural systems evolved to have an integration of plants and grazing animals. The manure from livestock grazing on cover crops in a grain field can be beneficial for building organic matter and soil health. It is also a great way to get immediate profit from cover crops, as certain cover crop species can be very high-quality forage in late fall or early spring.

10 Cover crops greatly reduce soil erosion and loss

On many fields that have some slope to them, half the topsoil has already been lost from the days when they were first farmed. The future success of farming and our food supply depends on keeping the topsoil we still have, and cover crops are exceptional at helping stop erosion. Using no-till with cover crops can reduce erosion to a tiny fraction of what it would otherwise be in a conventional corn and soybean system. Even with some light tillage, a field with cover crops is still much better protected, especially with winter annual cover crops like cereal rye.

Summary

Methods of improving soil health come back to the core principles identified by NRCS, including a greater diversity of plants, keeping the soil covered, having living roots in the soil throughout the year and disturbing the soil less. As we learn more about soil biology, it's clear that even modest use of cover crops makes a big difference for soil health. Further information on cover crops, including publications and videos of farmers talking about cover crops and soil health, is available from SARE at www.sare.org/covercrops. More information and fact sheets on soil health are available from NRCS at www.nrcs.usda.gov/wps/portal/nrcs/main/national/soils/health and from the Soil Health Institute at www.soilhealthinstitute.org.



United States
Department of
Agriculture

National Institute
of Food and
Agriculture



SOIL HEALTH
INSTITUTE

This publication was developed by Dr. Rob Myers, North Central SARE Regional Director of Extension Programs. The SARE program is supported by the National Institute of Food and Agriculture, U.S. Department of Agriculture, under award number 2014-38640-22173. Learn more at www.sare.org.

The Soil Health Institute is a national non-profit organization working to safeguard and enhance the vitality and productivity of soil through scientific research and advancement.

December 2017

Area VIII Fall Meeting



The 2018 Area VIII Fall Meeting was hosted by Davidson Soil and Water Conservation District on October 10th. Anson, Cabarrus, Cleveland, Davidson, Davie, Gaston, Iredell, Lincoln, Mecklenburg, Rowan, Stanly and Union Counties make up Area VIII.

The meeting was held at the Davidson County Agriculture Center in Lexington. Following breakfast and a time for networking, the business meeting was called to order by David Smith, Second Vice Chair. Steve Shell, Chairman of the Davidson County Board of Commissioners, welcomed everyone to Davidson County. The consent agenda, including the 2018 minutes of the spring meeting, the treasurers report and the 2018 budget reports were approved. A roll call indicated that there were 59 attendees.

Other items of business were reports from the nominating committee, resolutions, Environment updates, and introductions of new employees and supervisors

Jerry Davis gave a report from the nominating committee. Ben Knox and Curtis Furr will Co-Chair Area VIII next year. Ronnie Morgan was elected 2nd Vice Chair and Tommy Houser will continue as Secretary/Treasurer. Standing Committee appointments were also approved.

Two resolutions were presented as motions, seconded and passed. Additional information about the resolutions is available at the District office.

The following agencies presented their reports: NC Association of SWCD, NC Division of SWCD, Natural Resources Conservation Service, National Association of Conservation Districts, NC Foundation for SWCD and the NC Conservation District Employees Association.

Curtis Furr from Stanly County received a 10 year service award for his tenure as District Supervisor. Fence Row Farms in Union County was recognized for the NC Outstanding Conservation Farm Family of the Year award. The afternoon session included a presentation by Bryan Evans, Executive Director of the NCASWCD on "Advocacy for the Districts." Michelle Lovejoy presented a PowerPoint entitled "Visioning the Future of Conservation Delivery."

Following a drawing for door prizes, the meeting was adjourned. Stanly County will host the Area VIII Spring and Fall meetings in 2019.



Ag Cost Share Programs Available

Soil and Water Conservation Districts implement four cost share programs, all of which share a common goal of increasing water quality. These programs include the Agriculture Cost Share Program (ACSP), the Agricultural Water Resources Assistance Program (AgWRAP), and the Conservation Reserve Enhancement Program (CREP). The District accepts applications year round for each of these programs. Applications are ranked based on various criteria and conservation concerns. The highest ranking application is considered for assistance to install best management practices.



ACSP-The major cause of water quality problems in the area is non-point source pollution. Damage to our water resources comes from soil erosion, excessive fertilizer use, animal waste contamination, and improper use of agricultural chemicals. The Agriculture Cost Share Program helps address nonpoint source pollution.



AgWRAP-The Agricultural Water Resources Assistance Program was recently created in order to address water quantity issues. Producer concerns include water to be used for cropland irrigation, and livestock watering. Multiple best management practices are available to help producers increase their water use efficiency, availability and storage.



CREP-The Conservation Reserve Enhancement Program is available to protect environmentally sensitive cropland and marginal pasture land long term. This is accomplished through 10, 15, and 30 year conservation easements.

For more information on the services and how to apply come by our office, email Amanda Kirby at a.kirby@stanlycountync.gov or call 704-986-3059



USDA Non-Discrimination Policy

The United States Department of Agriculture (USDA) and the Stanly SWCD prohibits discrimination against its customers, employees and applicants for employment on the basis of race, color, national origin, age, disability, sex, gender identity, religion, reprisal, and where applicable, political beliefs, marital status, familial or parental status, sexual orientation, or all or part of an individual's income is derived from any public assistance program, or protected genetic information in employment or in any program or activity conducted or funded by the Department. Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact the USDA Office of Communication at (202) 720-2791. To file a complaint, write the Secretary of Agriculture, USDA, Washington, D.C. 20250 or call 1-800-245-6340 (Voice) or (202) 720-1127 (TDD).

Erosion Control Materials Available



Landowners and producers are encouraged to take advantage of another service provided by the Stanly SWCD. Erosion control materials are now in stock and available for purchase.

“Erosion control blankets are effective in controlling erosion on slopes and stabilizing soils long enough for re-vegetation seeding to establish on the site. They are designed to be used on gradual to steep slopes, with low to high velocity flow channels, and are available for both short term biodegradable applications, and long-term soil stabilization.” protecherosionsupply.com

8' x 112.5' Double Net Straw Blanket \$28.00 each

4' x 180' Single Net Excelsior Blanket \$38.00 each

6" x 1" 11 gauge Sod Staples \$30.00 box of 1000



“Our wattles are 100% Certified Weed Free Wheat Straw bound into a tight tubular roll. When wattles are placed on the face of slopes, they intercept storm water runoff, reduce its flow velocity, release the runoff as sheet flow, and provide removal of sediment from the runoff. By interrupting the length of a slope, the wattle can also reduce erosion. Wattles are designed to stop sediment and other debris from entering retention ponds, lakes and other water bodies.” Protecherosionsupply.com

12" x 10' Straw Wattle

\$25 each

24" Wood Stake 1.5" x 1.5"

\$16/bundle of 25

or 75¢ each



2019 Acreage Reporting Dates

In order to comply with FSA program eligibility requirements, all producers are encouraged to visit their local FSA office to file an accurate crop certification report by the applicable deadline.

Acreage reporting dates vary by crop and by county so please contact your local FSA office for a list of county-specific deadlines.

In Stanly County:

November 15, 2018: Apiculture, Perennial Forage and Grazing, Clary Sage
January 15, 2019: Apples, Blueberries, Canola, Grapes, Peaches, Fall-Seeded Small Grains, Rapeseed

July 15, 2019: Beans (planted 6/26-7/10, corn, soybeans, tobacco, cotton, peanuts, grain sorghum, CRP, all other crops

September 15, 2019 beans (planted 7/15-9/5, cabbage (planted 7/15-9/5)

The following exceptions apply to acreage reporting dates:

- If the crop has not been planted by the applicable acreage reporting date, then the acreage must be reported no later than 15 calendar days after planting is completed.
- If a producer acquires additional acreage after the applicable acreage reporting date, then the acreage must be reported no later than 30 calendar days after purchase or acquiring the lease. Appropriate documentation must be provided to the county office.
- If a perennial forage crop is reported with the intended use of “cover only,” “green manure,” “left standing,” or “seed,” then the acreage must be reported by July 15th.

Noninsured Crop Disaster Assistance Program (NAP) policy holders should note that the acreage reporting date for NAP covered crops is the earlier of the applicable dates or 15 calendar days before grazing or harvesting of the crop begins.

For questions regarding crop certification and crop loss reports, please contact your local FSA office.



Dates to Remember...

The AgriCivic Center will be closed the following days:

November 12 Veterans Day

November 22-23 Thanksgiving Holidays

December 24-26 Christmas Holidays

January 1 New Year's Day



County Office Committee (COC) Elections

Stanly County is proud to have 2 nominees for this year's FSA County Office Committee (COC) election. Listed below are the nominees with some biographical information for each.

Chris Furr is nominated in LAA 2, Stanly County, to serve as COC member for a 3-year term beginning January 1, 2019. Chris resides in LAA 2 – Endy Township and began farming about 20 years ago. He and his father, Donnie Furr, produce corn, soybeans, wheat and grass for haying and grazing. They also have beef cows. Chris is willing to serve if elected.

Curtis Furr is nominated in LAA 2, Stanly County, to serve as COC member for a 3-year term beginning January 1, 2019. Curtis resides in LAA 2 – Almond Township and been farming for 42 years. He grows corn, soybeans and wheat. Curtis is a past member of the Stanly County FSA County Committee, a current member of the Soil & Water Board, NC Soybean Association, and Farm Bureau, where he serves as VP. Curtis is willing to serve if elected.

USDA Market Facilitation Program

USDA launched the trade mitigation package aimed at assisting farmers suffering from damage due to unjustified trade retaliation by foreign nations. Producers of certain commodities can now sign up for the Market Facilitation Program (MFP).

USDA's Farm Service Agency (FSA) will administer MFP to provide payments to corn, cotton, dairy, hog, sorghum, soybean, wheat, shelled almond, and fresh sweet cherry producers. An announcement about further payments will be made in the coming months, if warranted.

The sign-up period for MFP runs through Jan. 15, 2019, with information and instructions provided at www.farmers.gov/mfp. MFP provides payments to producers of eligible commodities who have been significantly impacted by actions of foreign governments resulting in the loss of traditional exports. Eligible producers should apply after harvest is complete, as payments will only be issued once production is reported.

A payment will be issued on 50 percent of the producer's total production, multiplied by the MFP rate for a specific commodity. A second payment period, if warranted, will be determined by the USDA.

For a list of initial MFP payments rates, view the MFP Fact Sheet which can be found at www.fsa.usda.gov.

MFP payments are capped per person or legal entity as follows:

- A combined \$125,000 for eligible crop commodities
- A combined \$125,000 for dairy production and hogs
- A combined \$125,000 for fresh sweet cherries and almonds

Applicants must also have an average adjusted gross income for tax years 2014, 2015, and 2016 of less than \$900,000. Applicants must also comply with the provisions of the Highly Erodible Land and Wetland Conservation regulations.

More FSA News...

Breaking New Ground

Agricultural producers are reminded to consult with FSA and NRCS before breaking out new ground for production purposes as doing so without prior authorization may put a producer's federal farm program benefits in jeopardy. This is especially true for land that must meet Highly Erodible Land (HEL) and Wetland Conservation (WC) provisions.

Producers with HEL determined soils are required to apply tillage, crop residue and rotational requirements as specified in their conservation plan.

Producers should notify FSA as a first point of contact prior to conducting land clearing or drainage type projects to ensure the proposed actions meet compliance criteria such as clearing any trees to create new cropland, then these areas will need to be reviewed to ensure such work will not risk your eligibility for benefits.

Landowners and operators complete the form AD-1026 - Highly Erodible Land Conservation (HEL) and Wetland Conservation (WC) Certification to identify the proposed action and allow FSA to determine whether a referral to Natural Resources Conservation Service (NRCS) for further review is necessary.



Producers Urged to Consider NAP Risk Protection Coverage before Crop Sales Deadlines

The USDA Farm Service Agency (FSA) reminds producers to review available USDA crop risk protection options, including federal crop insurance and Noninsured Crop Disaster Assistance Program (NAP) coverage, before the crop deadline.

Federal crop insurance covers crop losses from natural adversities such as drought, hail and excessive moisture. NAP covers losses from natural disasters on crops for which no permanent federal crop insurance program is available, including perennial grass forage and grazing crops, fruits, vegetables, mushrooms, floriculture, ornamental nursery, aquaculture, turf grass, ginseng, honey, syrup, bioenergy, and industrial crops.

Producers can determine if crops are eligible for federal crop insurance or NAP by visiting <https://webapp.rma.usda.gov/apps/ActuarialInformationBrowser2018/CropCriteria.aspx>.

NAP basic coverage is available at 55 percent of the average market price for crop losses that exceed 50 percent of expected production.

Federal crop insurance coverage is sold and delivered solely through private insurance agents. Agent lists are available at all USDA Service Centers or at USDA's online Agent Locator: <http://prodwebnlb.rma.usda.gov/apps/AgentLocator/#>. Producers can use the USDA Cost Estimator, <https://ewebapp.rma.usda.gov/apps/costestimator/Default.aspx>, to predict insurance premium costs.



2019 NCASWCD/NCCDEA Raffle

Three chances to win a Bass Pro Shop gift card!

1 - \$1,500 gift card

1 - \$750 gift card

1 - \$500 gift card

\$10 per ticket

Drawing held at Annual Meeting – Jan 9

Do NOT need to be present to win

Checks payable to NCASWCD

See Soil & Water staff to purchase a ticket!





26032-C Newt Road
 Albemarle, NC 28001
 704-986-3059
www.stanlycountync.gov/soil-and-water

Mission Statement

The mission of Stanly Soil and Water Conservation District is to provide education, information and technical assistance to citizens of Stanly County for the conservation of our soil and water resources.

Uwharrie
 INVESTMENT ADVISORS
 uwharrie.com

Not FDIC Insured	Not Bank Guaranteed	May Lose Value
Not Guaranteed by a Government Agency		Not a Bank Deposit

FIRST BANK
 Your Community Bank

EQUAL HOUSING LENDER

ENTERPRISE RENDERING COMPANY
 28821 Bethlehem Church Rd
 Oakboro, NC 28129

Office 704-485-3018
 Fax 704-485-2222
 erco63@live.com

WE REMOVE & RECYCLE USED RESTAURANT COOKING OIL

Nutrien
 Ag Solutions™

BILLY LOWDER
 FACILITY MANAGER

32467 MILLINGPORT ROAD
 ALBEMARLE, NC 28001

t 704.982.8496
 c 704.791.3589
 billy.lowder@nutrien.com
 nutrienagsolutions.com

SOUTHERN STATES
 Agronomy Service

20560 N.C. 73 HWY, Albemarle, NC 28001
 (704) 982-2226 or 2228
 Steve Edwards, Manager

Mauney Feed Mill, Inc.

Kelly Vick
 704-463-1331

40255 US Hwy. 52 North
 New London, NC 28127

FARM BUREAU
 STANLY

Stanly County Farm Bureau
 704-982-0113

B.B. Oil, Inc.

Diesel - Home Heating Oil - Kerosene
 Home A/C, Furnace & Heat Pump Service
 Tires - Batteries - Auto Accessories
 Auto/Motorcycle Inspections
 Hydraulic Hoses
 Propane Tank Filling

128 Hwy 49 N
 PO Box 185
 Richfield, NC 28137

704-463-7543

Newport Landowner Services Inc.
 Complete Reforestation Management
 Site Preparation - Tree Planting - Herbicide Application
 Agricultural Services * Land and Estate Management

Dale Newport
 44558 N.C. Hwy 8
 New London, NC 28127

Mobile (704) 985-5437
 Home (704) 463-1226
 Email newportlandser@yahoo.com

To put your ad here...
rlittle@stanlycountync.gov

H.W. CULP LUMBER COMPANY

P.O. Box 235
 New London, NC 28127
 Phone: 704-463-7311

Purchasers of Standing Timber

To put your ad here...
rlittle@stanlycountync.gov