

UGA SE/SW District Extension Water Team News Vol 1 Mon. June 5, 2023

In this issue: Welcome, Meetings and Events, 2023 Sensor Installations, Recent Projects and Events, Focus, Interpreting Data, CoCoRaHS, Water Tip, and Final Word

Welcome

This is the first volume of the SE/SW District Water Team Newsletter. This newsletter is a collaborative effort from all of the water team members in UGA Extension Southeast and Southwest Districts. Water impacts each of us daily both personally and professionally. This newsletter will share what we have done, are doing and what we are going to do in the southeast and southwest districts as it relates to water. **Your farmers are your clientele, and our clientele is YOU!** Please checkout the most recent issue of the Southeastern Peanut Farmer for May/June where you get more information about irrigation.

Thank You Water Team Members: John Bennett, Phillip Edwards, David Hall, Hannah Grubbs, Camp Hand, Brian Hayes, Stephanie Hollifield, Daniel Lyon, Jason Mallard, Jennifer Miller, Wade Parker, Wes Porter, Andrew Sawyer, Ashley Smith, John Snider, and Savannah Tanner.

Extension Meetings and Events Please watch for updated general meeting information

<u>Meeting/Events</u>	<u>Date</u>	<u>Location</u>
Agronomic Crops Field Day	June 8, 2023	
Corn Silage and Stored Forage Field Day	June 15, 2023	UGA Tifton Campus Conference Center
Stripling Irrigation Park Biennial Field Day	Aug. 3, 2023 8:30 am	Camilla, GA
RSVP by July 28 th to Candace Gray (SIRP Administrative Associate) sirp@uga.edu or 229.522.3623		
SW GA Research and Education Center Field Day	Aug 16, 2023 8:30 am	Plains, GA
Pre-Register by August 11, 2023 by contacting the Station at 229.824.4375		

2023 Sensor Installations

These are the various sensor types installed or being installed in the near future. This does not include the Master Irrigator sensors and Irrigated UGA Cotton On-Farm Trials. We will be contacting you and you can contact us by calling, texting or email. *Black dots represent current installation by county – new sensor additions daily*

Aquaspy

- Burke
- Grady
- Jefferson
- Miller
- Mitchell
- Randolph

- Terrell
- Thomas
- Webster
- Cropx
- Bulloch
- Coffee
- Colquitt

- Echols
- Emmanuel
- Grady
- Macon
- Pulaski
- Ware

Meter Company

- Bulloch
- Lowndes
- Montgomery
- Tift
- Wilcox

Trellis

- Coffee
- Colquitt
- Irwin
- Laurens
- Mitchell
- Pierce

- Tattall
- Wilkinson
- Wilcox

Recent Projects and Events



Pivot Uniformity and Flow Rate Cale cloud in Grady, Luke Crosson, Dalton Evans (SW Intern), Taylor Mcdaniel, Seth Mcallister, and Braxton Crews in Webster County.



Educational Events North FL Research and Edu. Center - talks by Jason Mallard, Wes Porter and UF faculty and staff. Well Types/Wellhead Protection/Well Water Quality Training in Laurens. Daniel Lyon, SW Water Educator and Hannah Grubbs SW Water Intern at Ext. Orientation and visit and zoom meeting with John-Lea Cox with Meter Company in Tifton. Enviroscope watershed demonstration David Hall and Phillip Edwards in Telfair Ag Day and SE Branch Experiment Station at Midville. Sensor installation demonstration at UGA On-Farm Irrigated Cotton Variety in Trial Cook County.



Sensor Installation Collaborations Justin Shealey in Echols, John Bennett in Wilcox, Scout Carter in Ware, Seth Mcallister in Terrell, Andrew Sawyer at UGA Ponder Farm, Jake Price in Lowndes, Brian Hayes in Mitchell, Cody Powell in Miller County, Ashley Smith Coffee County and others.

Focused in Five Areas

1. AgWet Sensor Installations

One of the foundations of this program through the years is the AgWet Program. The crop sensors being used in 2023 are as follows Aquaspy, CropX, Meter Company and Trellis. We have been in two windows of opportunity for installation. In the first window we focused on installation of sensors in corn, vegetables, pecans, and satsuma. Now, we are finishing up on the cotton and peanut installations.

2. Master Irrigation Program (MIP)

We are excited to offer this program for all counties in the Altamaha Regional Water Council. Grant funds will reimburse the farmers initial financial commitment/participation fee at the close of the growing season. Two meetings will be held the first one being on June 28th in Lyons after all sensors are installed and then a fall meeting will be held to assess, discuss and receive input from farmers and agents. The agents in this area has or will contact a farmer in each county who will select one field location. Several counties outside of the region are invited in hopes of future growth and to seek out other funding sources.

3. UGA Irrigated Cotton Variety Trial Sensor Installations

Each of the 15 UGA On Farm Cotton Variety Trials that is irrigated will receive a sensor. The first sensor was installed in Cook County and included a demonstration showing the team of graduate students the process for installation of the CropX sensor and these students will be installing the sensors in the on-farm irrigated cotton trials.

4. Aflatoxin Study in Irrigated and Dryland Peanut

Cristiane Pilon continues this year with this important study to determine aflatoxin concerns in peanuts. In each of the field locations three sensors will be placed in irrigated portions of the field as well as three sensors in dryland portion.

5. Educational Efforts

This focus could or should be listed first as education is the basis for everything we all do in Extension. Educational efforts are slowing down with summer vacation for students. Multiple demonstrations were conducted during the school year with the Enviroscape watershed demonstration. The most recent was conducted at the SE Branch Experiment Station in Midville. Multiple opportunities are on the horizon with two coming up fast. On June 6th the water team will participate in collaboration with the USDA NRCS to demonstrate the rainfall simulator for the H2O Camp at the Stripling Irrigation Park. Then the next week members of the water team will be on the ABAC campus to demonstrate the Enviroscape as well as present information on point and non-point pollution to the Natural Resource Conservation Workshop 10-12 grade students. Our team has also participated in many of the installations and ongoing efforts at the UGA Stripling Irrigation Research Park.

Interpreting the Data Collected

Just a bunch of lines – Nope! What once was a whole lot of lines that I didn’t understand, now have meaning. To see the actions of a farmer, turn around a deepening soil moisture deficit situation due to the readings from a sensor was amazing. The one sensor in this situation will be impact for the farmer and for our programming efforts now and into the future. The picture shows two sensors in two very different soil types. It shows a noticeable difference and reiterates the importance of soil type determination is with these sensor installations.




CoCoRaHS



A few years ago livestock producers in Irwin County with pastures experienced a drought situation and if were not for the adjacent county being declared a disaster (which made our county eligible for assistance) our county would not have had many if any options to resolve their situation. It was down to the wire so to speak and the deadline was one day away. Thus the discussion on this rain gauge. The CoCoRaHS rain gauge is an opportunity for each of us to document our rainfall amounts. It is something you can encourage your farmers or even your 4-H Club members to get involved and participate. Basically you become a dot on a map, but an important dot. Just like the weekly crop report is used in ways we cant imagine. The dot that you will make by documenting rainfall in your location will be a portal of information for your area.


My son Ethan and I just put one up at my house. I decided to buy two and I look forward to show the gauge and share flyers and other information about CoCoRaHS when the opportunity presents itself.

Volunteer Rain/Snow Observers Needed!




What is CoCoRaHS?

The Community Collaborative Rain, Hail, and Snow network consists of volunteers across the country who measure precipitation in their own backyards!



Why Volunteer?

Reports are used by many people and organizations, including the National Weather Service. Information can improve river forecasts and assessment of drought.



What is Needed?

Volunteers need to purchase a specially-designed rain gauge. A few minutes a day is required to send data via the internet.

More Information: cocorahs.org





Photo: Steve Camp



DATA ON THE WEB

Volunteers submit their observations using the CoCoRaHS website or apps. Observations are immediately available to the public via maps and data analysis tools, and to data users via the CoCoRaHS Web API. Data users such as scientists, resource managers, decision makers and others have come to rely on the high density, high quality measurements provided by CoCoRaHS observers.

CoCoRaHS IS EDUCATIONAL

CoCoRaHS offers learning opportunities too. In addition to training materials, newsletters and the 'Message of the Day', members also enjoy opportunities to attend Webinars featuring experts in weather, climatology and other pertinent disciplines. CoCoRaHS offers classroom resources for K-12 teachers. Students get to collect and submit real scientific data – all while meeting State and National Standards in science, math, geography and more!




Photo: Carol Orand

JOIN CoCoRaHS TODAY!

CoCoRaHS is a practical, enjoyable and useful activity. If you have an interest in weather and would like to help your local community, as well as scientists and others interested in precipitation, then CoCoRaHS is for you. It only takes a few minutes a day and gives you the chance to participate in real hands-on science. You'll be amazed at what you learn as you become more aware of the variable weather that impacts you, your neighbors, your state and our entire country.


THANKS

CoCoRaHS is supported by many sponsors and collaborators. To view a full list please visit the CoCoRaHS Web page.


FOR MORE INFORMATION CONTACT:

www.cocorahs.org

CoCoRaHS



The Community Collaborative Rain, Hail and Snow Network



Help measure rain!

Because every drop counts!

Photo: Henry Reges

0.00" 0.74"

Capturing the variability of rainfall

Photo: Henry Reges

Your observations on our maps

All ages and locations welcome

WHAT IS CoCoRaHS?

The Community Collaborative Rain, Hail and Snow Network, is a non-profit, community based, network of volunteers who measure and report rain, hail and snow in their backyards.

A BRIEF HISTORY

CoCoRaHS came about as a result of a devastating flash flood that hit Fort Collins, Colorado in July 1997. A very localized storm dumped over a foot of rain in several hours while other portions of the city had only modest rainfall. The ensuing flood caught many by surprise, caused \$200 million in damages, and resulted in five deaths. CoCoRaHS was born in 1998 with the intent of doing a better job of mapping and reporting intense storms. CoCoRaHS became a nationwide volunteer network in 2010 and is now international with observers helping provide critical precipitation observations, benefiting their country's needs.

VOLUNTEERS OF ALL AGES WELCOME!

Individuals and family volunteers of all ages and all walks of life are the foundation of the CoCoRaHS network. Anyone can help. It only takes a few minutes to check the rain gauge and report your observations.

TRAINING: "THE KEY TO OUR SUCCESS"

It is important that all CoCoRaHS precipitation reports be accurate and consistent. Training is provided on how to install gauges, properly measure precipitation and transmit reports. CoCoRaHS precipitation reports are accurate and very useful.

SIMPLE MEASURING TOOLS

Volunteers use high quality rain gauges. In some states, "hail pads" are used to study hail storms.

WHY IS THERE SO MUCH INTEREST IN RAIN, HAIL AND SNOW?

Precipitation is essential for life. It varies greatly with topography, storm type and season. It really is true that it may pour on one side of the street and be dry on the other. A portion of a field may be pounded by hail while others nearby receive no damage. Snowfall may pile up in one neighborhood and only dust another. Rain, hail and snow are fairly easy to measure, and the data collected are very important. Meteorologists, hydrologists, engineers, builders, farmers . . . you name it, everyone seems to care about rain, hail and snow. That's why we ask, "How much fell in your backyard?"

www.cocorahs.org

Water Tip

An acre inch of water is the total amount of water needed to cover an acre (208.7 feet by 208.7 feet) in one inch of water. There are 27,154 gallons of water in one acre inch. If the average rainfall in south Georgia were 50 inches per year then that one acre would receive 1,357,700 gallons of rainfall.

Final Word

As a one of the newest members on this team, I would like to say it how exciting it is to work with such great team members. Water Educator Daniel Lyon and Water Intern Hannah Grubbs are just outstanding. With my recent birthday, it is so neat to see these young folks and their enthusiasm. I am learning much – and I appreciate all the help from coworkers and agents. The chance to visit and work with our agents across the state is fun (how do you get red clay out of khaki pants). Everybody on this team is just great. Extension is the best job in the world as Dr. Kemerait states often. We are blessed with such an amazing opportunity to impact the people of this state. County agents please know the water team is your team. If we can be of assistance please just call, text or email.

Thank You, God Bless You,

Phillip Edwards – SW District Area Water Agent representing John Bennett, David Hall, Hannah Grubbs, Camp Hand, Brain Hayes, Stephanie Hollifield, Daniel Lyon, Jason Mallard, Jennifer Miller, Wade Parker, Wes Porter, Andrew Sawyer, Ashley Smith, John Snider, and Savannah Tanner.



The mention of trade names in this newsletter does not imply endorsement by the Georgia Extension Service, nor criticism of similar ones not mentioned.

*COLLEGE OF AGRICULTURAL AND ENVIRONMENTAL SCIENCES, COLLEGE OF FAMILY AND CONSUMER SCIENCES, WARNELL SCHOOL OF FOREST RESOURCES, COLLEGE OF VETERINARY SCIENCES
The University of Georgia and Fort Valley State University, the U. S. Department of Agriculture and counties of the state cooperating, The Cooperative Extension Service offers educational programs, assistance and materials to all people without regard to race, color, religion, sex, national origin, disability, gender identity, sexual orientation or protected veteran status." An equal opportunity/affirmative action organization committed to a diverse work force.*