## C.M. Stripling Irrigation Research Park

Newsletter

July - December 2024





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## From the Superintendent

I am Amilcar Vargas, and I recently joined the University of Georgia in early September to oversee the Stripling Irrigation Research Park and the Attapulgus Research and Education Center. The past four months have been busy, with the arrival of my daughter in late July and starting a new job covering two research and education centers. However, I have felt very welcome and well-received at both research and education centers as well as by scientists (state and federal), graduate students, local growers, administration staff, ANR agents, ag business/industry, and government agencies.

I would like to give special thanks to B.J. Washington, Candace Gray, Daryl Williamson, Kyle Matthews, Martha Emanuel, and Calvin Perry for their invaluable support and assistance during my transition at Stripling Irrigation Research Park. They have provided me with a lot of information to help me hit the ground running. After my first month, Calvin wisely reminded me that, while I may feel like I'm "drinking from a firehose," I should not hesitate to slow down and enjoy the experience.

Finally, I want to recognize Calvin for all the tremendous work he has done over the years to advance precision agriculture technologies. He has been a pioneer in Variable Rate Irrigation and Crop Yield Monitoring Systems. It has been a great pleasure to learn from him and receive his words of wisdom, which I will surely rely on as we continue to keep the Stripling Irrigation Research Park at the forefront of irrigation technologies. His time at the Park in a retire/rehire role will be ending soon.

## So, what has happened at Stripling Irrigation Research Park since our last newsletter?

We are excited to share that we have successfully completed the 2024 growing season, assisting with 19 different projects on peanuts, cotton, corn, and sweet corn. These research projects focused on topics such as irrigation scheduling, plant growth regulators, soil fertility, disease management, plant physiology, and nitrogen management. The projects were led by our UGA scientists: Dr. Porter, Dr. Vellidis, Dr. Snider, Dr. Sintim, Dr. Kemerait, Dr. Pilon, Dr. Lacerda, and Dr. Virk. We also want to thank all our graduate students, technicians, and visiting scholars for their hard work this season. We've enjoyed helping you achieve your research goals.

## From the Superintendent

A quick summary of our visitors this year: We had the pleasure of welcoming people from Natural Resources Conservation Service, Flint River Soil and Water, the Apalachicola-Chattahoochee-Flint Water Council, UGA Athens Ecology students, Mr. Murray Campbell, a Brazilian delegation (growers and industry), Romanian scholars, the Agri Ability Tractor Driving Class with Dr. Glen Rains and Mason Dean, our annual 4-H2O camp, Mr. Gottfried Pessl (CEO and founder of METOS), as well as local irrigation service and technology reps: John Adams and Sonny Brown (J&B Irrigation), Jason Bromlow (Brady Electrical & Irrigation), Taylor O'Hearn (Irrigation Plus) and Marty Saylor (Lindsay Irrigation).

On a personal note, I am excited to announce that B.J. has been promoted to Farm Manager at the Stripling Irrigation Research Park. B.J. has been with the park for twelve years and has shown exceptional leadership and dedication to ensuring that our scientists' research projects are executed as planned and managing the Park to achieve those results.

Currently, at the Park, all our fields are planted with wheat as a cover crop to protect our soils for the upcoming months. We've also started servicing and winterizing all our farm and irrigation equipment in preparation for the next growing season. Of course, we're also working through our never-ending list of winter projects.

To close, we at the Stripling Irrigation Research Park want to thank you for your continued support and wish you Happy Holidays!

Sincerely, Amilcar Vargas



#### In the News!

To learn more, click on:

## Georgia EPD to resume issuing permits in Lower Flint & Chattahoochee

Gov. Brian Kemp gave Georgia farmers in Southwest Georgia an early Christmas... announced Dec. 18 that the Georgia Environmental Protection Division (EPD) has modified the 2012 suspension of agricultural water withdrawal permits in portions of the Lower Flint and Chattahoochee River Basins. This will allow the first new agricultural water withdrawal permits in this area to be issued in over a decade....

## An agriculture innovation partnership coming to Perry, Georgia

Today, the University of Georgia College of Agricultural and Environmental Sciences and Grand Farm, a leading innovator in agricultural technology, announced a collaboration to create a robust regional agricultural innovation ecosystem...

The farm will serve as a hub for research, education and sustainable agriculture practices and will harness the power of precision agriculture, robotics and data analytics to increase productivity, conserve resources and ensure food security for future generations.

#### **Hurricane Helene Report**

In total, Hurricane Helene will cost Georgia's economy at least \$5.5 billion in agricultural and timber losses, according to preliminary damage assessments produced in coordination with the UGA College of Agricultural and Environmental Sciences, the UGA Warnell School of Forestry and Natural Resources, the Office of Gov. Brian P. Kemp, the Georgia Department of Agriculture and the Georgia Forestry Commission. This figure represents the sum of direct crop losses, losses to firms that support agriculture and forestry, losses to workers in those and related industries, as well as likely recovery and restoration costs that firms in these industries will face.

# Tips for Winterizing Center Pivots

As the temperatures drop during the winter months, preparing your center pivot is essential to prevent possible damage and extend the lifespan of your irrigation system. For farmers and agricultural managers, this is a practical guide to protect your equipment and improve your operation efficiency.

Click on:

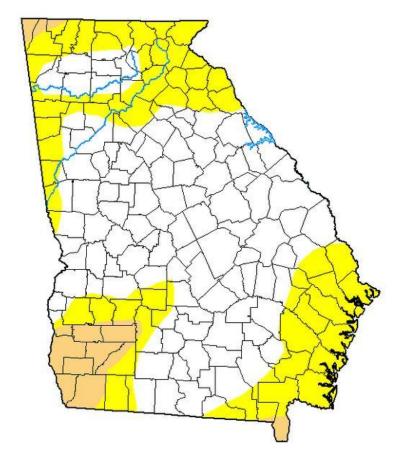
Winterizing your irrigation system

Spring center pivot and lateral irrigation system preparation

Evaluating and interpreting application uniformity of center pivot irrigation systems

## **Drought Conditions**

## U.S. Drought Monitor Georgia



#### December 17, 2024

(Released Thursday, Dec. 19, 2024) Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Сиптепт	61.22	38.78	6.27	0.00	0.00	0.00
Last Week 12-10-2024	37.75	62.25	11.64	0.00	0.00	0.00
3 Month's Ago 09-17-2024	43.18	56.82	34.07	4.03	0.12	0.00
Start of Calendar Year	46.66	53.34	28.92	11.91	0.07	0.00
Start of Water Year 10-01-2024	98.35	1.65	0.00	0.00	0.00	0.00
One Year Ago 12-19-2023	62.33	37.67	26.35	14.71	4.35	0.00

<u>Intensity:</u>	
None	D2 Severe Drought
D0 Abnormally Dry	D3 Extreme Drought
D1 Moderate Drought	D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions.

Local conditions may vary. For more information on the

Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

#### Author:

Brian Fuchs

National Drought Mitigation Center









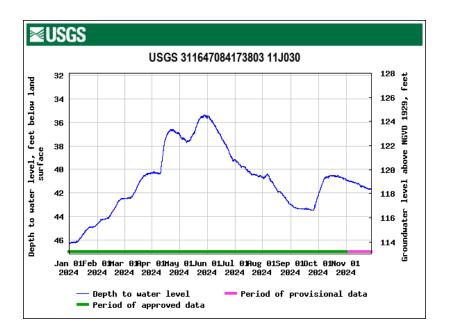
droughtmonitor.unl.edu

Drought Monitor map for Georgia as of December 17, 2024.

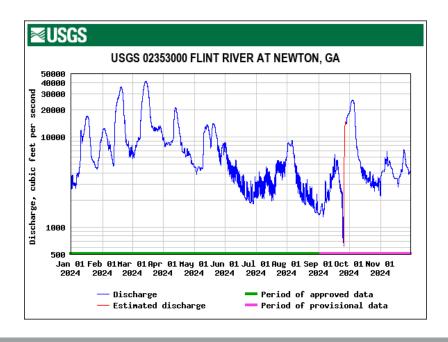
Conditions across the state as follows, with 61% ample soil moisture conditions. Currently, 39% of GA is abnormally dry, 6% moderate, 0% severe, and 0% extreme drought. For more information visit:

https://droughtmonitor.unl.edu/Maps/MapArchive.aspx

#### **Water Resources**



USGS data from January to November 2024. Above - Groundwater monitoring well here at SIRP in Floridan aquifer. Below - Stream gage on the Flint River at Newton, GA (3 miles from SIRP).



## **Events**

Past events	
November 28-29	Thanksgiving holidays

Upcoming events		
December 25-31	Christmas holidays	
January 1, 2025	New Year's holiday	
January 9	Peanut Update (Mitchell Co. Ag Center) *	
January 22	Disease Update (Mitchell Co.Ag Center) *	
January 24	2025 Georgia Ag Forecast	
January 30	Weed Mgmt. (Mitchell Co. Ag Center) *	
February 27	Cotton Update (Mitchell Co. Ag Center) *	
March 13	Pecan Update (Mitchell Co. Ag Center) *	

<sup>\*</sup> Call Extension office at 229-336-2066 to Register for meetings.

Right:
Dr. Kemerait's crew installing spore traps.

Below: IGEL 2024 group visits & tours the park.





Right: Christian & Dr. Kemerait rating peanuts.

Below: Emily Bedwell directing sweet corn data collection.







Above: Collecting data on sweet corn ears, fun!

Below: Fernando Martin, Calvin & Brazilian guests visit & tour the Park.







Above & Below:
Our grad students measuring and collecting data from cotton & peanut plots.



Right: Dr. Porter & crew weighing peanut.

Below:
B.J. with Dr. Kemerait
& crew with a sample
of sweet corn.





Right & Below: Dr. Vellidis & crew





Right & Below: Dr. Snider & crew harvesting cotton.



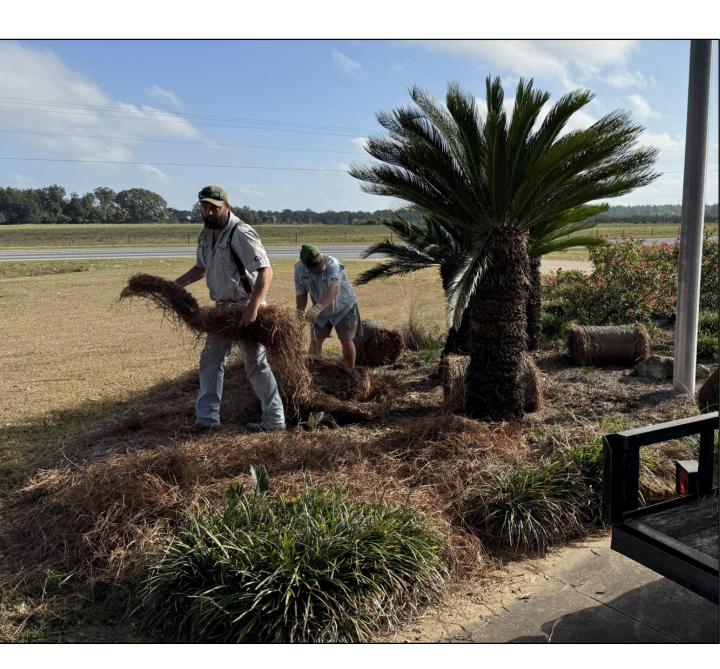




Above: Ms. Candace helping Dr. Kemerait crew weighing cotton. Below: Our shared Almaco plot combine harvesting field corn



Below: Kyle & Daryl making the Park look great!



#### Right:

Enjoying lunch after all the crops were harvested.

#### Below:

B.J., Calvin, Kyle & Daryl preparing the steaks for our 'end of harvest' and Christmas lunch.





Amilcar's Meet & Greet at Stripling Park.





Above: Calvin 'passing the torch' on to Amilcar.

#### **Brain Teasers**

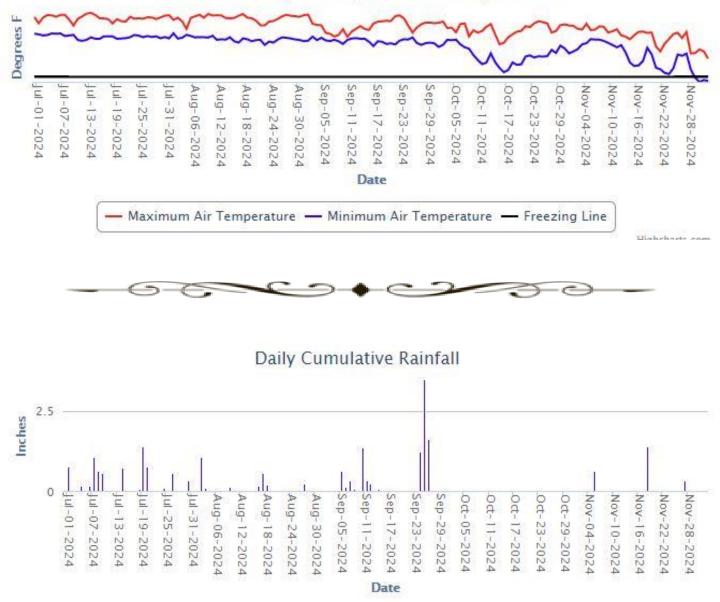
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#### Answers:

1-History repeating itself; 2-Ring around the rosey; 3-Repeat after me; 4 Read between the lines; 5-You're under arrest; 6-Square meal; 7-Double vision; 8-Alice in Wonderland; 9-Right beside me; 10-Frankenstein; 11-Made in China; 12-Scrambled eggs; 13-One in a million; 14- Four wheel drive; 15-Land before time; 16-I'll be there in a minute; 17-Cross country; 18-Green eggs & ham; 19-Banana split; 20-Fancy that; 21-Undercover agent; 22-Balanced meal; 23-Somewhere over the rainbow; 24-Excuse me; 25-Time after time; 26-Bad influence; 27-Walk in the park; 28-Too big too ignore; 29-Big Bird; 30-Going around in circles; 31-Ice cube; 32-Foreign language; 33-Space invaders; 34-Safety in numbers; 35-Looking backwards; 36-Half baked; 37- 2 Rights don't make a wrong; 38-Tiptoe thru the tulips; 39-Free for all; 40-Neon lights.

#### **SIRP Weather**





For July, SIRP had 7.65 inches of rain, compared to 2.55 inches in August, 9.63 inches in September, 0.00 in October and 2.49 inches in November. For July through November, SIRP received a total of 22.32 inches of rain.

To explore weather information, visit www.georgiaweather.net.

#### **Contact Us**

#### You can stop by

8207 Highway 37 West, Camilla, GA 31730

#### Give us a call

229 522-3623

#### Visit our website & watch our live camera!

www.striplingpark.caes.uga.edu

#### Or send us an email

Amilcar Vargas (Superintendent): amilcar.vargas@uga.edu B. J. Washington (Farm Manager): bwashing@uga.edu Candace Gray (Admin. Associate): sirp@uga.edu



#### Commit to Groundbreaking Research

Ag research keeps Georgia agriculture on the leading edge of the industry. Consider giving to the C.M. Stripling Irrigation Research Park today.

Click here to Donate Now.