

Stripling Irrigation Research Park

August 2019



Stripling Research Park's employees (L – R)
B.J. Washington, Amanda Brown, Candace
Gray, Calvin Perry & Kyle Matthews.

This Month

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UNIVERSITY OF
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C.M. STRIPLING IRRIGATION
RESEARCH PARK

From the Superintendent

Like May, July was a very warm month at SIRP. We 'enjoyed' a high temp of 98.1F on July 3rd yet had a nice low of 64.5F on July 27th. For our Field Day on the 18th, we had a high of 95F accompanied by oppressive humidity – very sticky. We received 6.15 inches of rain during July, over 9 rain days, but 3.65 inches came on July 19th.

The SIRP crew was very busy last month with irrigation, spraying plots (cotton, peanuts, soybeans), fertilizing (and fertigating) cotton, working on VRI system hiccups, repairing buried mainline breaks, and pulling up pigweed (Palmer Amaranth) by hand (fun). Our corn plots for Drs. Porter and Vellidis reached black layer on July 23rd, ending the need for additional irrigation.

Visitors to the Park included Adam Snow with Trellis Inc., Kinsie Rayburn with Farm Journal and Trust in Food, and Bill Tollner and Coleman Barrie from the UGA College of Engineering. As of this writing, the Park has hosted 738 visitors for 2019.

We were very appreciative of Bubba Ivey, McCrometer regional sales manager, and Justin Wilkerson, J&B Irrigation, for arranging for installation of a new McCrometer DuraMag flowmeter to replace a malfunctioning unit from another manufacturer. This meter is on the output of our Claiborne aquifer well.

Once again, SIRP hosted the Institute for Georgia Environmental Leadership (IGEL) class as part of their institute in SW Georgia. We take advantage of the opportunity to educate class members from mostly non-ag/non-rural backgrounds on the importance of water and irrigation to farmers in our region.

We were also pleased to host, for the third time, a meeting of the Tristate Climate group at the Park. The highlight of the meeting was a tour of a local 1200 acre solar power generation project.

The BIG event for July was our biennial Field Day. Nearly 100 attendees braved the heat, humidity and gnats to hear from SIRP's scientists and grad students about their respective projects at the Park. Drs. Bob Stougaard (Assistant Dean for Research) and Mark McCann (Assistant Dean for Extension) were the keynote speakers. Thanks to the speakers, including Drs. Bob Kemerait, Wes Porter, George Vellidis and Vasileios Liakos, Cale Cloud, Simer Virk, Alessandro Ermanis, Matt Gruver, and Arianna Toffanin. We appreciate Georgia Farm Monitor covering our Field Day once again. Check out the Farm Monitor's video from the event at:

<https://www.youtube.com/watch?v=9B32yF8trbA>



Calvin Perry

Smart Irrigation Month

Smart Irrigation Month is a public awareness campaign to promote efficient water use. Focused on July, Smart Irrigation Month highlights effective practices and innovative technologies to:

- Increase crop yield, quality and profits per acre.
- Apply water and nutrient inputs more precisely for improved results with no waste.
- Minimize runoff and top soil erosion.
- Help protect and preserve water supplies for today and the future.

This year, a great team worked on the Smart Irrigation Georgia campaign to promote efficiency. The team included Flint River Soil & Water Conservation District, USDA-NRCS, University of Georgia (incl. SIRP), Georgia Farm Bureau, Southwest Georgia Water Stewards, Georgia Department of Ag, Georgia Agribusiness Council, Georgia Chamber of Commerce, Metro North Georgia Water Planning District, and the Urban Ag Council / Georgia.

A nice website was created with lots of important content, including several feature articles and a FAQ: www.smartirrigationgeorgia.com

As part of the campaign, Calvin sent out Smart Irrigation tips during the month through social media and emails. We've included them here in case you missed them.

Tip #1 – To make sure your irrigation system operates at peak efficiency, make use of a reputable dealer when repairing, replacing or modifying your ag irrigation system – whether it be the system, the sprinklers, or the pumping plant. A poorly designed or matched combination will lead to disappointing results such as non-uniform application, excessive energy usage, or even crop reduction/failure. Go to the website of your respective equipment manufacturer to find the dealer nearest you.

Tip #2 – Consider adopting a form of advanced irrigation scheduling to help you decide when to trigger irrigation on your crop/field. Such advanced irrigation scheduling can be accomplished through the use of soil moisture sensors, irrigation scheduling smartphone apps, irrigation scheduling software, or even UGA Extension “checkbook” scheduling aids.

Tip #3 – A quick way to increase the efficiency of an ag irrigation system is to repair all leaks, including missing/broken sprinklers, on the center pivot or other type system as soon as you notice them. Buried pipes seldom leak. However, above ground pipes frequently have worn gaskets and considerable amounts of water (up to 30%) can be lost before it gets to the actual discharge point (sprinkler). Replace broken or missing sprinklers, leaking gaskets, boots, etc. and plug any holes in the pipes.

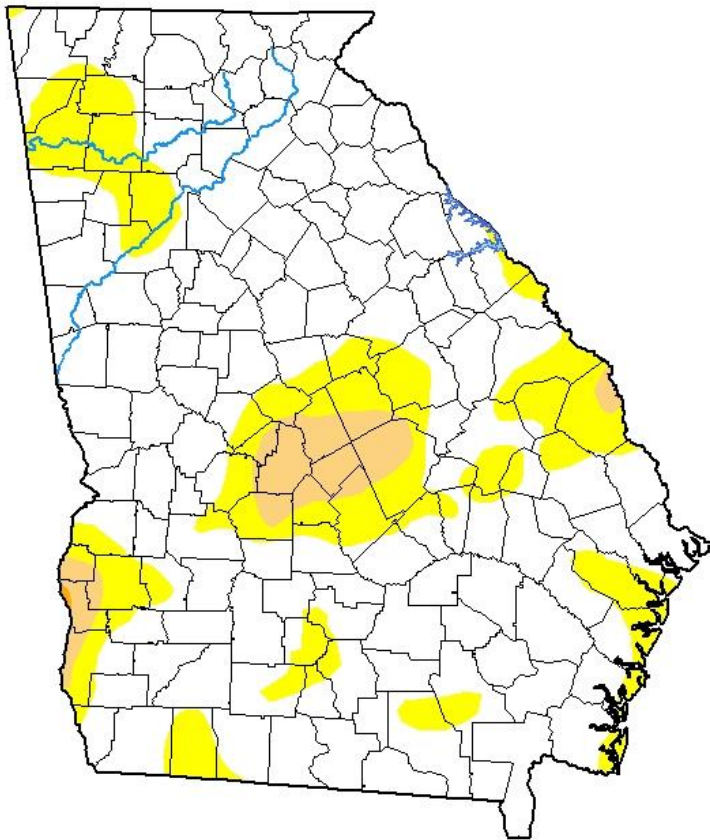
Tip #4 – Consider installing (or retrofitting to) low pressure spray-type sprinklers on your center pivot for highest efficiency. Why? - Losses from wind drift and/or evaporation will be decreased so more of your pumped water will reach the plants' roots for beneficial use. Check with your local USDA-NRCS office to find out if there are cost-assistance programs to help with retrofitting.



Drought Conditions

U.S. Drought Monitor Georgia

July 30, 2019
(Released Thursday, Aug. 1, 2019)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	76.37	23.63	4.25	0.05	0.00	0.00
Last Week 07-23-2019	75.31	24.69	4.05	0.05	0.00	0.00
3 Months Ago 04-30-2019	29.58	70.42	13.09	0.00	0.00	0.00
Start of Calendar Year 01-01-2019	100.00	0.00	0.00	0.00	0.00	0.00
Start of Water Year 09-25-2018	70.95	29.05	6.72	0.00	0.00	0.00
One Year Ago 07-31-2018	100.00	0.00	0.00	0.00	0.00	0.00

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:

Curtis Riganti
National Drought Mitigation Center



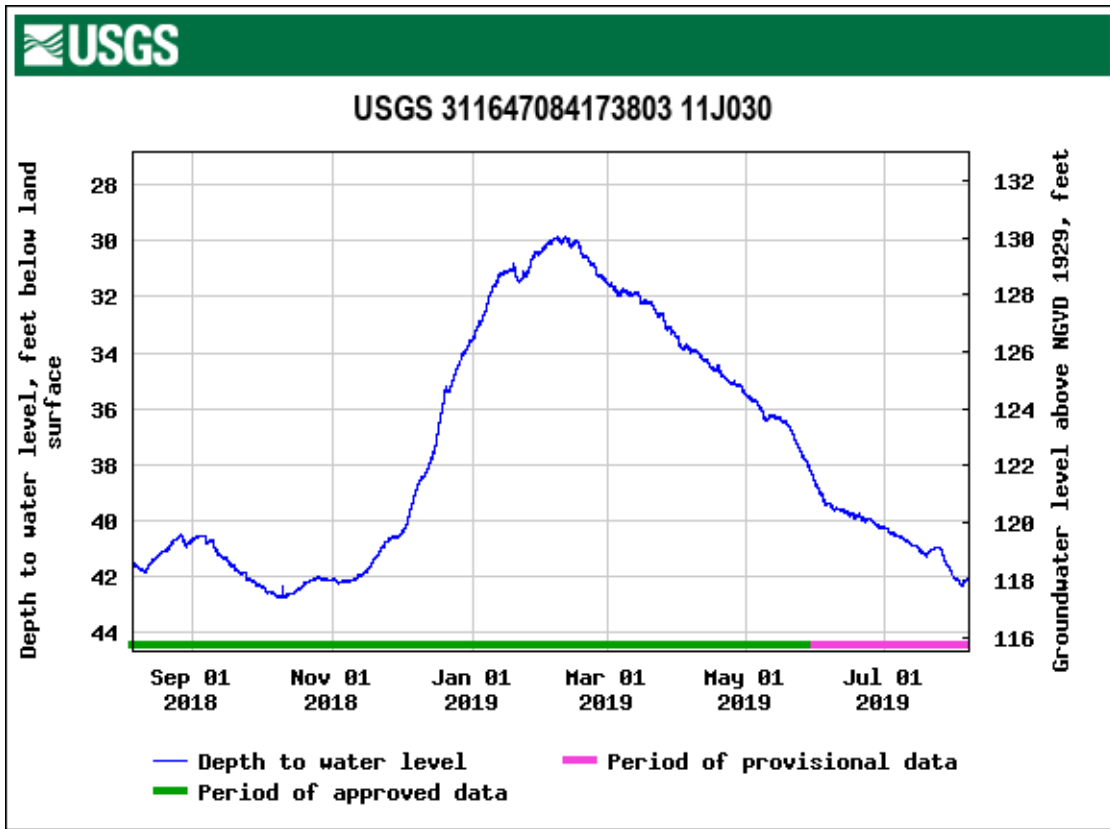
droughtmonitor.unl.edu

Drought Monitor map for Georgia as of July 30th. Currently, about 24% of GA is in the abnormally dry or moderate drought condition category. Last month we were at 37% abnormally dry or moderate drought.

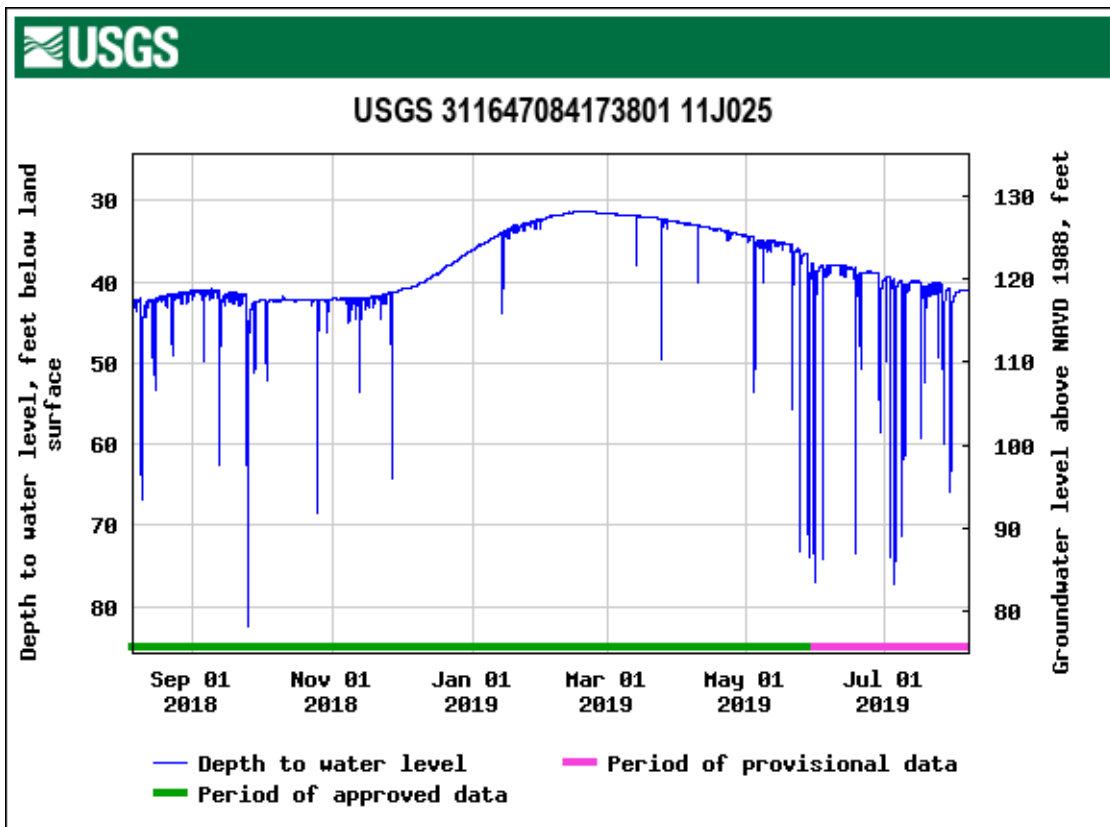
For more info:

<http://droughtmonitor.unl.edu/Home/StateDroughtMonitor.aspx?GA>

Water Resources



Above and below - USGS data for past year for groundwater monitoring wells here at Stripling Park. The graph above shows static water level for our Upper Floridan aquifer well and the graph below is static water level for our Claiborne aquifer well.



At the Park



Left: Ag. Econ. Visitors
with Calvin.

Bottom: B.J. & Kyle
working on sprayer.



At the Park



Left: Irrigating with our 3 linear-move systems.

Bottom: Irrigating Dr. Vellidis' soybeans.



At the Park



Above and below – SIRP hosted the 2019 class of IGEL



At the Park



Above: Calvin being video'd by Trust in Food, a part of Farm Journal, to learn about VRI.

Bottom: Sometimes you just have to pull up pigweed by hand!



At the Park



Above: B.J. repairing the Camilla lateral VRI.
Below: Dr. Kemerait spraying cotton plots.



Field Day At the Park



Field Day At the Park



Events

Past events

July 4	Independence Day
July 11	IGEL
July 18	Field Day 2019

Upcoming events

Sept 2	Labor Day
Sept 9	SW Dist. Forestry Field Day
Nov 28 – 29	Thanksgiving Holidays
Dec 25 – 31	Christmas Holidays

In the News

[Growing urban farms](#)

[What Will 5G Mean for Rural America?](#)

[ScoutPro, Farmers Edge to Boost Crop Monitoring Capabilities With Daily Satellite Imagery](#)

[Georgia, Florida taking their water feud to New Mexico](#)

[5 Ways to Use Satellite Imagery on Your Farm](#)

[Farm Bureau: Rural Broadband Will Boost Economy, Improve Sustainability and Animal Welfare](#)

[Spot Spraying With Drones a Reality in Asia, When Will It Come to the U.S.?](#)

[Sony Releases Smart Agriculture Solution for Crop Management, Feature Drones, Sensors](#)

[FCC Forming a Precision Agriculture Task Force](#)

[From Tranquility Base to the Tractor Seat: How NASA Technology is Advancing Agriculture](#)

[Smart irrigation model predicts rainfall to conserve water](#)

[USDA offices studying possibility of future without Ogallala Aquifer](#)

[Pecan Growers Eligible for Market Facilitation Program](#)

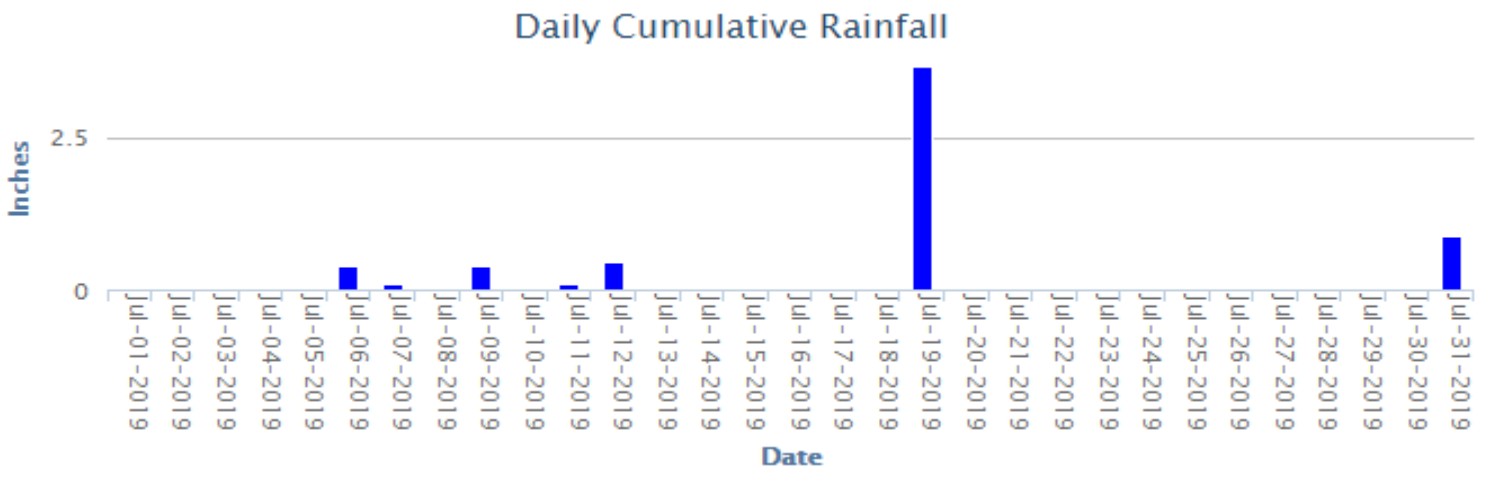
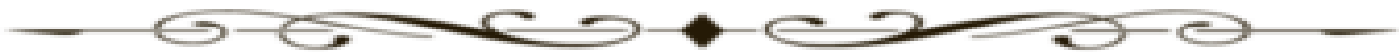
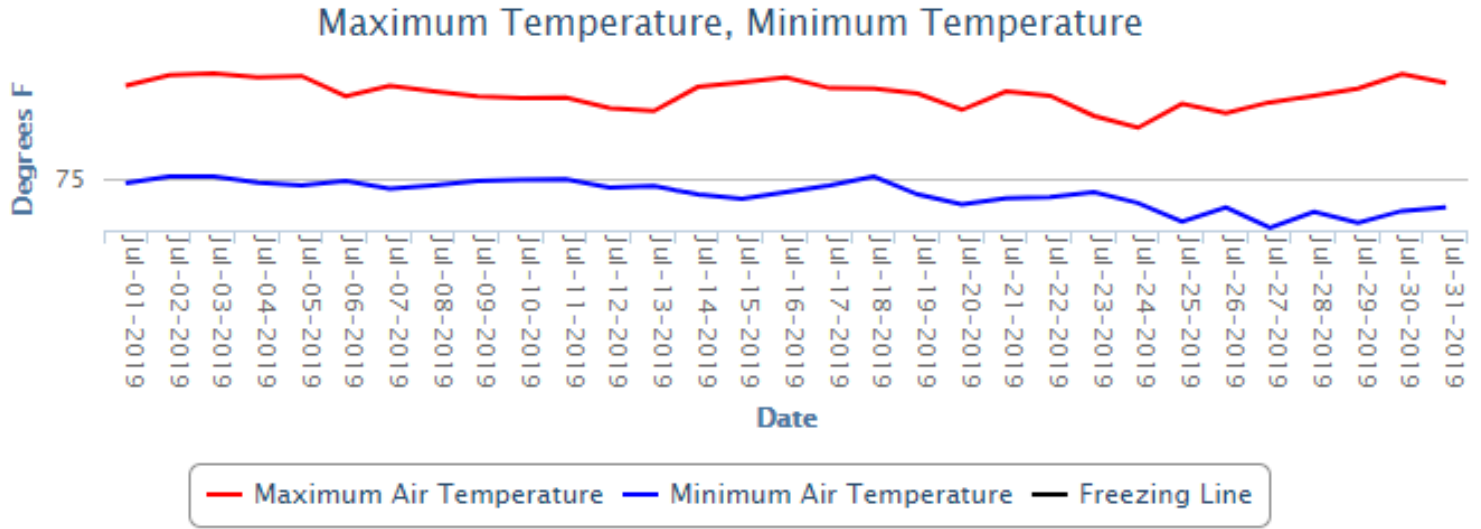
[Georgia Cotton: 6 Diseases to Watch for in August](#)

[Missouri: Kill Weed Seeds Before They Become Weeds – Study](#)

[Spraying, seeding with UAVs moves forward](#)

[Cotton industry targeting efforts to address new virus](#)

SIRP Weather



For August, SIRP had 6.15 inches of rainfall, compared to 4.77 inches in June, 3.42 inches in May, and 4.25 inches in April.

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

Contact Information

CM Stripling Irrigation Research Park
8207 Highway 37 West
Camilla, GA 31730
(229) 522-3623

Calvin Perry (Superintendent): perrycd@uga.edu
Candace Gray (Admin. Associate): sirp@uga.edu



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Trivia:

What food item was banned in United States movie theatres in the 1920s?

Answer: Popcorn, it was too noisy!