

#### December 2019



Nice pic of the sun shining down on the cotton picker while harvesting cotton study plots.

#### **This Month**

- From the Superintendent
- Drought Conditions
- Water Resources
- At the Park
- Past & Upcoming Events
- **▶** In The News
- SIRP Weather



College of Agricultural & Environmental Sciences

C.M. STRIPLING IRRIGATION RESEARCH PARK

# From the Superintendent

#### **BREAKING NEWS:**

Good news! Conclusion from PAUL J. KELLY, JR. Special Master, related to FL v GA case:

"I do not recommend that the Supreme Court grant Florida's request for a decree equitably apportioning the waters of the ACF Basin because the evidence has not shown harm to Florida caused by Georgia; the evidence has shown that Georgia's water use is reasonable; and the evidence has not shown that the benefits of apportionment would substantially outweigh the potential harms."

https://www.ca10.uscourts.gov/sites/default/files/SM142/670.pdf

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November continued the dry conditions at Stripling Park. We had six rain events scattered over the month for a total of only 2.3 inches. Our daily high temps ranged from a warm 81F down a chilly 51F while our lows ranged from 61F to a quite chilly 30F. As I noted last month, we have settled into a pattern of fronts passing through and bringing rain followed by cool temps and dry days. As you'll see on the next page, drought conditions across GA have eased quite a bit with no areas in "extreme drought", BUT deep south Georgia is in moderate drought designation. We really could use some substantial rains to start recharging our important Floridan aquifer.

The SIRP crew was busy last month with harvest of remaining plots of soybeans (Vellidis), cotton (Kemerait and Hayes, and peanut (Harris) as well as sowing rye cover crop as these plots were harvested. Planning for 2020 plots/crops is already underway.

In addition to scientists and their staff (mentioned above), visitors to the Park included Zeke Baker, a satellite comms guru with TBS/Atlanta, Marcos Bengolea (Metos/Pessl Instruments), Jay Holder (Holder Ag Consulting), Ray Yager (Certified Ag) and Dr. Erin Porter and her ABAC Irrigation & Drainage class. I presented in Tifton to a Leadership & Public Affairs class visiting from Georgia College & State University. The class was learning about the role that 21st-century agriculture will play in Georgia's future. I also participated in a meeting in Dawson at USDA on the IrrigatorPro app and its performance during the 2019 SW Ga AgWET project. One of the more interesting meetings I've attended was the industrial hemp production meeting in Perry sponsored by TriEst Irrigation. A very interesting crop with very unique 'constraints'.

We are pleased to be evaluating some Metos / Pessl Instruments units (D3 as well as LoRain). We have mounted units at our UGA weather station and a couple other stations around south Georgia. We will be comparing data between the Metos units and our UGA weather stations.

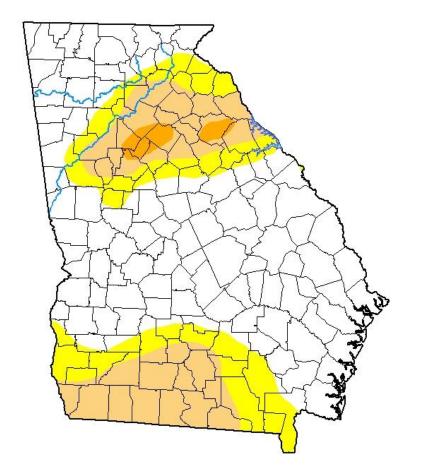
We are VERY pleased to announce the newest addition to the SIRP family. Mandy Brown, SIRP ag specialist, gave birth to Skylar Ray Brown on December 10<sup>th</sup>. Little Miss Skylar arrived at 7:330pm and weighed 7 lbs 12 oz. Everyone is doing fine.

Finally, I would like to wish everyone a Merry Christmas and Happy New Year. SIRP will be shut down December 25<sup>th</sup> to January 1<sup>st</sup> so we can enjoy the time with our friends and families. We look forward to working with many of you in 2020!

Calvin Perry

# **Drought Conditions**

U.S. Drought Monitor
Georgia



#### **December 10, 2019**

(Released Thursday, Dec. 12, 2019) Valid 7 a.m. EST

Drought Conditions (Percent Area)

6	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	62.87	37.13	20.33	1.68	0.00	0.00
Last Week 12-03-2019	63.17	36.83	20.34	1.68	0.00	0.00
3 Month's Ago 09-10-2019	59.56	40.44	10.33	1.33	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 10-01-2019	0.00	100.00	61.58	28.35	4.49	0.00
One Year Ago	100.00	0.00	0.00	0.00	0.00	0.00

#### Intensity:

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:

Deborah Bathke National Drought Mitigation Center







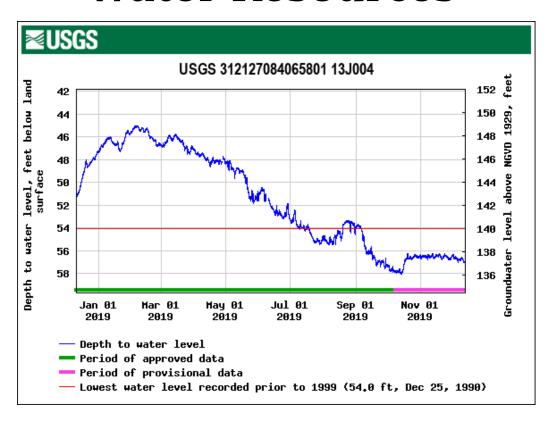


droughtmonitor.unl.edu

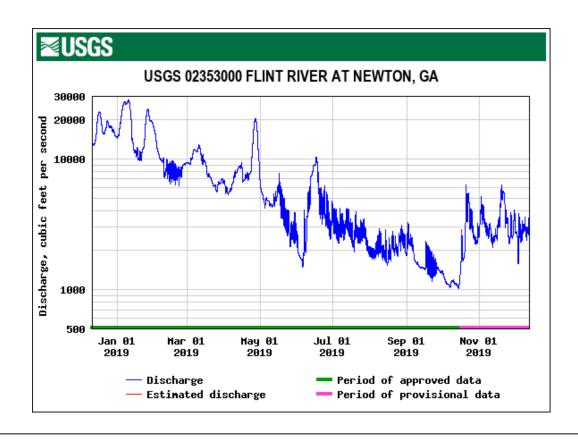
Drought Monitor map for Georgia as of December 10. Conditions have eased quite a bit - currently, only 37% of the state is categorized as abnormally dry, 20% is in moderate drought, 1.68% is in severe drought and 0% is considered extreme drought. But notice that deep south Georgia is experiencing moderate drought. Last month's map was showing much drier. For more info:

https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx? GA

### **Water Resources**



Above and below - USGS data for the past year for a groundwater monitoring well in northern Mitchell County and stream gage on the Flint River at Newton.



## At the Park



Above: Harvesting peanuts for Dr. Harris in the Lindsay lateral field..

Below: Kyle at the controls and harvesting Brian Hayes' (Mitchell Co. Ext. agent) cotton for his study in the VRI pivot field.



## At the Park



Above: Harvesting non-data rows in the Front 4 soybeans. Below: Harvesting 'data' rows in the Front 4 soybeans.



### At the Park



Above: Dr. Kemerait's crew getting weights on cotton plots, with the assistance from SIRP's crew (and Cale Cloud).

Below: Testing METOS D3 raingauge along side other weather stations.



## **Events**

#### Past events

Nov 18	Dr. Erin Porter's ABAC class tour
Nov 28 – 29	Thanksgiving Holidays
Dec 2-4	Irrigation Association (Las Vegas, NV)

# Upcoming events

Dec 25 – 31	Christmas Holidays
Jan 1, 2020	New Year's Holiday
Jan 8-10	Beltwide Cotton Conf. (Austin, TX)
Jan 14	Westminster School class tour
Jan 16	GA Peanut Show (Tifton)
Jan 30	GA Cotton Conference (Tifton)

### In the News

Tillage is a g	ood option	for fertilizer	applications i	f time permits
4 7	COG OPCOIL		appheations	. cirric perimics

USDA announces awards to put conservation innovation to work

New service enhances satellite imagery

Start-up companies taking on ag challenges

Citrus Industry Growing In Georgia

Georgia is the proud pecan capital of the U.S.

Roadside flowers to help bees, butterflies as Georgia Grown policy supports farmers

This lingering water wars issue may soon be resolved

High Plains Farmers Race to Save the Ogallala Aquifer

IBM to launch faster weather forecast system to cover the globe

How Irrigation Technology Meets Farming Challenges

2018 Irrigation and Water Management data now available

What Does Flash Drought Look Like in Your Region?

IRRIGATED AGRICULTURE: Technologies, Practices, and Implications for Water Scarcity

How is the GroGuru Solution and 'Ground Truthing'? with Soil Sensors Complementary with Satellite Imagery and Aerial Photography?

Startup Firm Planted 10,000 Acres of Corn Autonomously in 2019

Stalactites, bass, ducks overlooked as water war focuses on oysters, farmers, metro Atlanta

Six Exciting AgTech Projects Coming to Agriculture in Five Years

Extreme drought gone, but problems persist in parts of Georgia

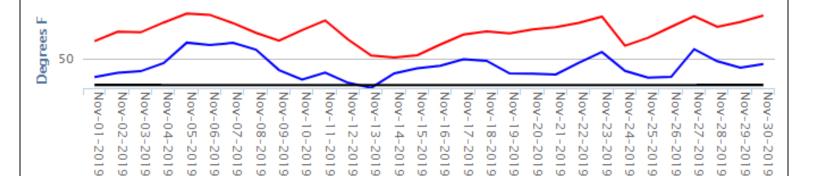
#### Video / Podcast / Radio:

Cotton Harvest 2019

Peterson Farm Bros. epically parody Ozzy Osbourne with 'Crazy Grain'

# **SIRP Weather**

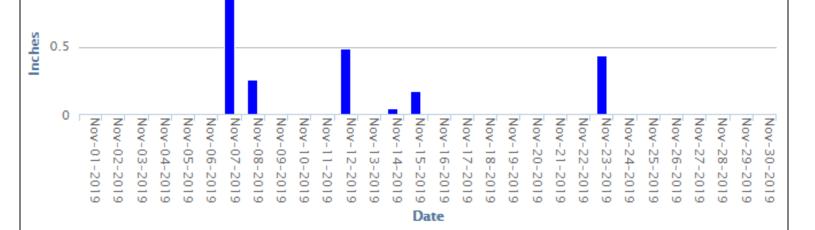
Maximum Temperature, Minimum Temperature



- Maximum Air Temperature — Minimum Air Temperature — Freezing Line



#### Daily Cumulative Rainfall



For November, SIRP had 2.30 inches of rainfall, compared to 5.08 inches in October, 1.01 inches in September, 4.82 inches in August, and 6.15 inches in July.

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

### **Contact Information**

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## C.M. Stripling Irrigation Research Park

College of Agricultural & Environmental Sciences

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#### Trivia:

What was the original slogan of Doctor Peppers?