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The University of Georgia

College of Agricultural and Environmental Sciences
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Lee County Ag Newsletter

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Pecan Update Date Changed-Doug Collins

The Lee County Pecan Update will be held on Wednesday, August 2 (one day earlier than originally scheduled due to a scheduling conflict.) The meeting will be a t noon. A sponsored meal will be served. Dr. Lenny Wells, UGA Extension Pecan Specialist will give us an update on what he is seeing in the field.

Weather and Climate Outlook for July

- Pam Knox, Agricultural Climatologist

Welcome to the dog days of summer, which runs from roughly July 3 to August 11. It has nothing to do with dogs but with the rising of Sirius (the Dog Star) in the east each morning, and coincides with the hottest time of the year in the Northern Hemisphere. As expected, hot and humid conditions are occurring here in Georgia now and are expected to continue for the next few weeks. The hottest conditions may occur in the next week or two but we are likely to return to more moderate (for summer) conditions later in the month. Precipitation is expected to be mainly from scattered thunderstorms throughout the month, with wetter conditions occurring in the next week or two due to the circulation around the high pressure centered over Texas and drier conditions occurring later in the month, especially in southwest Georgia. Some of the thunderstorms will have strong winds and hail associated with them, so scattered crop damage could occur from these storms.

The tropics are typically pretty quiet in July and this year looks like nothing significant is likely to form in the next few weeks. This is due to Saharan dust, wind shear aloft due to the current El Nino, and the lack of significant atmospheric waves moving west off of Africa. This year it is harder than usual to predict the total number of storms expected to develop due to the competition between a strong jet from El Nino preventing storm formation and the unusually warm ocean temperatures, which tend to fuel storm development. The more active season for tropical storms begins in mid-August and peaks about a month later, although storms can develop into November or even later. Only two or three of them are likely to affect Georgia directly, but since it only takes one to do a lot of damage, you should keep an eye on the tropics throughout the season just in case.

El Nino has developed and is strengthening rapidly. Typically, El Nino is strongest in winter and is linked towards cooler and wetter than normal conditions over the winter months. However, we are also seeing a trend towards warmer conditions over time, especially in winter, so it is not clear which will win out this year. Because of how strong the El Nino is likely to be, we are more likely than usual to see wet conditions occur this fall, especially late in the season, so you will want to watch conditions carefully and harvest as soon as you can since wet conditions may impede harvest and reduce crop quality if you wait too long.

July/Mid-Season Peanut Irrigation Considerations

- Jason Mallard, David Hall, Phillip Edwards, Daniel Lyon, Hannah Grubbs and Wesley Porter **July/Mid-Season Peanut Irrigation Considerations**

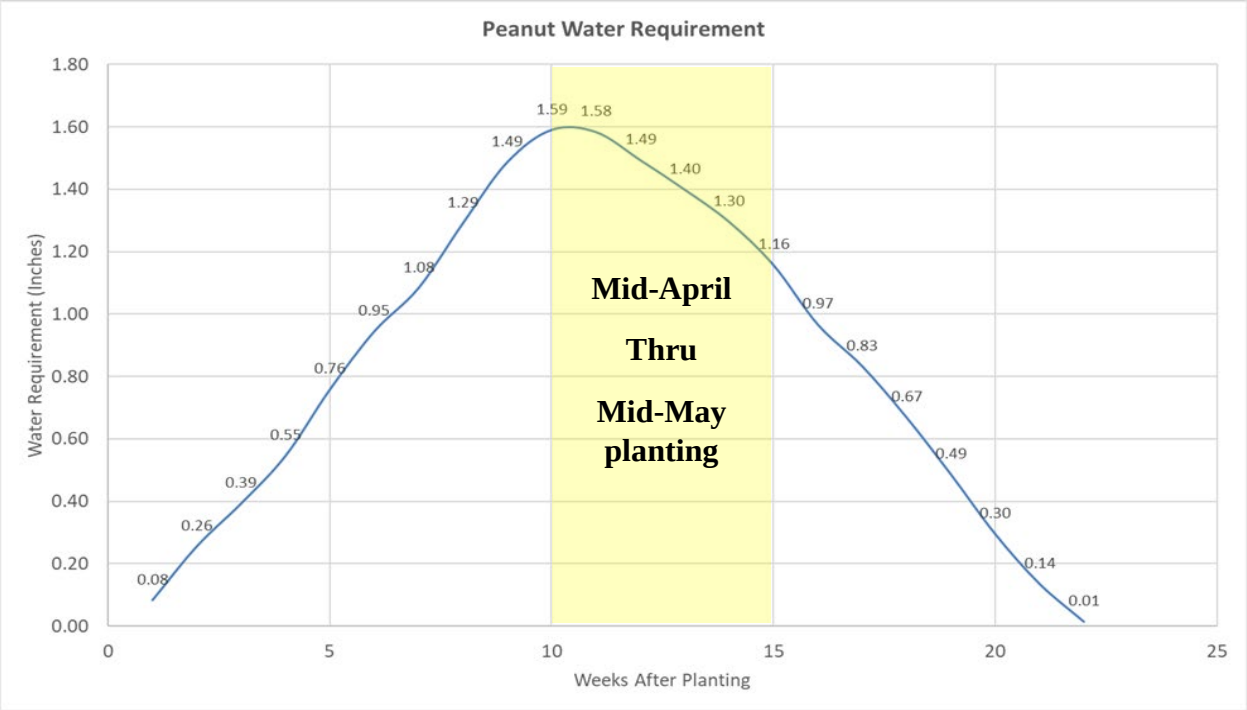
Jason Mallard, David Hall, Phillip Edwards, Daniel Lyon, Hannah Grubbs and Wesley Porter

Most of our peanut crop in the state should be pegging and putting on pods by now and approaching peak water use. However, I know from listening to Dr. Monfort, it seems that due to the cooler and wet weather early during the crop season that the crop appears to be behind and not at the same maturity level it would normally be at this time of year. Similar to what I wrote in the July Cotton newsletter, we were cooler and wet throughout the early part of June. In some areas we received significant rainfall throughout the middle portion of June with storms that caused significant damage to crops and equipment. While, we felt like we were saturated, it has all of the sudden turned very hot (the first few days of July are predicted to be near 100 degrees). While, the cooler weather and rainfall are always welcome and appreciated, it kept some of our younger crops, specifically, cotton and peanut, in saturated conditions through most of June and very likely hindered deep rooting development. Now that we are getting hot and dry, and are moving into peak water demand for cotton and peanut we need to ensure we are staying on top of our irrigation requirements. Please refer to the graph below to indicate where you are at with weekly water use in your crop. Remember this requirement is IRRIGATION and RAINFALL with historical evapotranspiration rates figured into the equation. Due to years of research, peanut water demands during different stages have been identified but one of the variables in irrigation scheduling are ET rates. A free tool is available to help in determining how much water is lost on a daily basis to evapotranspiration and that is the UGA Weather stations. Just pick a site and enter a timeline on the water balance tab. It should be noted that this is Evapotranspiration is not directly equal to crop water usage. To calculate actual crop water usage, the ET value must be multiplied by the current crop coefficient. As mentioned earlier, UGA Extension's Checkbook method of irrigation scheduling was developed by multiplying the peanut crop coefficient by the average historical ET rates and therefore there is a good chance the water being applied may be insufficient due to this year's current weather conditions. It is a good tool but soil moisture sensors or apps are far superior in irrigation scheduling.

Once peanuts begin blooming and pegging, they will use roughly 0.2" of water daily for ~20 days. By the middle of July, those early/mid-May planted peanuts can use up to 0.3" of water per day on days that it is hot, windy, with low humidity, so it is important to not get behind on irrigation. It is also important to not let your soil temperature get too high with peanuts pegging as high soil temperatures can burn off pegs.

Below is the estimated current Checkbook water use for peanuts across most of the state for the month of July.

If you are using a computer-based scheduling models such as Irrigator Pro in combination with soil thermometers, it has a maximum soil temperature notification that will alert you whenever your soil temperature reaches threshold, informing you that irrigation may be required to cool your soil temperature, even if there is adequate soil moisture.



For the producers who have installed soil moisture sensors, please take note of these few comments. Be mindful that skips or gaps can occur during the growing season due to disease or washouts. Once a stand is established and sensors are placed in an appropriate location in the field, we can often be guilty of taking for granted that the sensors will remain in an optimum location and supply accurate readings for the entire season. If you are not the one making trips across the field spraying or scouting, it would be wise to double check your sensor locations. Seedlings present after emergence can be nonexistent weeks later. The lack of plants will result in bare ground and the lack of roots near the sensor causing false water use data to be recorded since nothing will be using water near the sensor. Thus, the sensor will be providing erroneous soil moisture data. If you are utilizing Irrigator Pro, a lack of canopy will cause 2-inch soil temp readings to be flawed, leading to the program suggesting irrigation applications due to the high soil temperature. Early to mid-season soil temperatures and moisture availability readings can be affected greatly with poor sensor location. Fruiting and pegging in peanuts are critical periods for water requirements. Don't be fearful to pull the sensor up and reinstall it in a more suitable crop area. You have made an investment in utilizing the sensor and are expecting to receive accurate and quality data from your sensor, but this will only occur if you have your sensor placed where peanuts are present. As can been seen in the image below, the sensor is in a location that has no plants or canopy nearby to accurately read information from. This sensor needs to be removed and reinstalled between two plants that have adequate canopy and rooting development.

Remember to do a good job staying on top of your irrigation during the month of July since it is during peak water use. There are many irrigation scheduling tools available to help with this task. If you have more questions about irrigation scheduling or crop water usage reach out to your local UGA Extension Agent and general water usage can be found here: Irrigation Reference Guide for Corn, Cotton, Peanuts, and Soybeans | UGA Cooperative Extension

July Peanut Pointers -Dr. Scott Monfort

What to expect due to the late start due to weather and vigor issues?

April – Late May Plantings

With a majority of peanut acreage planted in mid to late May along with the crazy weather we had for the first 30-60 days, the major question to be asked is "When will peanuts reach optimal maturity this year?". The answer is who knows but I expect we will be 1-2 weeks behind compared to previous years. If we have "normal to hot "temperatures in July, August and September a majority of the peanuts will catch up some but I would not expect them to be the normal 140 DAP. I would recommend you begin to evaluate your early and mid-May plantings at 120-125 Dap to see what they look like and keep monitoring weekly thereafter. This is still the best course of action to accurately determine maturity.

June and After Plantings

Peanut maturity begins to be a little trickier as we get into June and July planted peanuts. We tend to run out of heat units in these later planted fields which slow down the plants ability to mature the peanut crop out. For example, a field planted on June 20 would need until November 7 to reach 140 days if it had optimum temperatures and moisture. The problem is a majority of the peanut growing areas begin to cool down in October and November. Therefore, for peanut fields planted in late June or early July, the maturation timing would be

extended an extra 10 days or more. It is very common to have some of these late planted fields to go to the first frost in order to allow them as much time as possible to mature.

This harvest season will be a real challenge for us as far as determining optimal maturity. It will all depend on what kind of rainfall and temperatures we have in July, August, September and October.

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