

Plants for Human Health

INSTITUTE

April 2019

FRESH from the Garden

Register now for the School Garden Summer Institute

August 14-15 • 8:30 am - 3:30 pm Registration cost: \$25, lunch included Registration deadline: June 30 Register now!

Last year's SGSI was a resounding success. One attendee said, "I loved every minute of the workshop - and that's never happened!"



If you have an interest in school gardens, whether you're a pro or a

beginning or just wanting to learn more,

you don't want to miss this professional development opportunity.

Day 1 will be held at the NC Research Campus in Kannapolis. Topics include hydroponics, vermicomposting, and sweet potato tips (just to name a few) and keynote speaker, Jenna Mobley. Mobley is a contributing educator for school garden support organizations including FoodCorp, Georgia Organics, LifeLab, Whole Kids Foundation, and the Captain Planet Foundation.

Day 2 will start at Barbee Farms in Concord, because even teachers like field trips! Next stop will be a school garden tour featuring curriculum connections and classroom management in the garden.



Teacher Feature: Abraya Johnson, School Nurse

The school garden is not just a resource for traditional classroom teachers. At GW Carver Elementary in

Kannapolis, the school nurse recognized a great opportunity to work with the teachers to prepare the garden harvest, promoting student health. Abraya Johnson, RN, BSN, NCSN, joined the GW Carver staff in 2015 as the community health nurse. She serves 550 students, which she describes as a "smaller" school population. Abraya understands the importance of good nutrition to growing minds and bodies. The school garden is a perfect fit for Abraya to work with classroom teachers to impart lessons about healthy habits; in particular, the importance of fruits and vegetables.

Here are a few examples of how Abraya is a school garden champion:

 She leads a Nutrition Club, funded by a grant from Cabarrus Health Alliance Project MUNCH - offered to students who attend Boys and Girls Club



- She has done other nutrition groups where "Healthy Selfies" are a hit and students learn to "Eat a Rainbow"
- She wheels around a Mobile Salad Bar stocked with the garden harvest, and additional produce to complement what's in season.

Abraya brings some unique benefits to the students and teachers in her role. As the nurse, she is aware of food allergies, students who manage diabetes, or those who may have other dietary restrictions. She recognizes that students may have never tried some of the vegetables from the garden and tries to present them in a "kid-friendly" way, that will make their experience positive and hopefully coming back for more. She's made kale salads with kale and sausage, where all but 1 student came back for seconds. When lettuce was harvested from the garden, she made 3 simple dressings, always keeping the cost of ingredients and prep time in mind, because children frequently say, "Can I have the recipe?" It's an overarching goal that they will request these healthy options at home. Since kale is an inexpensive item at the grocery store, it's a win all around when a kid asks their parent, "When can we have kale salad, again?"

Recently, PHHI awarded Abraya a mobile kitchen cart, to help her have the right tools in one spot to prepare fresh fruits and vegetables. This cart has already prepared berry/kale smoothies, homemade ranch dips for veggies, sausage and kale and a couple different harvest veggie soups in its first month at GW Carver. Abraya says, "Another great reward is seeing children who said they don't eat something because 'it is nasty' come back for seconds!"





PHHI Earns Award for School Gardening Efforts

Congratulations to Amy Bowman and Doug Vernon, who forged the relationships with Kannapolis City Schools that led to Plants for Human Health Institute being selected as the 2019 recipients of the Kannapolis Education Foundation's Friend of Education Award. Dr. Chip Buckwell, superintendent of KCS, presented the award at the KEF Breakfast on March 22, at The Laureate Center at the NC Research Campus.



The theme of the fundraising breakfast

was "Learning As We Grow." More than 100 attendees heard from elementary and middle school teachers and students who are using school gardens as an integrated part of their curriculum. Ashlyn Ozment at G.W. Carver Elementary is using drones to teach pollination, coding robots to sow seeds and using the garden harvest as a springboard in reading, social studies and math. At Kannapolis Middle, agriculture education teacher Tim Downing is tackling production; from growing and postharvest care to processing and marketing. The school's culinary arts program uses the fresh produce in their restaurants.

Doug launched the Scientist for a Day program in 2015. KCS teachers select students to participate in this day of hands-on, age-appropriate lab experience at the Plants for Human Health Institute. Scientist for a Day introduces students to basic lab skills and features lab scientists who speak about some aspect of research that is happening at PHHI. Doug's vision was to offer a high impact experience exposing students to the exciting job opportunities in STEM, right here in Kannapolis. He also thought that it was a great opportunity to begin building stronger connections between the campus and the community. Since its inception, nearly 300 students have been "Scientists for a Day."

Amy and Doug work together providing teacher training and resources that support the use of school gardens as an outdoor classroom space. As former classroom teachers, they understand the importance of using standards-based lesson plans in conjunction with engaging applications of the learning objective.

The Kannapolis Education Foundation provides additional STEM resources to students in KCS, including school garden tools that will further support the expansion of school garden programs.



In the Garden Now



Plant

Consider this a "last call" for cool season transplants. North Carolina has demonstrated its skill at producing weeks with big temperature swings. A few consecutive spring days of extra warm temperatures can cause bolting (premature flowering) in cool season crops. Bolting can mark the end of the season for cole crops as plants that have bolted often become bitter.

Green beans, squash and cucumbers are generally considered summer crops but last year at least one school planted these in early-mid April and were able to harvest before school dismissed for the summer.

If you have a summer garden program, it's time to be planning for warm season crops. April 12 is the "frost free" date in our area (indicating it's safe to plant frost tender crops); but always check the weather forecast for frost potential. It's better to wait until May to plant some crops, like peppers and melons; crops that do not like cold weather at all.



Harvest

Harvest of radishes, lettuce, kale, kohlrabi and more continues this month. With spring break in late April for many school systems, be sure to assess the garden just before break. It will be better to harvest crops a little early than to wait a little too long. Crops like broccoli will be maturing quickly due to warmer days and once the buds open and turn yellow, the head will be past prime.

Strawberries will be ready to harvest this month. If temperatures are predicted to fall below 32 degrees F, protect the strawberry flowers with a frost blanket. In addition to tasting ripe berries, consider doing a strawberry DNA extraction lab with your students if it aligns with your curriculum.

Be sure to have a plan for the harvest so that students get to enjoy the fruits (and veggies) of their labor. Will you...have a tasting at school? Send the produce home with students? Or maybe even have a farmers market for the car-rider line?



Maintenance

Water is the biggest key to maintenance in a raised bed. Check the garden daily for irrigation needs. Remember, morning is the best time to water but if you can't do it then, just make sure you water as needed.

Insects will become a problem this month as well. Keep an eve out for white moths which will be laying eggs of the larvae that eat leaves. If you see skeletonized leaves (only the veins remaining), you've been attacked by cabbage worms or a similar critter. Have students look for the worms (little green inchworms) on the veins of leaves (often on the underside) and physically remove the worms (they don't bite/sting). Be sure the worms are disposed of, not simply relocated.

Once you feel confident that the "threat" of frost has passed, you can remove and store your frost protection supplies. It's a good idea to make sure these are stored in the garden tool shed, to prolong their useful life. **Lesson Plans**

Professional Development

Recipes

Newsletter Archive

Questions? Contact us!

Amy Bowman • <u>asbowman@ncsu.edu</u>

Doug Vernon • <u>dpvernon@ncsu.edu</u>

Subscribe to FRESH from the Garden!

View FRESH from the Garden in a web browser