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GMCA Newsletter

Volume 13, Issue 1 **April 7, 2022**

Annual Meeting Update

Jekyll Island, 2023

We are planning to have our 2023 meeting in October on Jekyll Island at Villas by the Sea. This will be our first in-person meeting since 2019, and we hope for a big turnout and lots of interesting speakers. We are not having a meeting in 2022, as we will be having a combined meeting with the Mid-Atlantic Mosquito Control Association (MAMCA) in January of 2023 instead.

The Board of Directors of the Georgia Mosquito Control Association (GMCA) would like to invite active mosquito control personnel, researchers, and associated students who have limited financial resources to submit a letter of request for sponsorship to attend our annual meeting. The GMCA holds an annual meeting where a variety of topics related to mosquito control, the public health profession and entomology are presented. In support of this effort, this meeting often draws some of the foremost mosquito, public health and entomological professionals from across the country. As a result, this meeting provides an outstanding educational environment and an excellent opportunity for attendees to expand their professional networks. These relationships are instrumental in the professional development of employees and in solving challenging problems associated with specific pest situations. This sponsorship will include two nights lodging, meals, and meeting registration.

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MAMCA/GMCA Combined Meeting

Savannah, 2023

The Mid-Atlantic Mosquito Control Program (MAMCA), our regional mosquito control association with nine member states (Delaware, Georgia, Maryland, North Carolina, Pennsylvania, South Carolina, Tennessee, Virginia and West Virginia), is planning a meeting in Georgia in January of 2023. And, to avoid overlapping meeting dates, this meeting will culminate with the Fly-In, an event for aerial applicators usually put on by the Florida Mosquito Control Association (FMCA). We hope to blend the final day of the MAMCA/GMCA meeting into a set of talks relevant to all 3 groups before moving on to the Fly-In. To accommodate the aircraft brought to the Fly-In, the combined MAMCA/GMCA meeting will be held at the Chatham County Mosquito Control building, which is next to the Savannah/Hilton Head International Airport.

Currently, the meeting is still in the planning stages, so check in to the MAMCA website (www.MAMCA.org) periodically to learn about any updates.

INSIDE THIS ISSUE

We are always looking for contributors to the GMCA Newsletter, so if you have an interesting story to tell about mosquitoes or mosquito control, please send it to rosmarie.kelly@dph.ga.gov.

Mosquito BEACONS (Biodiversity, Enhancement and Control Of Non-native Species) Working Group

Elmer W Gray (ewgray@uga.edu)

The Mosquito Beacons working group was formed in 2021 with support from the Southern Integrated Pest Management Center and the United States Department of Agriculture. This working group operates as a multi-state committee dedicated to providing leadership and communication on invasive mosquito species related issues in the Southern Region. The Southern Region, as designated by this project, includes Florida, Georgia, South Carolina, North Carolina, Alabama, Mississippi, Louisiana, Texas and Puerto Rico. The group was initiated and led by the Project Director, Dr. Bryan Giordano of the Florida Medical Entomology Laboratory (FMEL). Dr Yoosook Lee, also from the FMEL, will serve as the project director this year. Co-Project directors include Dr. Ben Allen of the City of Jacksonville, FL mosquito control, Dr. Lindsey Campbell of the FMEL, Dan Killingsworth owner and operator of Environmental Security Pest and Lawn, Michael Riles of Beach Mosquito Control in Panama City, FL and me.

The goal of this project is to support the implementation of an Integrated Pest Management (IPM) approach for the monitoring and control of invasive mosquito species in the Southern Region and improve knowledge transfer through stakeholder engagement. As part of these efforts, the group will work to increase awareness of invasive mosquito issues and enhance surveillance and control capacity in the Southern Region. Through this process the group will strengthen multi-state and county collaborations, provide a forum for real time pest/disease/biocontrol monitoring and promote a sustainable IPM infrastructure.

Personnel from across this region met four times during the group's first year. Three of the meetings were virtual, with a small workshop being held as the fourth meeting in January of 2022. Amy Trimm, of Chatham County Mosquito Control, and I represented Georgia at this workshop. The workshop was attended by a mix of mosquito control and public health professionals. Topics covered included data management, GIS mapping, and invasive species bionomics and identification. While this was only a one-day workshop, it served to introduce these concepts and provided a venue to strengthen our connections and relationships across the region.

I see this group helping to improve the knowledge level of mosquito and public health professionals across the Southern Region as related to introduced and invasive species while also enhancing the communication and interaction amongst these professionals. While *Aedes aegypti* was introduced to Georgia long ago, *Aedes albopictus* arrived in the 1990's, and *Culex coronator* and *Aedes japonicus* are much more recent arrivals. As we emerge from the Covid-19 pandemic, all of these introduced mosquito pests will also likely reemerge as important public health pests. I would encourage all of you who are on the frontlines of operational mosquito surveillance in Georgia to report any usual observations or collections. In turn, working group participants will be monitoring the spread and control of introduced mosquito pests across the region. *Aedes scapularis*, which is already established in mainland Florida, but has not been reported in Georgia as of yet and *Aedes vittatus* and *Culex panocossa* are particular species of note.

Two areas of particular interest to the BEACONS group this year are surveillance around ports and the removal of used tires in our communities. More information on these topics will be forth coming. As a newly chosen Co-Director, I will promptly communicate any findings or recommendations that are developed by the Mosquito BEACONS working group to the membership of the Georgia Mosquito Control Association. In turn, I would also request that operators share new and unusual surveillance observations or collections with the Mosquito BEACONS working group members.

Mosquito Beacons Working Group - https://fmel.ifas.ufl.edu/invasivemosquito/

Culex coronator – a highly invasive neotropical species introduced into the southeastern US

Annual Meeting Update (continued from p1)

The purpose of this support is to encourage involvement for personnel associated with smaller programs and institutions where funding for travel and participation in professional meetings is limited. The participant should send a one-page letter to Ms. Laura Peaty (lfpeaty@chathamcounty.org), the current president of the GMCA, requesting the sponsorship and describing how this support will enhance mosquito control or research in their program or institution. The Board of Directors of the GMCA will select the scholarship recipients. The next annual meeting of the GMCA will be held in January 2023 in Savannah. This meeting will be held jointly with the Mid-Atlantic Mosquito Control Association and should draw a great lineup of speakers. More information will be forthcoming as the meeting draws near. As part of this effort, the Board of Directors of the Georgia Mosquito Control Association would like to thank ADAPCO Inc. for their generous support of the GMCA's educational efforts through the years.

FUTURE MEETINGS
2022 – with MAMCA in Savannah in Jan 2023
2023 – Jekyll Island in Oct
2024 – Georgia Center in Athens in Oct
2025 - ??????

Spotlight on…Natasha Agramonte

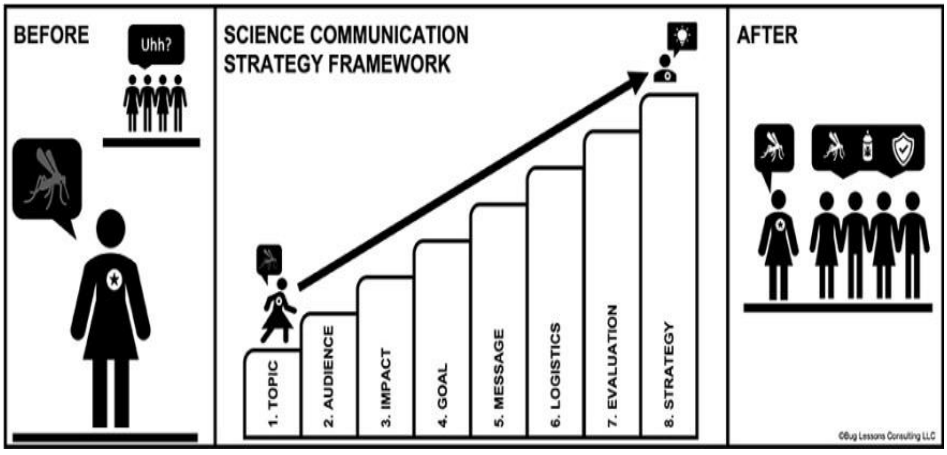
Natasha Agramonte, PhD, is currently an environmental health County Supervisor in Vector Control at the DeKalb County Board of Health in Georgia. Her expertise is in the field of medical entomology, including West Nile virus surveillance. However, she also responds to urban entomology complaints. Prior to working for DeKalb County, Natasha was a research fellow at the U.S. Centers for Disease Control and Prevention (CDC) in Atlanta.

Natasha received her bachelor's degree in zoology and her master's and doctorate degrees in entomology from the University of Florida. For more than 10 years she worked for the U.S. Department of Agriculture's mosquito repellents laboratory and served as an institutional review board coordinator for three years in a joint position for the USDA and the Emerging Pathogens Institute, overseeing human-use studies for novel insect repellent development and insecticide efficacy.

Natasha has served as the American Mosquito Control Association Young Professionals Committee President and on the AMCA Science & Technology Committee. You can follow Natasha on Twitter at @mosquito_PhD.

To read the complete article from Entomology Today, go to:
https://entomologytoday.org/2020/07/28/entomologist-public-health-natasha-agramonte-standout-early-career-professional/

https://entomologytoday.org/2022/02/17/successful-science-communication-strategy/



Communicating complex scientific topics to non-scientists can leave the communicator and audience frustrated. However, scientists who create communication strategies to get onto the same level as their audience can achieve better results. (Image by Jennifer Gordon, PhD)

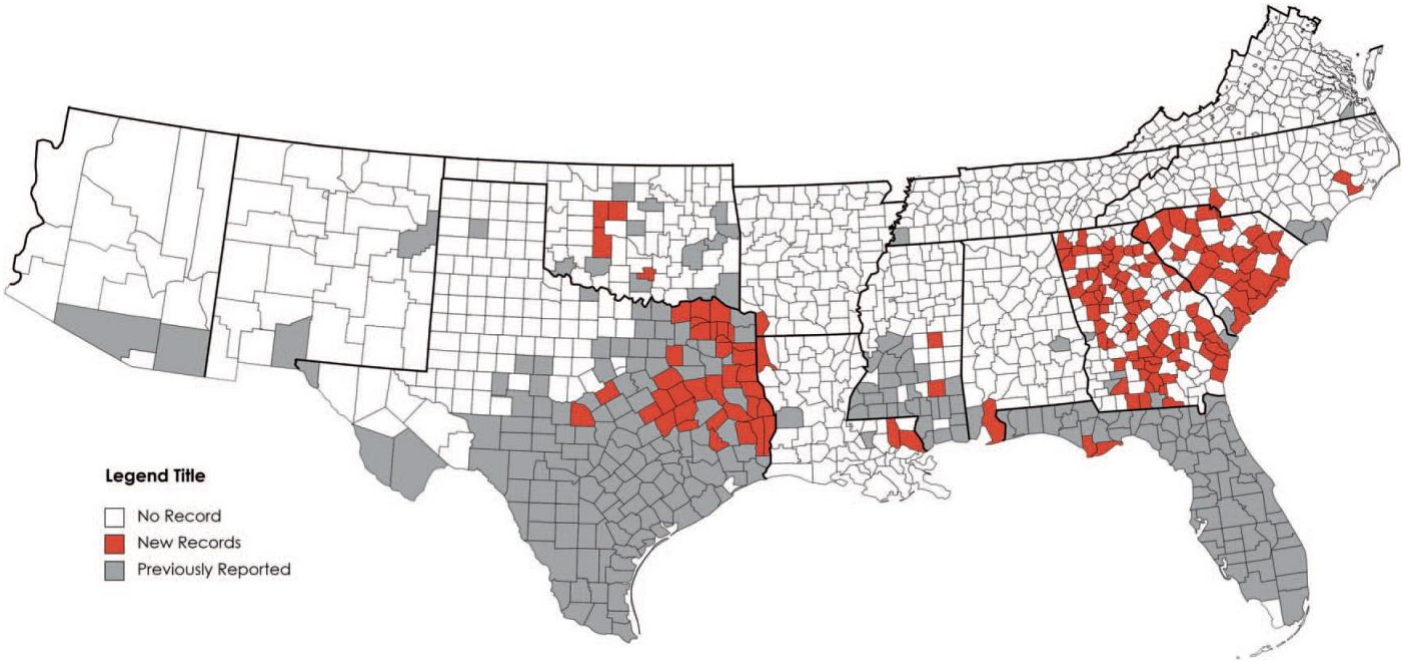
***Culex coronator* in Georgia**

One of the benefits of mosquito surveillance is determining where mosquito species are found. This is especially important for vector species and for invasive species that may become involved in an arboviral disease cycle.

Culex coronator was first detected in Georgia in 2006. It was found initially in counties below the Fall line. Mosquito surveillance done in 2017 - 2020 has shown that this species can now be found in most regions of Georgia (Mosquito Surveillance Reports - http://www.gamosquito.org/mosquito.htm). It is important to monitor *Cx coronator* as it has the potential to be involved in the WNV cycle.

In 1920, *Culex coronator* was reported from San Benito, Texas, and later in Arizona, New Mexico, and Oklahoma. In 2005, this species was reported to be spreading across the southeastern USA. A study published in 2021 documented *Cx coronator* in 386 counties in 14 states of the continental USA. States reporting *Cx coronator* include Alabama, Arizona, Arkansas, Florida, Georgia, Louisiana, Mississippi, New Mexico, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, and Virginia.

Culex coronator females have been characterized as preferring mammalian hosts, but studies from Texas identifying bloodmeals from chickens and doves indicate that this species may feed opportunistically. *Culex coronator* larval have been collected in a variety of habitats, including wetlands, ground pools, roadside ditches, flooded depressions in fields, areas around leaking pipes, within or around overflowing water troughs, around culverts, in tires, plastic tubs, steel barrels, and abandoned swimming pools. This species appears to be adaptable to artificial container breeding, which could make it difficult to control.



Distribution of Culex coronator in the southern USA.
from the Journal of the American Mosquito Control Association, 37(1):1–9, 2021

References:
http://www.gamosquito.org/resources/papers/CxCoronatorChatham.pdf
http://www.gamosquito.org/resources/papers/CulexcoronatorGA.pdf
http://www.gamosquito.org/resources/papers/CxcoronatorUS.pdf

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