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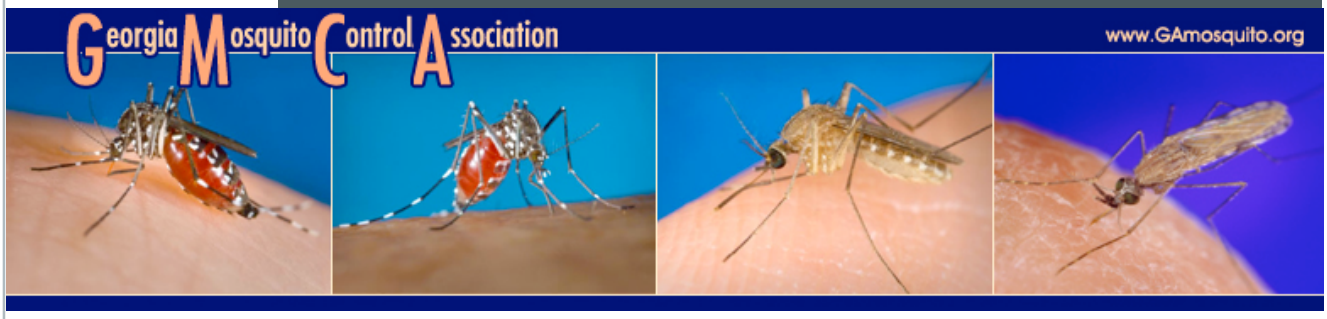


The GMCA Newsletter - DIDEEBYCHA - is a means of spotlighting various programs throughout Georgia, as well as a way of providing the membership with information about topics of interest to mosquito control.

GMCA Annual Meeting

The 36th Annual Meeting of the Georgia Mosquito Control Association (GMCA)

… took place on October 16-18, 2013. The agenda included a good mixture of both applied and research topics. About 65 people attended the meeting.

The GMCA Annual Meeting is the premier education and networking event in Georgia for researchers, educators, vector control professionals, industry representatives, and students in mosquito control. The GMCA holds its educational conference in the fall of each year as a benefit to its membership and any other interested individuals. The conference is an opportunity for members to interact with colleagues, obtain the latest information concerning all aspects of mosquito control and to earn Continuing Education credits required to maintain the

Continued on page 4…

Public Health Surveillance

Public health surveillance is the ongoing systematic collection, analysis, and interpretation of data, closely integrated with the timely dissemination of these data to those responsible for preventing and controlling disease and injury. Mosquito surveillance is a prerequisite to an effective, efficient, and environmentally sound mosquito control program. Surveillance is used to define the nature and extent of the mosquito problem and to gauge daily mosquito control operations.

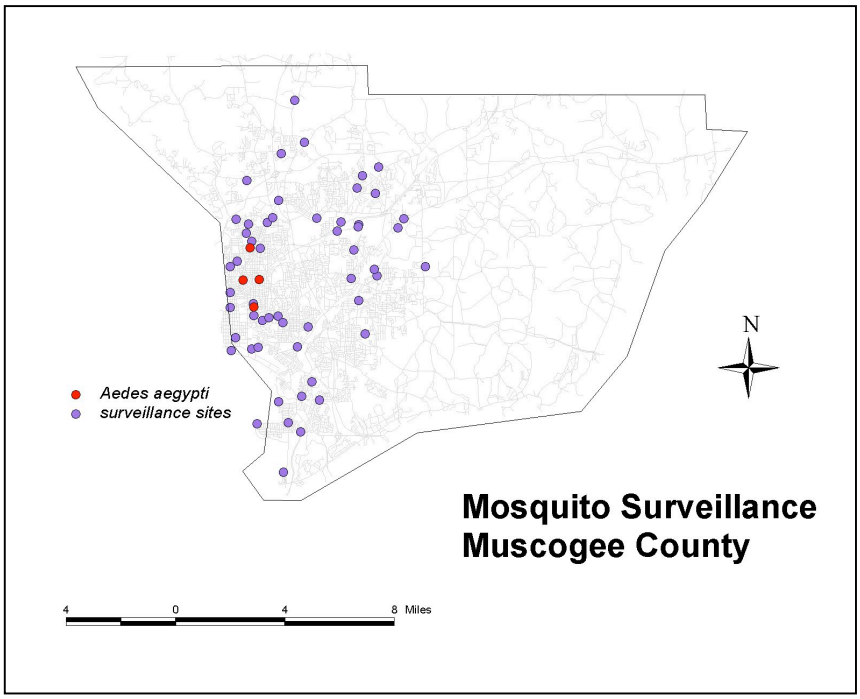
Analyzing mosquito surveillance data and the spatiotemporal patterns of human WNV cases can help with assessing the risk of human arboviral infections and the allocation of limited public health resources, as well as justifying emergency control actions (http://www.ncbi.nlm.nih.gov/pubmed/23825164). However, the ability of members of different agencies to access relevant data has been an ongoing challenge. Mosquito control complains because human case data are not made available in a timely manner (if at all), reducing the efficiency of mosquito control in preventing disease transmission. Public health focuses on developing, implementing, and evaluating population-based strategies addressing diseases and other threats to health in the general population and in subgroups of the population. Data from other sources can help public health agencies conduct surveillance, intervention, and prevention activities. However, lack of access to these data make appropriate analysis very difficult. Information exchanges have the potential to greatly increase the appropriate flow of data between agencies. However, health information exchanges raise corresponding legal and policy issues, making agencies reluctant to share necessary data.

Sharing of public health and mosquito surveillance data can lead to:

- Earlier detection of increased arboviral disease risks.
- Improved coordination of risk management strategies across public and private sectors.
- More accurate assessments of the amount of disease in the community and of the impact of community-wide prevention initiatives.

Additionally, research done using these data can help to determine risk factors associated with arboviral disease. However, if the data are left unanalyzed in a database, they are of no use to anyone.

The "return" of *Aedes aegypti*



The yellow fever mosquito, *Aedes aegypti*, is a mosquito that can spread the dengue fever, chikungunya, yellow fever viruses, and other diseases. The mosquito can be recognized by white markings on legs and a marking in the form of a lyre on the thorax. The mosquito originated in Africa but is now found in tropical and subtropical regions throughout the world. *Aedes aegypti* has been a nuisance species in the United States for centuries. It was most likely brought to the new world on ships used for European exploration and colonization.

Aedes aegypti was the focus of an eradication program that began in 1964. However, the arrival of *Aedes albopictus* has been correlated with the decline in the widespread abundance and distribution of the *Aedes aegypti*. There are a number of possible explanations for this competitive exclusion, and the decline is likely due to a combination of (a) sterility of offspring from interspecific matings; (b) reduced fitness of *Ae. aegypti* from parasites brought in with *Ae. albopictus* and; (c) superiority of *Ae. albopictus* in larval resource competition.

The reduction of the yellow fever mosquito was reported by several authors beginning in 1989. By 1994, *Ae albopictus* was found in every county in Georgia. When systematic mosquito surveillance for WNV began in 2002, *Ae aegypti* was no longer found in most of Georgia. In 2005, two *Ae aegypti* were collected at one site in Columbus, GA. One specimen was collected from a gravid trap and the other from a light trap. In 2006, 2 *Ae aegypti* were found in Columbus and one in Chatham County. No other specimens were collected until 2011 when the apparent source of the Columbus *Ae aegypti* was found. Why at this site? Hard to say. The site looks no different than many other sites, but both *Ae aegypti* and *Ae albopictus* are found here in high numbers. What will this mean for the future? Only time will tell.

Resources

http://entnemdept.ufl.edu/creatures/aquatic/aedes_aegypti.htm

http://whqlibdoc.who.int/bulletin/1967/Vol36/Vol36-No4/bulletin_1967_36(4)_604-609.pdf

GMCA Annual Meeting Update (cont)

State of Georgia Pesticide Applicator's License.

The Georgia Mosquito Control Association is a non-profit, professional organization founded in 1977. The Association was founded on the belief that mosquito and other public health pest control problems have a significant impact on the citizens of Georgia. There was a need for interested persons within the state to form an association for these purposes:

- to exchange ideas and procedures to enable mosquito workers to better perform their duties;
- to protect the health and welfare of the people and their environment;
- to keep abreast of the latest and best methods for control of mosquitoes and other pests so the citizens will be served;
- to encourage proper mosquito control, wherever feasible, and to help maintain a positive public interest in areas where mosquito and other public health pest control is operative;
- to keep the general public better informed of the benefits of mosquito and other public health pest control.

The 2013 meeting presentations and notes are available for download at http://www.gamosquito.org/Presentations2013.htm. You may download or view the presentation in Adobe Acrobat PDF format. NA indicates that the presentation is not available.

The President, Vice-President, Secretary/Treasurer, and Industry Board Members of the GMCA serve a one-year term of office beginning in October. The Directors serve a three-year term, while the term for representatives is indefinite. Nominations are accepted during the annual October meeting. Our current Board members are:

President: Ian Brown

VP: Alan Gaines

Secretary/Treasurer: Jerry DeRamus /David Touwsma

Directors:

1. Jeff Heusel
2. Kenna Graham
3. Joey Bland

Cooperative Extension Rep: Elmer Gray

Public Health Rep: Rosmarie Kelly

Industry Rep: Julie Fogg

Past President: Fred Koehle

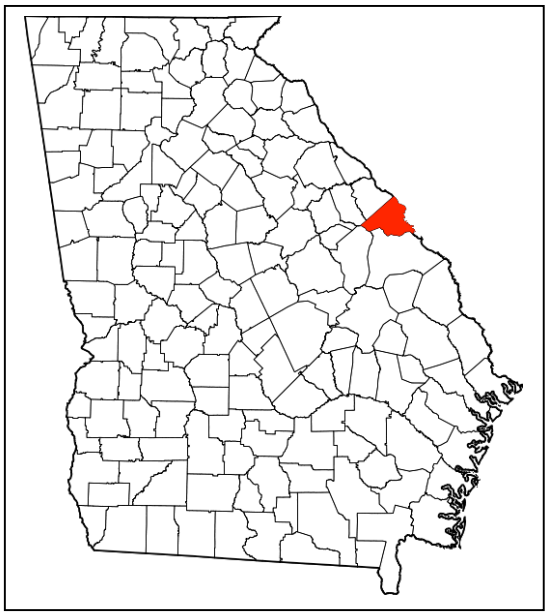
Last, but not least, the Oscar T Fultz award was given this year for the first time since 2010. This award is the highest award given by the GMCA next to that of the immediate past president of the association. The criteria for this award are exceptional lifetime contributions to the association and to the control and study of mosquitoes.

The award went to Henry Lewandowski, director of the Chatham County Mosquito Control Program, for his help and support, not only of employees of his program, but to any and all who need assistance.

PROGRAM SPOTLIGHT

Richmond County Mosquito Control Program

Richmond County, in east Georgia, has one of the better organized mosquito control programs in Georgia. Fred Koehle, the just retired director of the program, and Jerry DeRamus, the new director, (http://www.ecphd.com/common/content.asp?PAGE=731) are one of the reasons why.



Richmond County Mosquito Control has, as part of its control program, a swimming pool remediation program. This program was set up to give property owners a chance to fix or fill in the pool, but does impose penalties if no action is taken.

POOL COMPLAINT PROCEDURES

The following procedure is to be used when answering mosquito complaints.

- Receive the complaint by phone or by observation.
- Log the complaint in the computer.
- Print the Mosquito Surveillance Checklist.
- A Mosquito Technician will go to the property, inspect the area and complete the Mosquito Surveillance Checklist. They will then make recommendations to the property owner.
- The Mosquito Technician will then determine what action he will take (landing count, trapping or larval dipping). ***Based on his findings, action can then be taken.***
- The Mosquito Surveillance Checklist will be filled out with each action noted with the required information. The Checklist will be turned into the Operations Manager each day until the complaint is resolved.
- Once the Mosquito Surveillance Report is completed, recommendations for further action, if necessary, can be given to the Operations Manager.
- If further action is required, the Operations Manager will conduct an on-site inspection of the property and complete the Mosquito Surveillance Checklist. A copy of the inspection report and a letter of recommendations will be sent to the property owner. The letter should include the code violation. Pictures should be taken at this time.
- In most cases the owner will be given 30 days to complete the recommended improvements. In a case of dire hardship an extension can be given not to exceed a total of 60 days.

PROGRAM SPOTLIGHT

Richmond County Mosquito Control Program (cont)

- A re-inspection will be conducted after the 30 days and a determination will be made as to whether the conditions have been met. Pictures should be taken at this time.
- If conditions have been met, a copy of the inspection report and a letter of thanks will be sent to the property owner.
- If conditions have not been met, a copy of the inspection report and a letter granting an extension of 15 days to complete the recommendations will be sent to the property owner. The letter should include that failure to complete the recommendations will result in a citation from the Richmond County Marshall's Office. Cite the code again and take pictures. This letter should be sent Certified Mail with a Return Receipt requested as proof of delivery.
- If conditions have been met, a copy of the inspection report and a letter of thanks will be sent to the property owner.
- If conditions have not been met, a copy of the file and a Request of Citation form will be taken to the Richmond County Marshall's Office and a citation requested.

  From this point they will follow the directions of the Court.

Pool Program Count - 2013				
Date	**March**	**April**	**July**	**as of 11/12/13**
Pools in Program	166	171	212	241
Pools Filled or Working	116	119	152	206
Pools Processing	38	43	46	19
Pools in Court	6	4	3	3
Constant Maintenance	6	5	6	0
Pools with Mosquitofish			5	13

The mosquitofish program is a new venture for Richmond County Mosquito Control. Since there are always some pools that have to be in control maintenance due to an inability to determine who owns the pool, or other reasons, a means of reducing the cost of maintaining these pools was sought. Tiny fish could be the answer to some of the county's biggest mosquito problems.

Mosquitofish fill Phinizy Swamp and now they also fill some abandoned swimming pools. It's a new project with Richmond County Mosquito Control and the Southeastern Natural Sciences Academy and it could save residents a few bug bites.

Dr. Oscar Flite is the Vice President for Research at the Southeastern Natural Sciences Academy at Phinizy Swamp. They've teamed up with Richmond County mosquito control for an experiment with mosquito fish placing them in abandoned pools to stop mosquito's from breeding there.

PROGRAM SPOTLIGHT
Richmond County Mosquito Control Program (cont)

Earlier this summer they added about 30 mosquito fish to 4 pools in the county. In two weeks they went back to check and see how the programs working. The fish had survived and were reproducing, and preliminary surveillance data show a decrease in numbers of mosquitoes being caught in traps set in the vicinity of the pools.

The mosquito fish will save both time and money.

"It's going to save us a lot of money because treating a pool three times a year costs us about 150 bucks," explained Koehle.

"The guys spent about 5 minutes going out and catching more than a 150 mosquito fish, so in terms of economics I think it works out pretty well," added Dr. Flite.

An easy fix and easy to get rid of when someone wants to swim.

"When a new homeowner moves in, they dump the water out the fish go with it no big deal," said Koehle.

"Nobody loses, everybody wins in this."

Well, everyone except the mosquitoes.

The Georgia Mosquito Control Association

c/o **Jerry DeRamus**

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