



## President's Message

The Fall is here and with it another season is coming to an end, though some will undoubtedly linger longer than others. There are likely a lot of us out there that are eager for the winter months to bring things down to a slower pace. A time to reflect on the season, do some number crunching, and look ahead to next year's season with a fresh perspective.

By now, there may have even been annual conferences in some of the member states. I hope that everyone has participated and enjoyed the gathering of like-minded professionals, as communication and collaboration are some of the most important cornerstones of the business. As you all should know, MAMCA's annual conference this upcoming year will be held in Carolina Beach, North Carolina from February 12-14<sup>th</sup>, 2018. Although February is typically a winter month and the beach may not sound as enticing, I can tell you from experience, it is an awesome spot to hold a meeting, and there are plenty of interesting local businesses within a short drive. The Program Chair, Dr. Stephanie Richards, has been hard at work putting together a very stacked and interesting agenda, a copy of which can be viewed on the MAMCA website at [www.mamca.org](http://www.mamca.org).

AMCA, the Virginia Mosquito Control Association, and the Tennessee Mosquito & Vector Control Association will also have annual conferences in early 2018. Information on these and other future meetings can be found further in the newsletter. Please remember that MAMCA is always looking for people to help out with the organization. If you are interested in becoming a State Director, joining the board, or just helping out with a committee, you can reach out to myself, or another board member for more information.

I hope to see all of you in February in North Carolina and enjoy the holiday season!

Tim DuBois  
MAMCA President  
Hampton, VA

**FEB 12-FEB 14, 2018.....MARK THE DATE!**

**43<sup>rd</sup> Mid-Atlantic Mosquito Control Association Annual Conference**  
(to be held jointly with the North Carolina Mosquito & Vector Control Association)

**Courtyard Carolina Beach Oceanfront  
Carolina Beach, NC**

See page 2 for details

## 2018 ANNUAL EDUCATIONAL CONFERENCE

A joint meeting of the Mid-Atlantic Mosquito Control Association and the N.C. Mosquito & Vector Control Association (NCMVCA)

**February 12-14, 2018**  
**Carolina Beach, North Carolina**  
**Courtyard Carolina Beach Oceanfront**



The 2018 annual conference will be held at the oceanfront Courtyard Carolina Beach, 100 Charlotte Avenue, Carolina Beach, NC. Carolina Beach is located about 15 miles south of downtown Wilmington (NC). The hotel website may be viewed at <https://www.marriott.com/hotels/travel/ilmcb-courtyard-carolina-beach-oceanfront/?app=resvlink>.

This will be the 43rd Annual MAMCA meeting and the 52nd (and a half) Annual NCMVCA meeting. The conference hotel room rate will be the prevailing North Carolina State government room night rate (\$67.30), plus local and state taxes. All standard rooms are 2-queen beds and a limited number of suites are available at a higher rate.

Rooms can be reserved online at the dedicated hotel MAMCA conference page (see <http://www.mamca.org/conference.htm> and follow the link titled "NCMVCA/MAMCA Online Group Reservation") or by calling the hotel at (910) 458-2030. Make sure you indicate you are with the Mid-Atlantic Mosquito Control Association conference. **Space is limited and reservations must be made by January 9, 2018, after which time neither the room rate nor availability is guaranteed.**

Want more information about the Wilmington/Carolina Beach area? Try starting with the following site: [www.wilmingtonandbeaches.com/carolina-beach/](http://www.wilmingtonandbeaches.com/carolina-beach/).

### \*\*CONFERENCE FORMAT NOTES\*\*

The meeting provides 2+ days of educational and technical presentations to attendees as well as exhibit opportunities for companies and organizations which serve the mosquito control profession. Registration and exhibit information, including fees, is posted on the MAMCA website ([www.mamca.org](http://www.mamca.org)). Both onsite and advance registration is available and registration is mandatory for all conference attendees.

The educational program agenda for this conference is also posted on the website. MAMCA does not apply for individual state or national CE units or hours for its attendees. Questions about a specific state CEU credit, in one of the listed mid-Atlantic states, may be directed to that state's Director (see page 15).

## PROFESSIONAL NEWS & DEVELOPMENTS

### ◆ CDC

**MosquitoNET**– A new state-by-state mosquito surveillance data recording system from CDC. Want to know more about this? See information at [https://www.cdc.gov/Arbonet/MosquitoNET/MosquitoNET\\_FAQ.pdf](https://www.cdc.gov/Arbonet/MosquitoNET/MosquitoNET_FAQ.pdf).

**CDC TRAIN** – CDC has always been a great training resource. However, many folks are not familiar with all that the CDC TRAIN website has available on mosquitoes and mosquito transmitted disease. For more information on this, go to <https://www.train.org/cdctrain/welcome>. Key search words which work best with their search engine are “malaria, ZIKA, mosquito, chikungunya”.

### ◆ ZIKA

**Current state case counts** – Can be viewed at <http://www.cdc.gov/zika/geo/united-states.html>. As of NOV 1st, the current CDC reported case count in the MAMCA states is 31 cases. This compares with 2016’s cumulative total of 638 cases.

**Updates** – The current CDC Zika Interim Response Plan (dated 5/5/2017) can be viewed at [www.cdc.gov/zika/public-health-partners/cdc-zika-interim-response-plan.html](http://www.cdc.gov/zika/public-health-partners/cdc-zika-interim-response-plan.html). CDC did release a new **Pregnant Women with Any Laboratory Evidence of Possible Zika Virus Infection** update dated 10/17/2017. A link to this can be found at <https://www.cdc.gov/zika/index.html>.

**Posters and Factsheets** – CDC updated many of their posters and factsheets this past summer. If you know of someone or group who uses these posters or factsheets, you may wish to refer them to the CDC website to ensure the most current version is being used. These can be found at <https://www.cdc.gov/zika/fs-posters/index.html>. Look for a ‘revised’ or print/ date/month/yr which are commonly found on the bottom.

### ◆ AMCA

**Training** – AMCA is rolling out the CDC-funded Train-the-Trainer (TTT) Mosquito Surveillance and Control training and certification programs in 2017. There are 10 states which have been identified as training sites for this training. Multiple training dates and locations have been posted on the AMCA website. In the Mid-Atlantic Region, Virginia will be hosting two TTT workshops in NOV and DEC 2017. Information on this and other mosquito-related news can found on the AMCA website at [www.mosquito.org](http://www.mosquito.org).

**Resource** – The recent JAN 2017 publication, “**Best Practices for Integrated Mosquito Management: A Focused Update**” is available on the AMCA website at <https://mosquito.site-ym.com/page/training> in a downloadable pdf format.

**New website design** – AMCA has a new website which was rolled out in SEPT 2017 and it is definitely an upgrade. If you haven’t viewed in last 3 months, you are encouraged to view.

**Webinars** – AMCA provides webinars several times a year and the next one is scheduled for November 28, 2017. Titled “Agricultural Aircraft Operations (AAO) with Unmanned Aircraft Systems”, the webinar is FREE to AMCA members. Non-members can also view for a fee or, if able, can view with an AMCA member in their area or program.

**New (interim) Executive Director**– Bill Schankel, our previous AMCA Executive Director, has left Association Headquarters (AH) for a new opportunity. Heather Gosciniak, the current Director of Operations for AMCA, has agreed to serve as the Interim Director until such time that a permanent Executive Director is selected.

## 2017-2020

### STATE, REGIONAL, AND NATIONAL CONFERENCES & MEETINGS

2017 Entomological Society of America (ESA) (Denver, CO)	NOV 5-8, 2017
Pennsylvania Vector Control Association (PVCA) Annual Meeting	NOV 7-9, 2017
Florida Mosquito Control Association (FMCA) Fall Meeting	NOV 12-15, 2017
Illinois Mosquito & Vector Control Association Annual Meeting	NOV 16-17, 2017
Northeastern Mosquito Control Association Annual Meeting (Plymouth, MA)	DEC 4-6, 2017
Purdue Pest Management Conference (W. Lafayette, IN)	JAN 8-10, 2018
Florida Mosquito Control Association (FMCA) Fly-In	JAN 9-11, 2018
Virginia Mosquito Control Association (VMCA) Annual Meeting	JAN 23-25, 2018
Tennessee Mosquito & Vector Control Association (TMVCA) Annual Meeting	JAN 25-26, 2018
FMCA Dodd Short Courses	JAN 22– JAN 26, 2018
Mid-Atlantic Mosquito Control Association/NC Mosquito & Vector Control Association Joint Meeting (Carolina Beach, NC)	FEB 12-14, 2018
American Mosquito Control Association (AMCA) Annual Meeting (Kansas City, MO)	FEB 26–MAR 2, 2018
American Mosquito Control Association (AMCA) Annual Meeting (Orlando, FLA)	FEB 25–MAR 1, 2019
American Mosquito Control Association (AMCA) Annual Meeting (Portland, OR)	MAR 16–MAR 20, 2020

\*\*Meeting information can be obtained from organization websites, where available. Some links to those sites can be found on the MAMCA website at [www.mamca.org](http://www.mamca.org). If not listed there, utilize web search engines to get more information. The cited dates (and locations) came from various organizations, or their websites, as of SEPTEMBER 2017. MAMCA is not responsible for the accuracy or the information listed above or for communicating changes in meeting dates or locations. Always verify such with the host organizations before making travel plans.

## American Mosquito Control Association Train the Trainer (TTT) Workshop Held in North Carolina

In 2016, the Centers for Disease Control and Prevention (CDC) awarded the American Mosquito Control Association (AMCA) a multi-million dollar contract to develop training accessible to mosquito surveillance and control personnel. As a result, both online and face-to-face training components have been designed. Of the four AMCA online training modules planned, one is currently available to the public (<https://mosquito.site-ym.com/page/training>). Nine regional training hubs have been planned across the United States (Arizona, California, Colorado, Florida, Louisiana, North Carolina [NC], New Jersey, Texas, Virginia) where master trainers were positioned to lead face-to face AMCA Train the Trainer events (based on AMCA's Best Practices for Integrated Mosquito Management Manual). The training consists of interactive activities and encourages students to participate in a variety of exercises (including case studies and a capstone presentation) that encourage active learning and communication with other students. These nationwide training hubs are expected to enable decision makers to assist counties to responding quickly and efficiently to mosquito-related crises.

Personnel of the NC Mosquito and Vector Control Association (NCMVCA) volunteered to be one of the regional training hubs tasked with training participants from both NC and South Carolina (SC). Participants for the NC workshop were actively recruited by personnel from the NCMVCA, NC Department of Health and Human Services [NC DHHS], SC Mosquito Control Association, and SC Department of Health and Environmental Control.

The NC hub held their Train the Trainer Workshop October 9-10, 2017 at the Courtyard Marriott in Carolina Beach, NC. Dr. Stephanie Richards [East Carolina University] and Mr. Mike Doyle [NC DHHS] were the AMCA certified master trainers at the NC Hub and conducted the training with additional support from NC colleagues (Dr. Brian Byrd [Western Carolina University], Dr. Mike Reiskind [NC State University], Mr. Charlie Sither [Western Carolina University], and Ms. Avian White [East Carolina University]).

In order to encourage participation, the workshop registration was free and breakfast and lunch were provided each day. Workshop organizers in NC invited health directors, environmental health supervisors, and other leaders involved in training vector control personnel. The number of participants that attended the NC hub were as follows: 19 from NC, 13 from SC, 1 each from California, Michigan, Georgia, and Virginia. In the future, NC trainers plan to check in with AMCA Train the Trainer participants to track those who utilize AMCA workshop educational materials to train personnel at their respective sites.

NC is honored to be an educational training hub of the current AMCA training program and encourages mosquito control personnel in our region to take advantage of current and future training opportunities. Whenever possible, the NCMVCA will continue to advocate for participation in national, regional, and local-level training in our region.

Dr. Stephanie Richards, PhD  
East Carolina University  
Greenville NC

# STATE REPORTS



## Delaware

A total of 3,023 service requests were received statewide in 2017 which is approximately 36% higher than average. Aerial larvicide treatment acreage was just about equal to our long term average with 25,383 acres treated in 2017 while aerial adulticide treatment acreage this season totaling 43,911 acres was approximately 21% below average.

The reason for the reduced aerial adulticiding and increased service requests? Consistent rainfall and tidal flooding reducing the need for aerial adulticide in coastal areas while that same rainfall prompted many service requests from both non-coastal rural areas as well as urban areas throughout Delaware which are not frequently treated with aircraft.. Consequently, ground larviciding and/or adulticiding was increased in those areas.

We've had an active season with mosquito-borne diseases in Delaware during the season. As of November 1, 2017, there has been one horse and one human case of West Nile Virus (WNV) reported. A total of 9 WNV positive (+) wild birds have been reported along with 44 occurrences of WNV and 1 occurrence of Eastern Equine Encephalitis (EEE) in our sentinel chicken surveillance. This is the highest (44) number of WNV+ samples found in a season with our sentinel chicken program. Because of this as well as the warm Fall this year, we will continue our sentinel chicken surveillance far later than normal in an effort to determine how late in the season virus transmission can occur.

A statewide survey took place this season to monitor for *Aedes (Ae.) aegypti* incidence and for virus pool rate, in *Ae. albopictus* and *Ae. triseriatus*, for both WNV and Zika virus. The survey concluded there are no known populations of *Ae. aegypti* in Delaware nor have WNV or Zika virus been found in mosquito collections to date.

Jamie Joachimowski



## Maryland

Maryland experienced a mosquito activity season with a wet spring, dry mid-summer, and wet late-summer. *Ae. grossbecki* were plentiful in the spring, *Ae. albopictus* in the mid-summer, and *Ps. columbiae* in the late-summer. On the Eastern Shore, *Ae. sollicitans* and *Oc. taeniorhyncus* populations were lower than normal due to persistent high water levels on the salt-marshes.

Aerial adulticide and larvicide applications resulted in over 130,000 acres treated for control of various species. The Maryland Department of Agriculture purchased a brand new Titan Atomiser for larviciding container breeding habitats in urban and residential areas.

Disease activity as of October 17<sup>th</sup> includes 10 symptomatic Zika cases, 4 WNV+ human cases, 13 WNV+ surveillance pools (all within a 10 mile radius), and 2 WNV+ equines. Cache Valley Virus appeared in 3 mosquito pool collections around our nation's capital. The statewide source reduction program continued all season, which is normally conducted in the Fall & Winter months.

A long list of ditch maintenance projects on the Eastern Shore kept our amphibious excavator busy year-round. The Maryland Department of Agriculture is continuing its procurement of GPS tracking tablets for use in adulticide ULV vehicles.

Kyle Brinson



## North Carolina

Mosquito activity in the state in 2017 has been varied, according to both local and state program reports. Confirmed human disease activity, as of 10/19/2017, includes 35 cases of malaria, 1 case Dengue, and 12 cases of Zika (vs. 101 cases in 2016), all imported; and 9 cases of La Crosse encephalitis (LAC).

Rainfall patterns across the state varied widely all season long, resulting in HIGH and LOW seasons of activity. For example both the Piedmont (central NC) and the coast (New Hanover County received considerable spring rains; however, where New Hanover (Wilmington) had an average spring season, Forsyth County in the Piedmont reported one of the busiest seasons ever. Rocky Mount (Raleigh area) reported decreased rainfall resulting in a light season as did Beaufort County (Morehead City) and Pitt County (Greenville).

Some highlights for the year included both coastal New Hanover and Beaufort Counties saw *Culex nigrapalpus* with this occurrence being a first for Beaufort and the most predominant species this year for New Hanover. Control efforts were down in most areas, especially by July, with the exception of Jacksonville area and Forsyth County where very busy. Several NC counties (Wake, Mecklenburg, Pitt, New Hanover, Brunswick, Carteret, etc.) participated in year 2 of the Aedes container species surveillance project ( pulse survey) coordinated by our well-established “University partnership” with East Carolina University, NC State University, and Western Carolina University. A single pulse survey (60 ovitraps per county) was performed in late June. No *Ae. aegypti* incidence has been identified as of SEPT 2017.

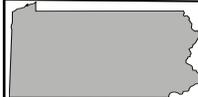
### Other news

- UNC-Greensboro has undertaken a tick surveillance project across 9 counties with flagging and deer host collections. Flagging yielded *B. burgdorferi* across 3 counties with 4 counties positive for *B. burgdorferi* through deer collections.
- NC held its first AMCA TTT CDC-funded training on OCT 9-10 (see page 5 article).
- the State Health Dept. (NC DHHS) continues to build our state mosquito program infrastructure. The state now has an Emergency Mosquito Response Control contract with a major vendor to provide surveillance

and control efforts when mosquito-borne disease may be a threat. State funding now provides \$2000-\$20,000 to local counties (\$178,000 budget in FY17-18). Public health entomologists continue to compile a current list of all local (city and county) mosquito program contacts in all 100 NC counties and have started a few trials with local programs in using the BG Sentinel counter traps for adult surveillance. NC will start inputting data into the new CDC MosquitoNET in NOV 2017.

The NC Mosquito & Vector Control Assoc will hold its annual meeting jointly with MAMCA FEB 12-14, 2018. See page 2.

Joe Andrews



## Pennsylvania

Pennsylvania’s Mosquito-borne Disease surveillance and control program saw an increase in WNV activity as compared to recent years. The increase is likely be due to the sustained level of *Culex restuans* populations for most of the season due to persistent rain events. As of the end of October, there were 17 WNV+ human cases with 2 fatalities and 1 positive blood donor. There were also 14 equine WNV+ cases. Other travel related arboviral cases include Dengue (4), Chikungunya (2), and Powassan (2). Lyme disease continues to be the leading tick-borne illness that plagues PA.

The mosquito surveillance season began in April and ran through the end of September. There was a total of 1.4 million mosquitoes collected and identified. Of those, 21,605 pools were tested and yielded 3,199 WNV+ from 45 counties. This is the second most positive pools collected in the history of the program falling only behind the 4,302 pools in 2012. The first positive mosquito sample was isolated from a pool of *Culex restuans* on April 18<sup>th</sup> and is the earliest WNV+ mosquito to be collected in Pennsylvania. Avian surveillance was conducted along with mosquitoes and accounted for 42 positive samples from 6 different species, 70% of those being American Crows.

(continued on page 8)

(Pennsylvania – Continued from page 7)

The program continued *Ae. albopictus* monitoring in 2017 relating to the State's Zika virus response plan. A total of 148,285 adult and larval mosquitoes were collected through the end of October. This is nearly 44,000 more than was collected in 2016. That sampling effort yielded 9 WNV+ pools. The earliest collection of an *Ae. albopictus* adult in PA was found on April 18<sup>th</sup> in a BGS trap. There were 35 human Zika virus cases imported into PA as of the end of October compared to the 146 in 2016.

The 2017 Black Fly Suppression Program serviced 38 participating counties throughout the Commonwealth. The Program collected 1,739 larval/pupal samples and 1,480 adult samples throughout the State to track black fly populations and plan control operations. Fifty (50) waterways were treated to suppress black flies from April into early August with a total of 46,417 gallons of Bti. Funding for the Program has remained flat for the past 5 years as Program costs continue to rise resulting in 1,635 fewer gallons of Bti used in 2017 vs. 2016.

Christian Boyer

## Tennessee

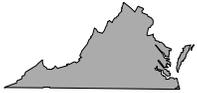
Tennessee's 2017 season started off very early compared to prior seasons. Statewide, more mosquito pools will be tested than any other year and the number of positive pools will also be more than any previous year. As of October 13<sup>th</sup>, there have been 5,913 mosquito pools tested for WNV, Flanders, and St. Louis encephalitis viruses. Of these, 1,554 pools have been found positive for West Nile virus, and 5 have been positive for St. Louis encephalitis virus. Shelby County (Memphis), Davidson County (Nashville), and Knox County (Knoxville) will see an increase in the number of positive WNV mosquito pools from the previous year. WNV+ mosquito pools have been collected from thirty one (31) counties. There have also been five (5) positive St. Louis Encephalitis virus mosquito pools, all from Shelby County.

So far this year, statewide, there have been twenty five (25) WNV+ human cases, with no fatalities, reported in 13 counties. In 2016, there were seven (7) WNV+ human cases with one (1) death. Shelby County has recorded eight (8) and Davidson County has recorded five (5) of the 25 cases in 2017. There have also been three (3) WNV+ veterinary cases and twenty two (22) WNV+ positive birds reported across the state. La Crosse virus (LAC) has also been active in Tennessee again in 2017 with 14 human cases reported as of October 13<sup>th</sup>. This is a significant increase in cases from the previous two year, seven (7) in 2016 and two (2) in 2015. No other human cases of mosquito borne disease have been reported.

A statewide survey for *Ae. aegypti* incidence has been ongoing in Tennessee since the beginning of May, mainly using oviposition traps. Currently, *Ae. aegypti* has not been identified in Tennessee.

The Tennessee Mosquito and Vector Control Association will hold its 2018 annual meeting January 25th and 26th at the Lentz Public Health Center in Nashville.

Ture Carlson/Amy Trimm



## Virginia

The most common theme of the VA counties which reported activities this year was the dramatic increase in adult mosquito numbers trapped by various local programs. Suffolk (SE Virginia) reported the 2nd highest numbers (450,000+) in a decade; Chesapeake reported almost a 50% increase (369,000+) over 2016; and Virginia Beach reported 164,000+ collected, the 3rd highest number in last 25 years. Prince William County in North VA reported that of the 2,478 pools tested for WNV in 2017, 275(11%) were WNV+ (one pool short of the record highest positive pool amount (276)).

Statewide, the following arboviral data for 2017 (YTD) were reported by the Virginia Dept. of Health:

- 12 WNV+ human cases
- 732 WNV+ mosquito pools (from 6 species with 96% being from *Culex pipens/restuans*)
- 15 WNV+ sentinel chicken samples
- 23 EEE+ mosquito pool (all *Culiseta (Cs.) melanura*)

Some other local program notes included Suffolk reporting decade record numbers of *Ae. albopictus*, *Anopheles* species, and *Culex erraticus*; Prince William tested 331 *albopictus* pools for Zika with no positives reported; Langley Air Force base reported no disease positives in any of their mosquito pools(number tested not reported); York County reported *Ae. vexans*, *Ae. atlanticus*, and *Ae. albopictus* as their predominant species this year; and both Chesapeake and Suffolk reported their most predominant species in 2017 was *Cs. melanura*.

Virginia is one of the ten American Mosquito Control Association (AMCA) regional training hubs for the new AMCA Train-The Trainer (TTT) programs on mosquito surveillance and control (based on AMCA's "Best Practices for Integrated Mosquito Management" Manual). Two sessions of this FREE training will be held in Virginia in NOV-DEC of 2017. Information on these workshops can be found on the AMCA website at <https://mosquito.site-ym.com/page/training>. You will also see other scheduled training for other U.S. states at this site.

Lastly, the Virginia Mosquito Control Association (VMCA) will hold its 71st Annual Conference in Portsmouth, VA January 23-25, 2018. Information on the conference should be available soon on the VMCA website at <http://mosquito-va.org/>.

Ann Herring



## West Virginia

During the period of May 17 to October 26 (2017), the West Virginia Department of Health & Human Resources Mosquito Surveillance Program initiated adult mosquito surveillance at 97 localities in 23 counties: Berkeley, Cabell, Clay, Fayette, Greenbrier, Harrison, Jackson, Jefferson, Kanawha, Lincoln, Marion, Mercer, Monongalia, Morgan, Nicholas, Ohio, Pocahontas, Putnam, Raleigh, Randolph, Wayne, Wetzel, and Wood counties.

In 2017, 49 *Cx. mosquitoes*, 12 *Ae. albopictus*, 3 *Aedes* spp., and 1 *Psorophora* spp. mosquito pool tested positive for WNV. High WNV minimum infection rates in *Culex* mosquitoes from counties along West Virginia's western border (Cabell, Wetzel, Wood) collected during the latter half of July prompted the release of a health advisory to health care providers warning about the potential increase in human cases of West Nile encephalitis. During the first three weeks of August, WNV in the *Culex* mosquito populations was very high in the eastern panhandle counties.

During the period of January 1 through October 27 (2017), four human cases of La Crosse encephalitis and one human case of West Nile encephalitis were detected in West Virginia. West Virginia reported two malaria cases and one Zika case in the state.

Two *Aedes* mosquito pools (*Ae. japonicus*) and one *Culex* mosquito pool also tested positive for La Crosse virus (La Crosse virus has been previously detected in *Ae.s japonicus* in West Virginia, Virginia, and Tennessee. La Crosse virus infection in *Culex* mosquitoes has also been previously documented in West Virginia and Virginia.). The two *Ae. japonicus* mosquito pools containing La Crosse virus were within one mile of each other. Furthermore, the infected *Ae. japonicus* mosquitoes were active in an urban environment, a habitat we do not usually associate with La Crosse human cases. St. Louis encephalitis virus and Zika virus were not detected in the mosquito populations.

Recently, the West Virginia Department of Health & Human Resources Bureau for Public Health hired a vector-borne disease epidemiologist to assist the zoonotic disease epidemiologist with human disease surveillance. The agency is currently searching for a vector control coordinator to work with the state public health entomologist on medical arthropod issues.

This year, West Virginia recorded its highest incidence of Lyme disease. As of October 27, there have been 537 human cases of Lyme disease. (Last year, 368 Lyme disease cases were reported from West Virginia). Most human Lyme disease cases occurred in northeastern West Virginia. To be considered a 'high incidence Lyme disease state' (as defined by the Council of State and Territorial Epidemiologists), a state must have an average of 10 confirmed cases/100,000 people for the previous three reporting years. In 2017, West Virginia was classified as a high incidence Lyme disease state. In addition to Lyme disease, there have been 11 spotted fever rickettsioses, five cases of human ehrlichiosis, two cases of human anaplasmosis, and the first record of human babesiosis in West Virginia.

Eric Dotseth

## R.E. Dorer Award

The Mid-Atlantic Mosquito Control Association (MAMCA) has one major award, the R.E. Dorer Award. This award honors Rowland E. Dorer of Virginia, one of the founding members of the association. Mr. Dorer always emphasized the need for a strong regional association. He was the first president of the MAMCA and was the first recipient of the R.E. Dorer Award, although posthumously. The criteria for the Rowland E. Dorer Award are as follows:

- Nominees for the award should be selected on the basis of their exceptional contributions, of whatever type, to mosquito control in the Mid-Atlantic region.
- The nominee must be a member in good standing of the MAMCA.
- Nominees are to be submitted to the MAMCA Awards Committee in writing with justification. Written nominations should include a cover letter from the individual(s) making the nomination and a resume/CV of the nominee's background/career/accomplishments in the MAMCA and mosquito control. At least three (3) accompanying letters of support are requested.

The award is presented at the annual MAMCA meeting and only one award per year will be given. (From the draft Procedures Manual: "The Awards Committee is reminded that they do not have to present an award every year. If the nominations are inadequately prepared, in the opinion of the Committee, or if the nominations lack the substance and tradition of past award recipients, it is imperative that the Committee wait.").

**Please think of those MAMCA members that are deserving of the Association's highest honor and submit a written nomination and accompanying documents to the MAMCA Awards Committee, c/o Sue Ferguson, fergussc@bellsouth.net, by Friday, January 5th, 2018.**

Any questions regarding the award may also be directed to Sue at the email address listed.

## Annual Meeting Student Scholarship Program

The North Carolina Mosquito and Vector Control Association (NCMVCA) and Mid-Atlantic Mosquito Control Association (MAMCA) Annual Meeting Scholarship program is available to full-time students pursuing an undergraduate or graduate degree at any colleges or universities represented in MAMCA states (PA, MD, DE, WV, VA, TN, NC, SC, GA). The goal of this program is to promote greater student participation at the NCMVCA and MAMCA annual meetings and encourage scholarly mosquito control and vector biology research.

Applicants must agree to give a 15 minute presentation at the annual meeting. Scholarships will be awarded annually to defray the costs of attending the annual meeting. The award will consist of meeting registration waiver plus \$250 towards the cost of room, food and travel. The number of annual scholarship awards will vary depending on available funding. **The due date for this year's applications is December 15, 2017.** Please submit your completed application (including abstract and PowerPoint presentation) via e-mail to Dr. Brian Byrd ([bdbyrd@wcu.edu](mailto:bdbyrd@wcu.edu)).

See the NCMVCA conference website at <http://www.ncmvca.org/conference.html>, under **Student Scholarships**, for information and registration.

## ANNUAL MEETING ANNOUNCEMENTS

***Pennsylvania Vector Control Association Annual Meeting  
State College, PA***

November 7-9, 2017

See website at <http://pavectorcontrol.org/> for more information



***Virginia Mosquito Control Association 71st Annual Meeting  
Portsmouth, VA***

January 23-25, 2018

See website at <http://mosquito-va.org/>



***Tennessee Mosquito & Vector Control Association Annual Meeting  
Nashville, TN***

January 25-26, 2018

See website at <http://www.tennmosquito.com/>



***84th Annual Meeting of the American Mosquito  
Control Association***

***Kansas City, MO***

February 26-March 2, 2018

See website at <http://www.mosquito.org/meetingevents>



## MEMBER NOTIFICATIONS

- ◆ **STATE/INDUSTRY DIRECTORS** - The term for the Board members from South Carolina, Virginia, and West Virginia will expire in FEBRUARY 2018. Delegates from the states and Industry need to select replacements prior to the Business meeting at the 2018 Annual Conference. Terms for State Directors are 3-year while the Industry Director is a 1-year term. If you are a resident in one of the listed states and have an interest in serving in this capacity, please contact your listed State/Industry Director (see page \_\_\_).
- ◆ **MEMBERSHIP RENEWAL**- Membership in the Mid-Atlantic Mosquito Control Association is open to individuals, companies, and students as REGULAR, STUDENT, or SUSTAINING members. Membership must be renewed annually. If you were a member of MAMCA, but have not renewed your membership (and dues) for 2017 or 2018, please consider doing so now.
- ◆ **AMCA MEMBERSHIP**- MAMCA is a Sustaining Member of the American Mosquito Control Association (AMCA) and while some MAMCA members are also AMCA members, membership in AMCA is not required to be a member of MAMCA. That said, please consider membership in AMCA

AMCA provides a variety of benefits to its members, but most importantly, it provides the **public health profession** many of you do, or did, work in, a NATIONAL, COLLECTIVE VOICE and RESOURCE to address the mosquito regulatory, public health, and scientific issues 'of the day'. That can't successfully be done with just money.....it takes collective representation from as many people, from as many states, from as many professions, as possible. Information on AMCA may be found at [www.mosquito.org](http://www.mosquito.org).

**Need a new or renewal MAMCA Membership form?**

**Need a MAMCA Conference Registration form ?**

**Need a link to a MAMCA state's association or mosquito control program website?**

**These forms and a variety of other links and information can be found on the MAMCA website at [www.mamca.org](http://www.mamca.org)**

## **MAMCA Sustaining Members– 2017**

Sustaining members of MAMCA are organizations or companies who provide needed services, products, research, and education to the public health and mosquito control communities. Their support of MAMCA is vital in the association being able to support our memberships' needs and benefits including conference and workshop opportunities for all in the mosquito control profession.

For information on contacting any of the organizations below, please see the MAMCA website LINKS page (<http://www.mamca.org/links.htm>) where links to each of their websites are provided.

**Adapco**

**AllPro Vector Group**

**AMVAC**

**Bayer Environmental Science**

**Central Life Sciences**

**Clarke**

**Crabbe Aviation**

**Dynamic Aviation**

**Frontier Precision**

**Leading Edge Associates**

**The Morrell Instrument Company**

**Mosquito Authority**

**Summit Chemical**

**UNIVAR**

**Valent Biosciences**

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