“AFTER”

For frame of reference, the first part of this address is written in early April, 2020—as the world is in the midst of a pandemic unlike anything that we’ve ever seen. The second part was written in mid-February, when CoViD-19 had barely exited China, it’s epicenter. This address, my first as VMCA president, is a tale of two worlds—before the pandemic, and after. I felt it important to include both portions, as so many aspects of our lives have been completely enveloped by this new disease. So recently it was barely on our radar—but now it is hard to remember the world without it. For now, I urge you to continue to work as effectively as possible with all of the change that swirls around our daily lives. CoViD-19 can be deadly for older adults and people with underlying conditions. So can vector borne diseases. In both, prevention is key. Most of us will not be able to do the work that we want to do this season because we’ve been drawn into the public health response for CoViD-19. But we should do all we can for as long as we can in both the COVID world and the vector world because our mission has not changed. We can still help protect the public—but it will require some creativity. And crisis breeds creativity.

As I type these words today, there is no corner of the world unaffected, with more than 1.5 million cases globally and 400,000 here in the U.S. alone. Individuals are taking unprecedented actions to help minimize the spread of this virus by practicing social distancing, constantly washing hands, and staying at home as much as possible. At present, there is no evidence that SARS-CoV-2 (the novel coronavirus that causes CoViD-19) is transmitted by mosquitoes or ticks—but those questions are coming from the public. There is even a treatment being researched in clinical trials that utilizes some of the same drugs that are used to treat malaria. It’s possible that misinformation about transmission of CoViD-19 and treatment could come in the future, and we should prepare for that possibility.

“BEFORE”

Happy Spring! I want to kick things off by making a pitch for sending your articles (no matter how short or long!) to Karen and Rachel for the Skeeter. These two (and their fellow committee members) put an incredible amount of effort into bringing you the most-relevant mosquito information for the state of VA, 4 times a year, in “The Skeeter.” Please help them make this publication the best it can be by sharing a quick story or article with them when it’s requested. Variety in the contributors and content improves the product incredibly. There is no article, anecdote, or funny story too small! Thank you!

Next, a sincere thank you, VMCA members, for allowing me to lead the organization in 2020 as your President. Your skills, knowledge and input are vital to the success of the VMCA. Additionally, I’d like to recognize and thank LaToya White, now Past President, for her efforts leading the organization in 2019 and during the years on the Board leading up to her presidency! It is also essential that we recognize the achievements of the entire VMCA Executive Board, who year-after-year, work together in the best interests of the VMCA and its members. The most visible product of their hard work is the Annual Meeting—but behind the scenes, there is great camaraderie, fun and effort all year long to ensure its success. I hope all of you feel free to contact any Board member if you have suggestions about the organization, its activities, or what we can do to be a stronger force in Virginia vector control.
It was such a pleasure for me to attend the 2020 Virginia Mosquito Control Association Annual Meeting after a long stretch of remote presentations. I didn't know how much I missed being there in person until I got into all those great side conversations that happen at meetings. Due to the modified format this year, which included a panel discussion and “Lightning Round,” we had a record number of presenters for this meeting—60+ presentations from 50+ speakers! One consistent comment on evaluations over the past years is that people want to hear more talks about what jurisdictions actually DO. Operations talks are a stellar way for us to learn from one-another, find common ground, benchmark, and ultimately improve our own operations. Variation in speakers at a given meeting, across years and across job titles are also consistent comments that we hear from membership. Every single VMCA member has some experience or does work that others can benefit from hearing about. Please make Tim DuBois's job as Agenda Chair this year difficult by overloading him with too many presentations for the next meeting!

I'm excited for all that is to come this year and beyond, and I’m honored to act in your interests over the next year. The VMCA Executive Board is a fantastic cross-section of vector control in VA, and their efforts are incalculable. Equally important is the participation and engagement of VMCA members, that the association is so fortunate to have. But ultimately, the VMCA Executive Board exists to serve YOU. Please consider joining one of our many committees and keep us moving forward as a state association.

Following federal, state, and local policies currently in place to reduce the spread of COVID-19, and due to the uncertainty of the future of this global pandemic, the VMCA Education Committee has decided to cancel the annual Adult Mosquito Identification Class. Virginia Governor Ralph Northam's Executive Order Fifty-Three orders the closure of all K-12 schools and certain non-essential businesses as well as bans all gatherings of more than 10 people. Past presentations have been posted on the Adult Mosquito ID class page of the VMCA website and we encourage you to share them with any new employees or seasonal staff that may need it.
What's in this issue

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ANNOUNCEMENTS

VMCA ORGANIZATIONAL MAILING ADDRESS

Virginia Mosquito Control Association
Jay Kiser, Secretary/Treasurer
800 Carolina Rd
Suffolk, VA 23434
Phone: (757) 514-7608
Email: virginiamosquito@gmail.com

YOU CAN SIGN UP FOR OR RENEW YOUR VMCA MEMBERSHIP ONLINE! VISIT OUR WEBSITE AND FILL OUT THE FORM HERE

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UPCOMING EVENTS

Tour de Skeeter Registration Deadline
May 29, 2020

Second Annual Tour de Skeeter
June 20, 2020
Chesapeake, VA

National Mosquito Control Awareness Week
June 21-27, 2020

Entomology 2020 (ESA)
November 15-18, 2020
Orlando, FL

The following events have been cancelled due to the COVID-19 crisis. Keep an eye on your email for further cancellations or modifications.

- AMCA Annual Meeting
  - presentation material from this year’s meeting is available here

- April TMVCC
  - TMVCC Annual Clarke Adulticide Rodeo
    - contact Jeff Hottenstein for calibrations

- 22nd Annual Washington Conference
  - see the legislative tab of AMCA’s website for details as they emerge

- Great Virginia Tick Field Meeting

- VMCA Adult ID Course
  - past presentations available online here

WHAT’S THAT...?

Answer on page 14
Mosquito Control Continues to Protect Public Health During Coronavirus Outbreak: Mosquito-borne disease control increases in importance to reduce severity of COVID-19

The current lockdowns in place meant to curtail spread of coronavirus will not preclude the performance of essential mosquito control activities in the United States. Despite emphasis on testing and treating COVID-19 patients, we can’t lose sight of the fact that other debilitating and potentially fatal diseases transmitted by mosquitoes may also potentially infect our citizens.

“Studies have shown that factors contributing to potentially serious or fatal outcomes attendant to COVID-19 infection involve underlying medical issues, such as neurologic conditions that weaken ability to cough or an already-stressed immune system due to concurrent infection by mosquito-borne viruses,” says Joseph Conlon, Technical Advisor to the American Mosquito Control Association. Mosquito-borne viruses such as West Nile virus and dengue have not disappeared as COVID-19 has usurped the media landscape. As potential contributors to severe outcomes, their prevention/control becomes even more critical. “Fortunately, mosquitoes have not been shown to transmit COVID-19” says Conlon, “However, mosquitoes can factor into the severity of the disease. Thus, it is crucial that we maintain robust measures to reduce their numbers.”

It’s important to remember that mosquitoes are more than just a nuisance. Their bites can spread diseases such as Zika and West Nile Virus – and more as yet to reach our shores in the future. “We already have the mosquitoes. We are continually importing the diseases they carry,” says Conlon. “We must be prepared to prevent their spread throughout our public health landscape – and this requires safe, effective, sustained mosquito control and awareness in the community.” It is even more critical now in light of the COVID-19 threat.

All that said, please monitor your emails for cancellations of VMCA meetings and trainings. The Education Committee has decided to cancel the May Adult Mosquito ID Course, TMVCC has cancelled their April meeting, and more cancellations will likely be ahead in order to keep everyone safe in accordance with the current federal, state, and local policies regarding COVID-19.

To date there has been no information nor evidence to suggest that the new coronavirus could be transmitted by mosquitoes.
The new coronavirus is a respiratory virus which spreads primarily through droplets generated when an infected person coughs or sneezes, or through droplets of saliva or discharge from the nose.
To protect yourself, clean your hands frequently with an alcohol-based hand rub or wash them with soap and water. Also, avoid close contact with anyone who is coughing and sneezing.

FACT: The new coronavirus CANNOT be transmitted through mosquito bites

#Coronavirus #COVID19
This award honors the legacy of Dr. Bruce Arthur Harrison, a brilliant taxonomist/entomologist, who devoted his life to the study of Culicidae. Dr. Harrison published more than 150 manuscripts, sharing his knowledge with the world. He was also a beloved friend and mentor to many within the Virginia Mosquito Control Association and was well known for providing counsel and encouragement about all-things-mosquito. His closest family, friends, and colleagues described him as a true naturalist, avid researcher and publisher, and a lifelong educator who went above-and-beyond to contribute to the study of mosquitoes.

The Dr. Bruce Harrison Mosquito Research Award is bestowed on an individual or group of individuals who have contributed greatly to the improvement of mosquito knowledge in or affecting the state of Virginia through the peer-reviewed publication of mosquito research. Recipients of the award must also show a dedication to the sharing of this knowledge through teaching and training. Only members of the Virginia Mosquito Control Association in good standing will be considered. Written rationale for the nominations must be submitted to the Executive Board for review. The VMCA Executive Board must review the nomination and vote unanimously to confirm the nominee(s).

VMCA’s Nominating Committee is seeking nominations for the 2021 VMCA executive board.

Are you or a VMCA member you know interested in being on the VMCA board? If so, please contact the Nominating Committee Chair, LaToya White (lnwhite@nnva.gov), with the name and contact information of your nomination. We are seeking nominations for the First Vice President position on the 2021 executive board. The member voted into the first vice president position typically moves up the ranks of the executive board each successive year; a five year commitment. VMCA needs the help of dedicated and enthusiastic individuals to keep our organization running great. Deadline for submissions will be November 1st, but the earlier we hear from you the better.
We had a good participation in the annual conference survey with 51 respondents. The chart above shows the average response for each category on the survey. Overall, the responses and comments were mostly positive about the conference. However, there was a suggestion of more preparation for the panel discussion. In terms of facilitation of questions and discussion, people requested better monitoring of the time and there was a suggestion for more technological preparation and troubleshooting. The luncheon received the lowest score (average = 3.7); while most of the comments were positive, there were calls for healthier options both during the banquet and breaks. Location and lodging received one of the lower scores (4.06); people commented on enjoying seeing the ocean at the previous location in Virginia Beach (Hilton Oceanfront). The hospitality room was well liked but people wanted more beverage options. Another comment noted the pricey drinks at the hotel bar during the Biting Times social event.

Out of all the categories, the speakers and lightning round received the highest average scores (4.61). Some of the topics requested for next year include more testing, traps/repairing traps, fire ants, alternative mosquito control, operations, more blood meal analysis, more in-depth on diseases, and effects on non-targets.

We are expecting an exciting year for the Tidewater Mosquito and Vector Control Council in 2020. Our board this year is as follows: **Mitch Burcham**: President, **Ann Herring**: Vice-President, **Luz Grant**: Secretary

As of now all sponsors have been booked for April-October. We are going to try something new this year for the last meeting of the year. We have decided to have that meeting on October 28th to try to beat the cold weather. Heating the meeting area has been a problem in the past so hopefully having the meeting a couple of weeks early will solve that problem. We will post the schedule on the VMCA website on the [TMVCC page](http://example.com) and monthly reminders will be sent to all TMVCC members to remind you of the meetings. If you are not on the email list please let one of us know and we will add you.

As always we are looking for speakers for the meetings so if you have a topic you would like to present or share your expertise or experiences please let one of the board members know. We are looking forward to seeing you this year at the meetings,

-Mitch Burcham, President, TMVCC
The Mid-Atlantic Mosquito Control Association (MAMCA) joined up this year with the South Carolina Mosquito Control Association (SCMCA) to bring the regional conference to Greenville, South Carolina. While the east coast was braving the looming snow storm, sunny skies graced conference goers as the nine member states met to discuss the recent trends and seasonal data.

Virginia was represented by Lisa Wagenbrenner and Zollie Russell from Chesapeake, Ann Herring from Suffolk, Jeff Hottenstein representing Clarke Mosquito Control, Virginia State Representative Elizabeth Hodson from York County, and serving a second term as President, Tim DuBois from Portsmouth. The conference opened up with a very entertaining presentation on the history of MAMCA by the organization’s historian Sue Ferguson, and moved onto very interesting talks ranging from an update on LaCrosse Encephalitis in North Carolina from Dr. Brian Byrd, a talk on bee biology from Dr. Tsuruda of University of Tennessee, the importance or lack of when pooling mosquitoes for exotic disease by Dr. Roxanne Connelly, and various other topics from across the region on mosquito, tick and black fly control.

There were a plethora of awards given at the banquet. The inaugural Dr. Bruce A Harrison Student Competition Award was received by Kyndall Dye-Braumuller from the University of South Carolina on her work involving kissing bug investigations. An Outstanding Service Award was presented to Joe Andrews for his years of seemingly never-ending energy towards MAMCA and its members. MAMCA’s highest honor the R.E. Dorer Award was received by Peter Connelly for his tremendous support and continued contributions to the organization. Not to be outdone, South Carolina also had a line of awards given at the banquet to include the silver dipper award given to Tammy Brewer, the Technician of the Year award received by Breyonia Evans, and SCMCA’s highest honor the L.A. Williams Award presented to Joe Conlon.

The 2021 MAMCA Annual Conference will be held in Rehoboth Beach, Delaware on February 9-11, 2021. This will be the first time since 1997 that the Mid-Atlantic Conference will grace the shores of Delaware. For more information on the Mid-Atlantic Mosquito Control Association, please visit the website at www.mamca.org. We hope to see you next year in Delaware!

-Submitted by Tim DuBois
During the 2020 VMCA conference, the Student Competition Committee (SCC) held its fourth annual student poster competition. Five posters were submitted from Virginia University students and displayed in the Westin Virginia Beach Town Center meeting hall. First place and the recipient of the 2020 Dr. Jorge Arias Student Competition Award, with a $500 grand prize, went to Olivia Spencer from William and Mary (pictured right). Her poster was titled “Temporal and spatial variation of *Erlichia chaffeensis* in the lone star tick (*Amblyomma americanum*)”. First place and all runners-up were awarded free registration to the VMCA conference. Runner-up authors included Alexandra Cumbie from Old Dominion University, Elizabeth Rush from George Mason University, Charlotte Pfamatter from Longwood University, and Marcus Simon from Old Dominion University.

During the meeting, both students and VMCA members participated in a Q&A poster session held in the meeting foyer. This session gave VMCA members a chance to talk one-on-one with the students and investigate each poster more thoroughly (pictures below). The SCC appreciates the participation from our membership during the Q&A session.

For the fourth year in a row, the SCC held two successful fundraising events during the annual conference; a 50/50 raffle and a silent auction. With the help of the SCC, VMCA members, and sustaining members, we were able to collect over $1,130.00. This money will be used to fund future competitions that encourage research in the fields of vector biology. Throughout the meeting, Karen Akaratovic, Francis Valera, Cassidy McKelvie, and Kaitlyn Price were hard at work selling raffle tickets and sold $446 worth. Ryan Levering was the lucky winner taking home half of those collections. Ann Herring spearheaded the 2020 silent auction. With the help of our members, she was able to auction off 35 donated items and collect over $900. During next year’s conference, the SCC plans to conduct another silent auction. If anyone is interested in donating items, please contact Ann Herring at mherring@suffolkva.us.
I would like to thank all the students that participated in the poster competition this year. I would also like to thank everyone that contributed to the silent auction and 50/50 raffle. Without your donations, this program would not have the success it has seen over the last four years. Last but not least, I would like to thank the members of the SCC (including our judges). A lot of hard work goes into this committee and I appreciate everything you have done. I am looking forward to seeing everyone next year.

-Submitted by Jay Kiser, Student Competition Committee Chair

On the Left, Ryan Levering shows off his 50/50 raffle winnings. In the middle, VMCA members check out the silent auction items. On the right, a few big ticket items in the auction: framed mosquito art donated by Valent Biosciences and a bat house donated by BatBnB.

### TOUR DE SKEETER 2020

The Student Competition Committee is planning to host our second Tour de Skeeter fundraising event on June 20, 2020. This event will be taking place on the Virginia Capital Trail between Jamestown and Richmond. Bike riding is a great way to get out of the house, get some exercise, and still keep a good social distance. Depending on restrictions, recommendations, and closures during this timeframe, we plan to meet up at Indian Fields Tavern at noon. At the Tavern, the SCC will provide a collection of appetizers to participants while riders can purchase their own drinks and lunch (more details).

**What if social distancing recommendations are still in effect?**

We will plan accordingly. You and your family’s health and safety are priority one. If needed, we may postpone the event until a later date in the summer (August) or limit the activities of the event on June 20 (biking only, either on the capital trail or a more local location for different members). Whatever happens with the event itself, your registration cost will still get you the t-shirt and other swag, while raising funds for our student competition.

Estimated look of 2020 Tour de Skeeter quick dry t-shirt.
Tour de Skeeter will be riding out again during the 2020 season. The Student Competition Committee (SCC) will be kicking off Mosquito Control Awareness Week on June 20, 2020 with our annual Tour de Skeeter event. This event will take place on the Virginia Capital Trail between Jamestown and Richmond. At noon, we will all meet up at Indian Fields Tavern right off the trail. At the tavern, the SCC will provide a collection of appetizers to participants while riders can purchase their own drinks and lunch.

Registration details:

Full Registration is $35 (May 29 deadline): Includes event packet (VMCA bag with t-shirt and other goodies, trail map and information card), light fare at the Indian Fields Tavern, and emergency support 1 hr +/- event time. Proceeds from registrations will go towards the VMCA Student Poster Competition and fundraising events. Come out and help support vector-borne research. Register and pay online.

The Virginia Capital Trail (Map) is a 52 mile paved trail that runs from Jamestown to Richmond Virginia. Before and after the tavern time, you can bike ride, jog, skateboard or walk on the trail as much or as little as you would like. Bring your families, join up with friends, or go solo. Last year, groups of bike riders met in Jamestown and Richmond to ride and meet up at the Tavern (roughly mile marker 22 on the trial). Another group met up at the tavern to ride locally. There are additional parking lots on the trail where people can meet up as well.

Meeting Location:

Indian Fields Tavern (12 - 4 PM)
9220 John Tyler Memorial Highway
(near mile marker 22)
Charles City, VA 23030
(804) 829-2200

Camping at Chickahominy Riverfront Park is a possibility the night before or night of the event. The park is located at mile 6.7 with over 120 campsites. If you are interested in camping and want to share a site, please email Jay Kiser (Jkise005@Suffolkva.us).

-Written by Jay Kiser, Photos by Karen Akaratovic and Jay Kiser
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<tr>
<th>COMMITTEE</th>
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<th>MEMBERS (2020)</th>
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<td>Annual Meeting (Local Arrangements)</td>
<td>Charles Abadam</td>
<td>Ann Herring, Luz Grant, Josh Smith, Ryan Levering, Stephen Rehak</td>
<td>Decides location of future meetings</td>
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<td>Tim Dubois</td>
<td>Mitch Burcham, Eli Hosen, Andy Lima, John Orr</td>
<td>Organize Annual Meeting program</td>
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<td>Kurt Vandock</td>
<td>Ann Herring, Wes Robertson, Steve Molnar</td>
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<td>Audit</td>
<td>Mitch Burcham</td>
<td>Daniel Sherwood, Penelope Smelser, Mike Bowery</td>
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<td>Charles Abadam, Luz Grant, Daniel Sherwood, Eli Hosen, George Wojcik</td>
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<td>Lisa Wagenbrenner</td>
<td>Ann Herring, Jennifer Barritt, Karen Akaratovic</td>
<td>Recertification, Adult ID course</td>
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<tr>
<td>Elections</td>
<td>Andy Lima</td>
<td>Penelope Smelser</td>
<td>Set up online voting, send out voter information, count votes, announce winners during annual business meeting</td>
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<td>Historian</td>
<td>Tim DuBois</td>
<td>John Orr, Carla Caulkins, Ann Herring, Daniel Sherwood, Francisca Cantu, Amanda Byrd</td>
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<td>Hospitality Room</td>
<td>Luz Grant</td>
<td>Darrell James, Charles Abadam, Tarik Philips</td>
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<td>Information/Social Media</td>
<td>Karen Akaratovic, Rachel Kempf</td>
<td>Cassidy McKelvie, Katherine Reutt, Wes Robertson</td>
<td>The Skeeter, Facebook, Instagram</td>
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<td>Randy Buchanan</td>
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<td>Jay Kiser</td>
<td>Joshua Bernick, Tim DuBois, Ann Herring</td>
<td>Keep updated list of membership</td>
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<td>Merchandise</td>
<td>Penelope Smelser</td>
<td>Katherine Reutt, Lisa Wagenbrenner, Ann Herring, Luz Grant, Daniel Sherwood, Francisca Cantu</td>
<td>Coordinating sales of merchandise for and during annual meeting</td>
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<td>Nominating</td>
<td>LaToya White</td>
<td>Ann Herring</td>
<td>Find election candidates, prepare/gather profiles of nominees for ballots</td>
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<td>Photography</td>
<td>Janice Pulver</td>
<td>Carla Caulkins, Andy Lima</td>
<td>Takes photos of VMCA-related events for website, The Skeeter, Facebook and Instagram</td>
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<td>Ryan Levering</td>
<td>Wes Robertson, Ann Herring</td>
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<td>Jennifer Barritt</td>
<td>LaToya White, Charles Abadam, Karen Akaratovic, Ann Herring, Phil Meekins, Darrell James</td>
<td>Annual Meeting awards--R.E. Dorer, Outstanding Service</td>
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<td>Jay Kiser</td>
<td>Charles Abadam, Karen Akaratovic, Kaitlyn Price, John Orr, Ann Herring, Wes Robertson, Ryan Levering, Francisca Cantu, Dennis Salmen, Francis Valera, George Wojcik, Michael Rollins</td>
<td>Organize student research/poster project competition with an award to be given at the annual meeting, raise funds for award, judge entries for student competition</td>
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<td>Technical Support</td>
<td>Charles Abadam</td>
<td>Cassidy McKelvie, Daniel Sherwood, Eli Hosen, Joshua Bernick, Ciro Monaco</td>
<td>Maintain/advise VMCA on hardware/software, operate AV setup during annual meeting, AV support for Executive Board meetings</td>
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<tr>
<td>Website</td>
<td>Karen Akaratovic</td>
<td>Karen Akaratovic</td>
<td>Maintain and revise website</td>
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Virginia Mosquito Control Association  
New Membership & Member Renewal Application

**MEMBERSHIP TYPE:**  
( ) RENEWAL  ( ) NEW  
Mark an “X’ in the appropriate box

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Questions or comments can be directed to Jay Kiser, Secretary-Treasurer, 757-514-7608 or email to: Virginiamosquito@gmail.com

The VMCA accepts cash, check, and credit card. Membership forms and payments are accepted on our website at [www.mosquito-va.org](http://www.mosquito-va.org).

**Jay Kiser**  
VMCA Secretary-Treasurer  
800 Carolina Rd  
Suffolk, VA 23434  
757-514-7608 office phone  
757-923-2484 office fax

**Regular Member** - VMCA Newsletter, hold office, serve on committees, propose motions, vote, and participate in business meetings.

**Associate Member** - VMCA Newsletter, participate in business meetings.

**Student Member** - VMCA Newsletter, serve on committees and participate in business meetings. (Student must be enrolled as part-time or more in an accredited college or university. Student must produce valid College or University ID Card).

**Sustaining Member** - Exhibit space during the annual meeting and registration for one person. VMCA Newsletter, participation in commercial presentation session, listing in VMCA Newsletter and meeting program, listing on VMCA website.

Online submission form can be found [here](http://www.mosquito-va.org).
That is Suffolk’s newest tool for monitoring catch basins or other hard-to-reach larval habitat. It is a simple hand pump siphon with a modified end to enable the tube to reach the bottom of some of our deeper pipes. Over the past few years, Suffolk has been making extra efforts to catalog and monitor our storm drain system for the presence of mosquito larvae (particularly *Culex pipiens* complex and *Culex restuans*), treating when necessary. As many programs are aware, it is not easy. Some storm systems are older and difficult to access (at least by conventional methods using a dipper) either because the grating at the access point is sealed or because the bottom of the pipe where the water pools is too deep for a 5-foot long pole to reach – even laying down on the ground with your arm fully extended in the opening!

During one of our office brainstorm sessions, we came up with an idea that seems to be a promising option. For the grand price of $36 at a local hardware store, we found a hand pump ($14) that we retrofitted with a longer tube ($10 for 20 feet), attached a funnel that we already had to the end, and then added a weight ($12). The funnel helps to suck up larger volumes of water and the weight helps to straighten and steady the tube. So far, field-testing has shown good results. The deeper the pipe, the harder it is to get the water flowing since you are fighting gravity; however, with some elbow grease and determination, it can be done! When testing in the lab with different developmental stages, it seems larger larvae (3rd/4th instar) and pupae are more capable of escaping the pull of the suction while 1st and 2nd instar larvae travel with relative ease. Some specimens that come through are missing setae on their heads or siphons but overall are in decent shape. We hope to use this tool for our larval surveillance of catch basins and better help us to evaluate the scope of the issue(s) in these locations. Hopefully we will be able to share some results at the 2021 annual VMCA conference.

-Submitted by Karen Akaratovic
The VMCA gratefully acknowledges the support of the following sustaining members for 2020. Without their generous contributions, much of what we do would not be possible. Please do not hesitate to contact them. They are here to help you!

**ADAPCO, Inc**
Ted Bean
(814) 671-6516
tbean@myadapco.com

**Clarke**
Jeff Hottenstein
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jhottenstein@clarke.com

**Central Life Sciences**
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**Bayer Environmental Science**
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kurt.vandock@gmail.com

**Co-Diagnostics Inc**
Seth Egan
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As a result of revisions to the VMCA By-Laws, the organizational member category was eliminated. In order to facilitate communication among mosquito control programs, jurisdictions with known mosquito and vector control programs are listed below. If there are other jurisdictions that should be listed, please submit them to the editor.

**Virginia Mosquito Control Jurisdictions**
- Alexandria Health Department
- Boykins, Town of
- Chesapeake Mosquito Control Commission
- Chincoteague Mosquito Control
- Fairfax County Health Department
- Fort Eustis
- Gloucester County Mosquito Control
- Hampton Environmental Services
- Henrico County
- Newport News Vector Control
- Norfolk Vector Control
- Poquoson Mosquito and Drainage
- Portsmouth Mosquito Control
- Prince William County Mosquito & Forest Pest Management
- Suffolk Mosquito Control
- US Air Force / Langley Air Force Base
- Virginia Beach Mosquito Control
- Williamsburg Mosquito Control
- York County Mosquito Control

**Other Mosquito Control Organizations**
- American Mosquito Control Association
- Mid-Atlantic Mosquito Control Association

**Other Resources**
- Virginia Department of Health
- Centers for Disease Control & Prevention
- Fairfax County Education and Outreach Materials

**WANTED: SUBMISSIONS!**

Do you have information you’d like to include in the next issue of The Skeeter or a photo you’d like to share? We are always looking for organizational updates, operational news, education and outreach activities, pictures, stories, and anything remotely vector-related to include in upcoming newsletters as well as on Facebook and Instagram.

Please send all items to the Skeeter editor, Rachel Kempf at rkempf@pwcgov.org
Take the time to volunteer on a committee! An active membership makes for a stronger organization. Contact anyone on the Board to participate.

The Skeeter is the official production of the Virginia Mosquito Control Association. The VMCA membership is encouraged to submit articles, reviews, and any other interesting facts or tidbits for publication. Submissions can be sent to Rachel Kempf at rkempf@pwcgov.org or Karen Akaratovic at kakaratovic@suffolkva.us.