

VOLUME 84

START DE START

President's Address

HELLO AND HAPPY SPRING!

Thank you for the opportunity to serve on the Executive Board this past year and I am excited to continue in my new role as President. I want to start by thanking Past President Carla Caulkins for all her work last year leading the organization and to everyone who attended and helped make our 77th annual conference a success. It cannot be overstated how much work goes into preparing for the conference and I am always so impressed by the dedication of those volunteering on the board and committees that keep this organization running. At the conference, all of the proposed changes to the Bylaws passed and the amended version is now available on the website. Thank you to the speakers for sharing their knowledge and experience as well as the students that took time to share their research with us through posters, presentations, and live Q&A. Congratulations to this year's winners! Many thanks are also due to our 2024 Sustaining Members, without whom much of what we do would not be possible. Please join me in thanking Azelis, Central Life Sciences, Clarke, Frontier Precision, Summit, Target, Valent, and Veseris; reach out to our representatives for any of your operational needs. Please save the date for our next conference, held jointly with MAMCA, February 4-6, 2025 at the Marriott City Center in Newport News, Virginia.



KAREN AKARATOVIC

2024 VMCA PRESIDENT

Thank you to everyone that voted in our 2024 Election. We hope to see this level of participation continue! Congratulations and welcome to our newest board members: First Vice President Janice Pulver, Industry Representative Steve Molnar, and Interim Secretary Katherine Reutt. Katherine was nominated by the Executive Board after Jay Kiser resigned from the joint Secretary/Treasurer position and we are so grateful she has agreed to serve in this position and keep things running smoothly. Jay will continue to serve as Treasurer and we owe him a sincere thank-you for all the work he has done in the joint position over the past several years. If you have any interest in serving on the board next year, please contact <u>Past President Carla Caulkins</u> and feel free to attend board meetings to observe or ask questions. Meetings are virtual and dates are posted on the website home page; all you have to do is email us (virginiamosquito@gmail.com) for the link!

We appreciate all the honest feedback and constructive criticism on the post-conference survey. Please remember that this is a volunteer-run association and I encourage anyone that wants to contribute or has suggestions and ideas for improvement to please consider joining a committee. Fill out the form on our <u>website</u> or contact any of the listed committee chairs. Our 2024 committees are already up and running, working on all sorts of benefits to VMCA membership like the Adult Mosquito ID Course, 6th annual Tour de Skeeter, 9th annual Student Poster Competition, securing the Governor's Proclamation for Virginia's Mosquito Control Awareness Week, sharing legislative updates, this newsletter, and so much more. **Thank you to our 2024 committee chairs and to all the members who have signed up to help so far!**

I hope you enjoy this issue of *The Skeeter* and I encourage everyone to submit at least one item to the newsletter this year. It doesn't have to be a full page article – send in your tips and tricks, funny stories, events you're attending, photos, or ANYTHING at all vector-related. There is an incredible amount of effort that goes into these newsletters and we'd love to see more membership engagement. Send submissions to <u>Information Chair Kaitlyn</u> <u>Price</u> or online (<u>https://mosquito-va.org/the-skeeter</u>).

Have a wonderful spring and a great start to the main mosquito season!

VOL. 84, No. 1

THE SKEETER

Table of Contents

PAGE 3

Announcements

WHAT'S IN THIS ISSUE

2 PRESIDENT'S ADDRESS

- 3 ANNOUNCEMENTS, WHAT'S THAT?
- 4 VMCA CONFERENCE SUMMARY
- 5 SURVEY RESULTS
- 7 ELECTION RESULTS 8 PRESIDENTIAL AWARD
- 2 HOSPITALITY ROOM & SPECIAL AWARDS
- 10 STUDENT COMPETITION
- 12 2024 ADULT MOSQUITO ID COURSE
- 14 HISTORICAL FLASHBACK
- 20 HENRICO IN THE SPOTLIGHT
- 25 DID YOU KNOW?
- 26 MAMCA RECAP
- 27 AMCA RECAP
- <u>30</u> WHAT'S THAT ANSWER
- 31 JURISDICTIONS AND RESOURCES
- 32 2024 SUSTAINING MEMBERS
- 33 2024 COMMITTEE LIST 34 2024 EXECUTIVE BOARD

WHAT'S ON THE COVER?



Female *Toxorhynchites rutilus* resting on a tree, photo taken by Chelsea Putnick from Portsmouth Mosquito Control

UPCOMING EVENTS

VMCA Executive Board Meeting May 3, 2024

VMCA Adult Mosquito ID Course May 6, 2024

Washington Conference May 13-15, 2024

National Mosquito Control Awareness Week June 16-22, 2024

We're celebrating!

In November, the Skeeter	.000
turned 80 years old:	Alt
Alex has written an	Jui v
amazing flashback	
documenting this! Check	
it out on page 14.	





DID YOU KNOW?

You can check our <u>news page</u> for more updates and renew your membership anytime<u>online</u>! Virginia Mosquito Control Association's 77th Annual Conference took place February 20-22, 2024 at the Hilton Virginia Beach Oceanfront.



Another great meeting for the books! Our 77th annual conference was held February 20-22, 2024 at the Hilton Virginia Beach Oceanfront Hotel. With over 100 attendees, 8 sustaining members, and 44 presentations from 35 speakers, we had a wonderful gathering of folks from all across the field of vector control and our committees were in full swing!

The Hospitality Room was a huge hit with food and games on Tuesday and Wednesday nights,

Elections Committee had a new voting booth, Student Competition Committee held fundraising events and a student poster Q&A session, Historian Committee took us on a trip down memory lane, the Inaugural Photo Contest held live voting, and there was lots of mosquito swag from the Merchandise Committee.

Also, **many thanks to the sustaining members!** The Icebreaker Social sponsored by **Central Life Sciences** and the Silent Auction Final Bidding Event sponsored by **Clarke** were enjoyed by many; and I know everyone appreciated the coffee and snack breaks sponsored by **Target, Central Life Sciences, Azelis**, and **Valent** that kept us energized and focused on all the information being shared.



Although the nip of winter was still gusting along, it was beautiful and sunny enough for several members to enjoy the sandy shore, some even dared to test the water! I hope everyone enjoyed this



meeting and is looking forward to the next one **February 4-6, 2025** which will be held jointly with the **Mid-Atlantic Mosquito Control Association at the Marriott City Center in Newport News, Virginia.**

Check out the articles that follow for detailed reports on the conference survey, elections results, student competition committee, and more.

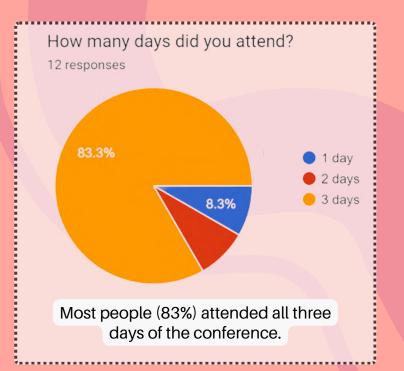


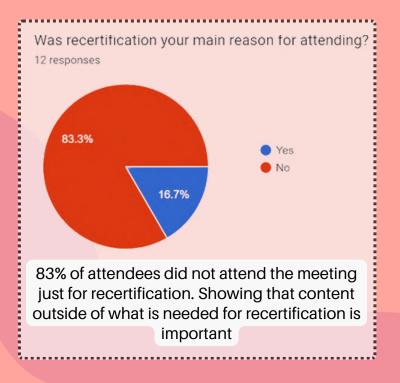


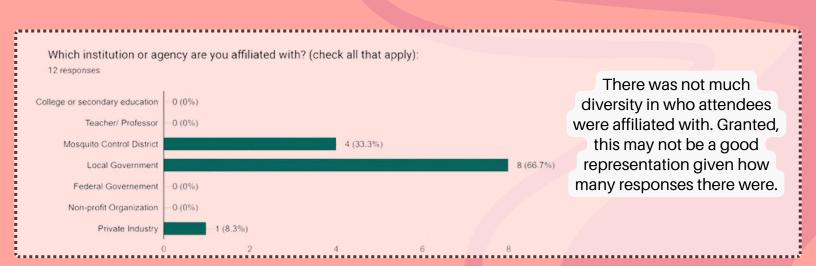
Submitted By: Karen Akaratovic VMCA President

Annual Conference - Survey Results

Thank you to those who took the time to fill out the survey and let us know how the conference went. These submissions really help gauge how to improve it in the future. Twelve surveys were submitted and the results were **overall very positive**. In terms of overall meeting experience on a scale of 1 to 5(1 being poor and 5 being excellent), 41.7% gave it a rating of 4/5 and 58.3% rated it 5/5.







Survey Results - Continued

Which presentation or subjects were most helpful to you?

8 responses

Subject Mentioned in Comment	Times Mentioned
Operational or protocol	9
Outreach	4
Showcasing new products or methods	2
Disease and VDH Update	2
GIS	1
Quality assurance	1
Lightning round	1
Poster presentations	1

The chart is organized by the most mentioned subjects from the comments to the question. Overall learning about how different localities operate is the most beneficial.

How could this meeting be improved in the future? 9 responses

Improvement	Times Mentioned
No improvements	3
Adjust schedule (later breakfast, break up Wednesday more, more time for questions)	3
Change location/city	2
Better address disruptions during presentations	1
More activities during social hours	1

The most mentioned room for improvement were no improvements and suggestions on ways to adjust the schedule. The change of location is already addressed because the next conference will be in Newport News.

How can the VMCA help support the type(s) of work that you do? 6 responses

VMCA Support	Times Mentioned
More training or workshops	3
Keeping up with modernization of operations	2
Improve communication between localities	1

VMCA can better help support attendees mainly by providing more trainings. Another suggestion is being a conduit to members to inform others of new protocols, technology, workflows, etc. that may also benefit them.

Please share any additional comments, any feedback helps! 7 responses

Additional Comments	Times Mentioned
Great conference	4
Better food	1
Different door prizes	1
Good lightning round and live voting	1
Talk on "vector indexing"	1
Outstanding hospitality suite	1
Bigger space for conference	1
More time for questions	1
More involvement from all Mosquito	
Control localities	1

The additional comments varied on several topics mentioned. The most consistent was that the conference was good overall.

> Submitted By: Janice Pulver VMCA First Vice President

Annual Conference - Election Results



Janice Pulver - First Vice President



Steve Molnar - Industry Representative



Katherine Reutt - Interim Secretary

For the 2024 Election, 81 ballots were cast online and 5 paper ballots were cast in-person at the conference. **Thank you to everyone that voted!** This is a significant improvement from the 26 ballots cast in 2023 and double the average of 40 in a typical year. A \$50 gift card drawing was offered to those that voted this year; however, we would hope to see this level of participation continue regardless of the extra incentive. There was also a new voting booth and "I voted" stickers which the committee hopes made the process a bit more visible and fun this year. **Thank you to Penny Smelser** for getting the ballot sent to membership so quickly and for managing the online system as she has done for many years. This is a great service to membership and we sincerely appreciate her efforts.

Congratulations to our new board members: Janice Pulver from York County Mosquito Control will serve as First Vice President and Steve Molnar from Target Specialty Products will serve as Industry Representative. We look forward to a productive year with our newest board members!

Executive Board Officers that ran uncontested and progressed into successive positions include: Past President Carla Caulkins, President Karen Akaratovic, President Elect Lauren Lochstampfor, and Vice President Addison Weddle. Winning the vote for Secretary/Treasurer was Jay Kiser; however, following the approval of the new Bylaws, Jay resigned from the Secretary position but will continue to serve as Treasurer. Katherine Reutt, who also ran for the combined Secretary/Treasurer position was nominated by the 2024 Executive Board and has agreed to serve as Interim Secretary. **Congratulations and thank you, Katherine!**

You can see all the board members and their contact information on the back cover as well as on the <u>website</u>. If you are interested in being on the board next year, please reach out to <u>Past</u> <u>President Carla Caulkins</u>.

A<mark>nnual Conference - Presidential Award</mark>



Carla Caulkins was presented with the Presidential Plaque for her leadership of the Virginia Mosquito Control Association in 2023. As Carla was out on maternity leave during the annual conference, Secretary/Treasurer Jay Kiser delivered the award to Carla's home and she provided us with a photo of her holding her award. Carla will continue to serve on the board in 2024 as Past President.

Thank you for your service to VMCA, Carla!

Submitted By: Karen Akaratovic VMCA President



MAMCA & VMCA 2025 JOINT CONFERENCE

February 4-6, 2025 Newport News Marriott at City Center





Annual Conference - Hospitality Room

Hello all. This year the Hospitality room was a new adventure for me. It was **an honor** to be able to be the chair of this event. I hope everyone that came by had a good time. The cards and board games seemed to be a "hit."

I hoped all enjoyed the candies and snacks on the tables Tuesday and Wednesday evening. There was some serious competition with UNO, poker for candy, Chess, checkers and all the other board games. On Wednesday night I had set up "vermin" scrabble with which you could use only words related to vector in English or Latin. Next year I plan on expanding Scrabble into a competition on the second night. Anyone who has old scrabble games that would like to donate them or let the hospitality chair borrow them please let me know. I hoped everyone that came by had a snack and/or beverage or two enjoyed the company of others. I also want to thank everyone who offered to help me with set-up and breakdown. Thanks for supplying the music, something I totally forgot. Once again thank you for the honor and privilege of being your hospitality room chair.



Here's to next time, with all the great people whom I've come to know and totally enjoy your company. I look forward to doing it again.

Submitted By: Carolyn LaLiberte Hospitality Chair

The Special Awards Committee did not receive any nominations for the 2024 meeting. **Please consider nominating one of your fellow VMCA members for the upcoming year.** A list of each special awards category can be found on the website.

We look forward to receiving nominations for the upcoming meeting! Thank you!

Annual Conference - Student Competition

During the 2024 VMCA annual conference, the Student Competition Committee (SCC) held its **eighth annual student poster competition**. During this year's competition, VMCA continued to invite university students from Virginia and Virginia's neighboring states: Kentucky, Maryland, North Carolina, Tennessee, Washington DC, and West Virginia. Four posters were submitted from four universities in different states. **First place**, **recipient of the 2024 Dr. Jorge Arias Student Competition Award, and winner of the \$500 grand prize, went to Funmilayo Egunjobi from Duke University** (pictured below). Her poster was titled "Identification of



SCC members, student poster submitters, and judges of the 2024 poster competition that were present at the 2024 VMCA Conference in Virginia Beach.

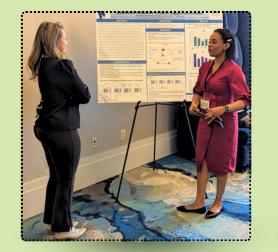
sodium channel mutations conferring pyrethroid resistance in Aedes aegypti mosquitoes." **Second place with a \$300 prize went to Benjamin Burgunder from University of Maryland, College Park** (pictured below). His poster was titled "Site-specific community composition of primary West Nile virus vectors in Chicago does not explain fine-scale variation in modeling human cases." Third place with a \$200 prize went to Jarin Taslem Mourosi from Catholic University of America (pictured below). Her poster was titled "Zika and Dengue vaccine design by CRISPR engineering of T4 bacteriophage nanoparticle."



Receiving the seventh annual SCC awards during the lunch banquet at the 2024 VMCA annual conference. VMCA Interim President, Karen Akaratovic is handing the plaques and checks to Funmilayo Egunjobi (left), Benjamin Burgunder (middle), and Jarin Taslem Mourosi (right).

Student Competition - Continued

During the 2024 conference, all four posters were displayed in the foyer of the Hilton Virginia Beach Oceanfront Hotel. Three poster submitters and several VMCA members participated in a Q&A poster session on the second day of the conference. This session gave VMCA members a chance to talk one-onone with the students and investigate each poster more thoroughly (pictures below).**The SCC appreciates the abundant level of participation from our membership this year during the Q&A session and allowing the students to be fully engaged during the session.**







During the 2024 VMCA Conference, the SCC held **two successful fundraising events**. Throughout the meeting, Ann Herring and Karen Akaratovic were hard at work selling raffle tickets for the 50/50 raffle. **\$485 worth of tickets were sold**, with half of this amount going to the lucky winner, Edward Bishop. With the help of the SCC, VMCA members, and sustaining members, **the silent auction was a big success**. **The auction raised almost \$1000**. All the money collected from these events will be used to fund future competitions that encourage research in fields of vector biology. If anyone is interested in donating items to next year's auction, please contact me at jkiser@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 this year. Without your donations this program would not have the success it has seen. Last but not least, I would like to thank the members of the SCC (including judges). A lot of hard work has gone into this committee over the years and I appreciate everything you have done. Looking forward to seeing you next year.



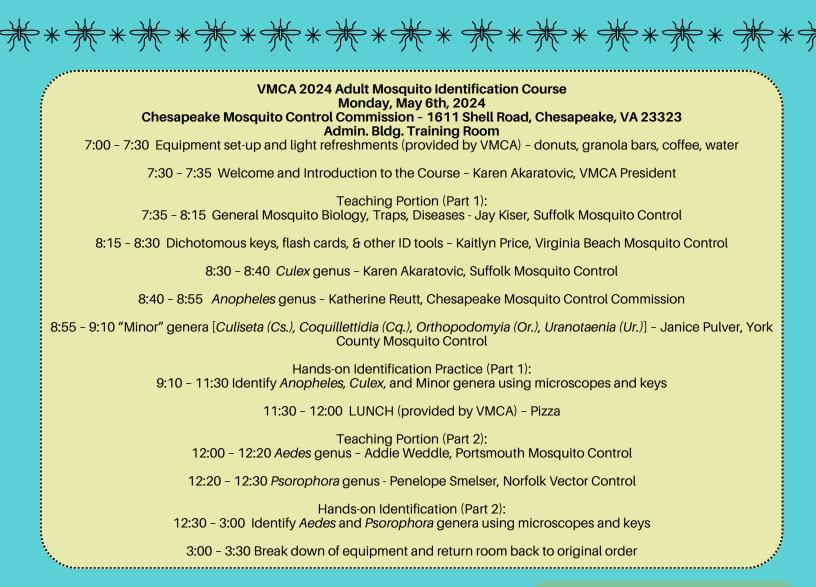


2024 Adult Mosquito ID Course

The annual Adult Mosquito Identification Course will take place on Monday, May 6th, 2024 at

Chesapeake Mosquito Control Commission's facility. This one-day course starts at 7:00am and lasts until roughly 3:00pm. The class is organized through the VMCA Education Committee with assistance from local Virginia mosquito control biologists as teachers on the topics of mosquito biology and each genus (frequent to our region).

This class is held annually as an introductory training session for **seasonal interns**, **summer part-time biology positions**, **mosquito biologists new to the area**, **and/or other mosquito control staff as a cross-training opportunity**. **Class size is limited to 20 students;** attendees should have mosquito control, surveillance and/or identification in their job description and duties. The course is open to VMCA members (as well as affiliated MC associations) to register staff. Sign-up is on a firstcome basis, so don't miss your chance! Registration instructions: Contact VMCA Education Committee Chair, Katherine Reutt, via email (kreutt@cityofchesapeake.net) with your name, the student you are signing up (if not yourself) and your organization. Registration closes Friday, April 26th. A light breakfast and lunch will be provided by the VMCA. If you have dietary restrictions and/or would like to bring your own food, a refrigerator/freezer and microwave are available.



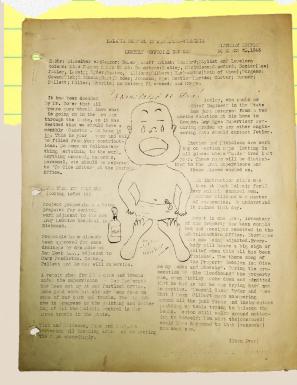


HISTORICAL FLASHBACK

EIGHT DECADES presented by the Historical Committee THE SKEETER

Did you know that this newsletter of ours has been around for EIGHTY years? It's true! The first issue rolled off the Linotype machine on November 25, 1943, kicking things off with the statement below:

It has been decided by Mr. Dorer that all 'youse guys'should know what is going on in the program through the State, so it was decided that we should have a monthly 'Gazette'. So here it is. This is your paper and will be filled from your contributions. So come on fellows any thing pertaining to the work, anything unusual, humorous, personal, etc should be reported to 'Ye Olde Editor' at the Norfolk Office.



Inspiring stuff!

But wait - what? Didn't we just do the VMCA's 75th anniversary? Don't worry - five years haven't slipped by already! It turns out the Skeeter is actually older than the VMCA by three whole years. Who knew! (Not me! Until like a month ago, when I joined this committee and finally looked at the archives. Wow!) So this year to commemmorate its eighty(ish) year history, the Historical Flashback will be taking a look back at the Skeeter through the decades. To kick things off, we're headed back to (almost) the very beginning - April of 1944!

- Alex Riley, Historical Committee

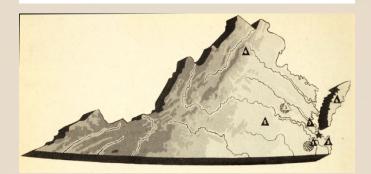
For our readers, who tuned in late, that drawing by our Staff Artist Jim Woodard, is supposed to be a baby. If you think it doesn't look like a baby, you should have seen some of the other samples. They looked like anythink from "Tojo" to "Mickey Finn's Uncle." Jim is O. K. though, swell guy.

LEFT: The first ever issue of the Skeeter featured a bizarre illustration of a baby, which prompted some friendly ribbing of the artist by editor Ed Sisselberger (quoted above).

THE SKEETER

The men and women who founded the Skeeter worked for Malaria Control in War Areas, a federal program tasked with controlling anopheline mosquitoes. malaria-bearing Coordinating with state health departments, the MCWA set up branch projects across the southern half of the country.

In the spring of 1944 Virginia's branch employed around 145 people attached to six different areas. Portsmouth, Virginia Beach, and the Peninsula made up the Hampton Roads half, with the other three in Richmond, Northern Virginia, and the the Eastern Shore.



SKEETER: ORIGINS

The newborn newsletter lacked one thing: a name. And so a contest was announced, promising an ironic reward of five days leave (without pay) to the "lucky fellow" who submitted the winning entry. The results were to be announced the following month.

In the end, the winner wasn't a "fellow" at all-but rather Dorothy "Dot" Farmer, a young woman in the Administrative department at the main Norfolk office.

She married her high school sweetheart days after the announcement, changing her surname to Riggan. The next issue reports their honeymoon was "wonderful."



TOP LEFT: The cover of an MCWA annual report. Most of the outside research and photos comes from these. Photos confirmed to be from Virginia are noted, but the rest are likely from elsewhere in the country. TOP RIGHT: MCWA personnel inspect blood slides for malaria. LEFT: A map of Virginia's MCWA projects.

The MCWA's national headquarters was located in Atlanta. When the war ended, the state programs would devolve to local authorities, while the MCWA itself would continue on under a new name: the Centers for Disease Control and Prevention, or CDC.

Mrs. Riggan would remain with the MCWA until the war's end in 1946, handling the Skeeter's printing duties and briefly hosting the first issue's acerbic "Lovelorn Column". She was also, apparently, a pretty good bowler.

She and Ed moved their three children to Raleigh, North Carolina about ten vears after the war's end. She worked for the state until her retirement, later throwing herself into church activities after Ed died in 1998.

Dot Riggan died in 2020 of dementia and Covid-19. She was 97 years old.

It is unknown whether she ever received her promised five days of leave (without pay).

Name Contest

, We are pleased to announce that Miss Dot Farmer (Mrs. Ed Riggan after Dec 28) won the Grand Prize of five days leave without pay for suggesting the name of this paper -- THE SKEETER. Beaton suggested the name "The Hurt Herald". The name "Quad-ar-angles" was also submitted. But after many hours of deep concentration accompanied by severe headache we awarded the prize to Miss Farmer and extend to her our sincere congratulations. She will receive the prize beginning Dec. 21, 1999...at 2:00 a. m.

VOL I NO 6: APRIL, 1944



MCWA-Virginia was run from an office in Norfolk, and it was here that Dot Riggan typeset and printed the early runs of the Skeeter. She used a Linotype machine, a complicated device for printing short-run publications. These used molten metal to cast temporary printing plates that could then be re-melted and reused.

The original Skeeter ran monthly from 1943-1945, publishing 19 issues less than two years. The issue from April of '44 was a typical one, beginning with "News from the Projects," a regular section that filled readers in on the MCWA's efforts across the state.

AMONTHLY PUBLICATIO

TOP LEFT: The MCWA's Norfolk office. ABOVE: The Skeeter, Vol I No 6. Both are from the VMCA's archives.

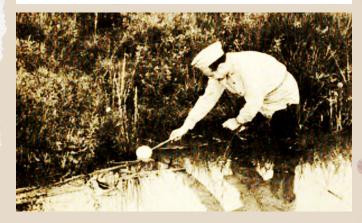
NEWS FROM THE PROJECTS

Eighty years ago this month, the mosquito season began much as it does today—with larval inspectors finding some early-season *Culex*, and not much else.

(NEWS FROM THE PROJECTS CONT'D.) Recent spot checks disclosed some culicine breeding.

The mosquito season was officially opened during the week, April 16-22, when inspection of pest species was begun in Broad Creek Village, Alexander & Douglas Parks & Highland Park Trailer Camp in Area I & in Copeland-Newsome Park in Area III. Very little breeding was found. Newport Norfolk News

RIGHT: An MCWA inspector dips for larvae. Location unknown. From MCWA annual reports. Though malaria-bearing *Anopheles* were the MCWA's primary concern, trial attempts to suppress pest species were also already underway. These early efforts focused mainly on the emergency housing projects that were being hastily constructed across Virginia to house war workers and their families. The units were cheaply built and not meant to last. None of them still exist today.



On May 1st Inspection of aduit collecting stations begins. The boys will get out their little flashlights and perambulate around. ***********

On April 26, the first Anopheles crucians of the season was collected in a light trap at Camp Shelton.

Adult surveillance began a few weeks later. Methods were simple: these "perambulators" were using their little flashlights to count mosquito numbers in natural resting places they had made note of the previous season.

Light traps were also in use, though they don't appear to have yet become a mainstay.



Just as today, source reduction was the first line of defense. The previous year had seen 1,370 total miles of ditches dug, draining 6,421 acres of water. Much of this was accomplished by hand, though labor shortages saw the MCWA turn to quicker and cruder methods—namely dynamite. A funny bit from this issue highlights the anxieties some of the men had about this approach:

Ryder, Gilbert and Carter believe that days when the clouds hang low are not the days to dynamite ditches near residences. We have no facts on the subject but it is understood that Jetley suggested that low clouds might reflect concussion. We are going to ask Jetley to investigate and report in the next issue.



TOP LEFT: An MCWA biologist counts adults with his little flashlight. TOP RIGHT: An MCWA light trap. LEFT: An MCWA-Virginia crew digs a ditch. BELOW: Power larviciding in Virginia. Likely Paris Green? All images from MCWA annual reports.

Adulticiding was in its infancy in 1944, so when source reduction failed larviciding was the order of the day.

The the two main substances were diesel oil and Paris Green, a vibrant pigment originally used in green paint. Diesel oil suffocated juvenile mosquitoes, while Paris Green killed larvae because it was made of arsenic.



Research into less dangerous approaches was already underway: by the spring of '44 pyrethrins were already being explored for multiple purposes. But buzz was growing about a far more promising method, even in the pages of the Skeeter: an exciting new miracle substance known as DDT...

THIS AND THAT

Malaria control was serious business, but the Skeeter of '44 mostly was not. The editorial tone was informal and chatty, filled with in-jokes and wry asides even in the News from the Projects.

Much of each issue was devoted to extracurriculars: readers could get a rundown of the last month's bowling scores or hunting results, along with Blessed Events (births, usually), the Sick List (the motor pool's Ray Hackworth was a frequent star) and lists of recent Visitors of note. Letters to the Editor (often sardonic) were also a regular feature.

Most issues also had a long section called simply Miscellaneous. A roundup of bits not fitting elsewhere, the editor often used it to poke fun at his colleagues. Targets this issue included Vick (left his coat and glasses in Williamsburg) and an unnamed "guy" who accidentally overtipped a waitress he fancied. The MCWA team were extremely into bowling. The following passage from this issue captures this, and the general tone of the era:

THINGS WORTH SEEING OR HEARING AS THE CASE MAY BE (a) Jim Woodard's"Style of Delivery" when bowling. (b) The Judge throwing 3 straight balls down the gutter ON A SPARE. - A record! (George Williams, please note.) (c) Carter's facial expression when he misses a strike or spare. (d) Ryder's look of concern was peculiar. (e) Jetley figuring his next "Bowl" in a "squatting" position. (f) Nick telling Crawford "All you need is a dog collar."

(g) "Dot" Riggan beating most of the fellows at the regular Wednesday Night bowling "Tournament."

MCWA AND THE WAR

By the spring of '44 America had been at war for over two years. Fighting had stalled in Italy and D-Day was still two months away, while Pacific forces sparred with Japan in the Admiralty Islands. The war wouldn't end until the following August.

The battles overseas rarely came up directly in the Skeeter, but the ongoing war underlay everything. There's talk this issue of Victory Gardens and updates on drafted ex-MCWA workers. (War Bond drives, though a common topic, didn't come up this time.)

And then there were the prisoners of war. POW camps dotted the state, with Virginia Beach's Camp Ashby one of the largest. Its 6,000 prisoners were mostly Germans captured in North Africa, and a handful of them were put to work digging ditches in areas close to their camp. According to other MCWA sources, having them larvicide was "not feasible," though it's not clear why. On April 16, we were successful in getting 20 prisoner of war laborers assigned to Malaria Control in War Areas work within the Reservation of camp Ashby.

On April 13, Mr. Dorer attended a meeting in Richmond in regard to Rules and Regulations governing the working of prisoner of war labor.



RIGHT: German POWs post for a photo. Location unconfirmed. From Julie Spivey, for the City of Virginia Beach.

END OF AN ERA

The end of the war saw the end of the first edition of the Skeeter: its final issue ran in September of '45. Already familiar names were departing: that last issue included a farewell to Dot Riggan and a few others alongside a column about the end of the wear. But many of the men would remain on the job: as the MCWA-Virginia was demobilized, many of them were hired by local governments and set about creating the city and county programs that employ most of us today. Norfolk, Portsmouth, and Virginia Beach were the first three, with many more to follow.

During this brief transitional period the Skeeter would go dormant, though it wouldn't stay that way for long. Following 10 month

THE WAR IS OVER!

We are indeed thankful to note that since our last issue Japan has surrendered.

"Grim-visaged war", the Monster that yearns for blood and power, has again been knocked out - (at least temporarily) - in the Bai of Lif

hiatus, in 1946 the Skeeter was resurrected by MCWA vets to help keep in touch as they set up the locally run successor projects. This second volume of the paper ran for a mere six months before the creation of the VMCA, after which Volume 3 established its final role as that organization's official "organ."

VOL Y NO Z: MARCH + APRIL, 1954

By 1954 the Skeeter was a bimonthly publication. It seems the staff realized the futility of a monthly schedule during the season.

Sporting a sleek new title plate and a neater layout than the earlier iterations, the '54 edition of the paper had settled into a more formal format than the freewheeling days of the war years. Gone were the bowling scores and letters to the editor, though jokes and anecdotes were still sprinkled here and there thoughout each issue.

The March/April of '54 issue began with an obituary for the VMCA's second president and ened on a report about Norfolk's early-season *vexans* troubles. But late winter is convention season, so everything in between was a recap of the recent meeting of the AMCA, which had just elected Virginia's own R. E. Dorer as president. Most of the talks seem to have been about pesticides: DDT was now a mainstay for treating lavae and adults alike, and there was a talk on newly developed chemicals such as malathion. <section-header><text><text><text><text><text><text><text><text><text><text><text><text>

That's all for now! It's a shame '54 gets only half a page, but there's just so much more going on in '44 compared to then. Next time on History Flashback: the

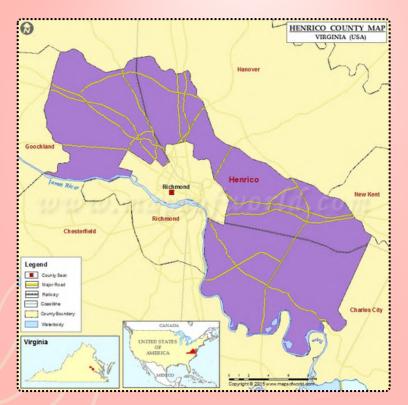
tumultuous summer of 1964! - Alex

RIGHT: The Skeeter Vol 4 No 2. From the VMCA Archives.

County in the Spotlight: Henrico

What is the Henrico County Standing Water Initiative?

The County of Henrico Department of Public Works Standing Water Initiative (SWI), nicknamed the Henrico Mosquito Section, is an integrated mosquito management program, established in the early 2000s, to protect residents from mosquitoborne diseases and proactively deter mosquito population growth using a multi-pronged ecological approach. To accomplish our objective, our section manages a **fully operational surveillance and control program and promotes community-level action through outreach and educational activities.**





Standing Water Initiatives Establishment

Henrico County's SWI was established via a directive from the County Board of Supervisors with the intent of using biologybased methods to combat mosquitoes and their growing health impacts. At the time the board realized the broad negative impacts arboviruses such as West Nile were having on the community and decided to act. Henrico has since established itself as the only mosquito surveillance and virus vector response team within the Central Virginia region. Some 20-plus years later our section is still going strong and despite West Nile not making as many headlines our impact within the community is still significant and important to resident health and comfort.

<u>Surveillance</u>

First, a surveillance program was established. Over 100 sites were selected for bi-weekly monitoring. Sites were selected by human population density. Surveillance is carried out systematically from April through the end of October using modified CDC light traps and Gravid Frommer traps. While our surveillance is centered around those species that potentially carry and transmit the West Nile virus, we also respond heavily to nuisance threats. This means our program's main techniques for monitoring disease and nuisance species is using a slightly modified Frommer Updraft Gravid Trap. While we continue to adhere to the implementation of an upward



air current to remove oviposition seeking females, we have found the use of an oviposition fan too laborious and unnecessarily messy. Therefore, we use "Gravid Buckets" which are Uline Screw Top pails painted in black. This has virtually eliminated field spills and allows for more efficient set up and pick up when placing traps in the field. Nuisance threats are monitored mostly through a modified CDC Light Trap. In-house studies determined that larger yields of mosquitoes occurred without the presence of light sources therefore; traps are currently set without a bulb.

Pathogen Testing

Once samples are collected from the field and identified to species the SWI team processes pooled samples of potential WNV vectors via an evaluation of Rapid Analyte Measurement Platform (RAMP) results. RAMP is an immunoassay test for West Nile virus detection. Determinations of WNV positives can fluctuate but once a positive has been determined mosquito homogenate is stored and set off for RT-PCR confirmation at the end of the season.



In addition to seasonal surveillance and testing procedures, the SWI lab runs resistance tests via bottle bioassay methodologies. Our lab works diligently to curate both larval and adult mosquito species samples seasonally to ensure accurate year-to-year depictions of our regional mosquito populations.

Pesticide Application

Tangential to the surveillance program was the establishment of protocols for pesticide application to control mosquito populations. Over 600 treatment sites are monitored and treated as necessary throughout the County at minimum every 3 weeks. We have adopted an integrated approach that focuses on rotating pesticides but relies heavily on BTI applications as a source of control. Applications generally occur from April to November and primarily include hand/shaker applications of BTI granule formulations and/or truck mounted liquid BTI treatments. In congruence with these applications some increased risk sites and/or temporary habitats are actively treated with CocoBear larvicide oil and Methoprene-infused BTI granule formulations. Henrico is not granted public health access to private property under any circumstance, nor do we have the support of an ordinance structure to ensure resident compliance with suggested safety protocols. As a result, IPM and pesticide approaches remain largely confined to public use and right-of-way areas or are entirely dependent on our outreach impacts.

<text><section-header><section-header><image>

Outreach and Education

Central to our mission is our contribution to outreach and educational activities. Protecting the public's health from mosquitoborne viruses requires participation from the community. We host or contribute to many community education and outreach events each year. These efforts reach property

owners who can make a collective difference in reducing mosquito populations by making simple, low, or no-cost changes on their property like replacing their corrugated drainpipes with smooth PVC pipes and storm drain pop-up emitter outlets.

Continued on next page ...

Outreach and Education, cont'd.

We also focus on reaching youth. Children are willing change-makers and absorb mosquito management practices with interest when they are approached with child-friendly activities and developmentally appropriate science-based lesson plans. Our team leads the SWI Elementary Outreach Program that reaches 2,000 students each year. The program uses Randy the Mosquito to encourage kids to observe and investigate their environments to "Fight-the-Bite" while also teaching them about mosquito anatomy and





physiology. Educating children is doubly effective because not only will they retain this information, but research shows that younger residents carry messages home to parents. The program has been embraced by children, teachers, and parents alike.



Empowering residents to become more active and

educated stewards of the environment is how Henrico's team continues to make a lasting impression in our community.

Growth

The installation of our new elementary education program in combination with the large increases in the County's human population density has meant that SWI has needed to expand. This was accomplished through the efficient development and installation of an SWI internship program. Since our section is limited to 3 full-time staff and only receives a limited operational budget there are impactful restrictions on staff hiring.

Historically this has limited our program's ability to reach more residents, conduct research, commit to outreach events, add new monitoring and treatment sites, and encourage professional development and growth. However, in 2020 we adopted and implemented an internship program for local and regional university students which allows them to gain practical experience in real-world field, lab, and office settings in return for class credits and/or pay which is subsidized under Henrico County broader internship campaign and funding classifications.

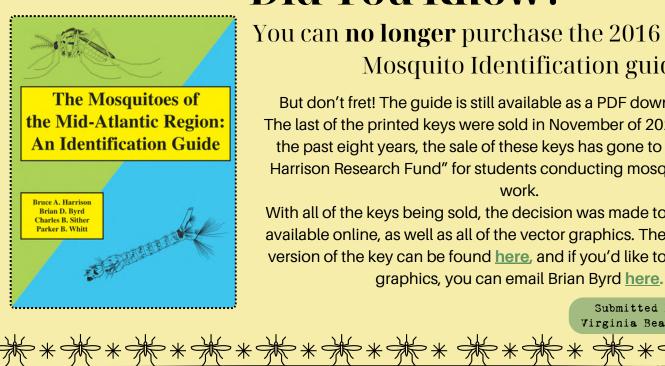
Growth, cont'd.

The intern program employs one to four interns seasonally. Interns are tasked with short or longterm special projects including the development of new GIS surveillance layers, developing new outreach campaigns and materials, and/or working on other existing projects aimed at increasing our operational reach and standard. One up-andcoming project that is likely to gain local attention is SWI's expansion into the world of pollinator garden establishment and promotion. In 2024 Henrico's mosquito section will be testing a series of 6 newly developed and established pollinator sites. Each site will be established on "stagnant" yet

manicured Henrico County property. The goals of the program include a reduction in nonrecreational mowing and the re-establishment of native organism biodiversity. Without the expansion of our staff through the intern program focus on this project would be virtually impossible. It is because of this and many other reasons that staff contributions are greatly appreciated and although still small **Henrico's SWI is mighty and remains dedicated to doing all we can to fulfill our mission to protect public health and promote environmental stability.**



Submitted By: Wes Robertson Henrico County SWI



Did You Know?

2024-25

VMCA

Photo Contest

<u>Coming Soon...</u>

You can **no longer** purchase the 2016 Mid-Atlantic **Mosquito Identification guide!**

But don't fret! The guide is still available as a PDF download for free. The last of the printed keys were sold in November of 2023. Throughout the past eight years, the sale of these keys has gone to fund a "Bruce Harrison Research Fund" for students conducting mosquito taxonomy work.

With all of the keys being sold, the decision was made to make it readily available online, as well as all of the vector graphics. The downloadable version of the key can be found here, and if you'd like to use the vector graphics, you can email Brian Byrd here.

Virginia Beach Mosquito Control

Submitted By: Kaitlyn Price



Submitted By: Wes Robertson hoto Contest Committee

THE SKEETER

Table of Contents

PAGE 26



Annual Conference from January 23-25th in Annapolis, Maryland.

The conference was well attended (67 attendees) and featured speakers from all of the nine sustaining member states ranging from Georgia to Pennsylvania. Virginia Mosquito Control Association's Past President Brian Prendergast, now head of the Maryland Department of Agriculture, put together a full agenda and a panel of speakers discussing how varying programs handle Aedes albopictus control and outreach.

There were multiple awards given this year to include the Bruce A. Harrison Student Competition Award going to University of Maryland's Sarah Emily Rothman (pictured above) who gave a great presentation titled 'Socioeconomically-aligned plant resources alter the outcome of competition between *Aedes albopictus* and *Culex pipiens* larvae'. Jeff O'Neil was recognized with the Outstanding Service Award (pictured second from top) in honor of his continued contributions to the organization.

The rare honor of the Rowland E. Dorer Award was endowed to Jonathan S. Cohen of Summit Chemical (pictured second from bottom) for his exceptional contributions not only to MAMCA, but also the Mid-Atlantic Region as a whole.







Brian Prendergast was handed over the MAMCA gavel, symbolizing his ascension on the board as President (pictured below), while Ture Carlson from Georgia was awarded the presidential plaque. State Representatives were voted in this year to include Chris Evans (SC), Tim DuBois (VA), and Eric Dotseth (WV).

The Mid-Atlantic Mosquito Control Association will be celebrating its 50th year Anniversary in 2025 and will be coming back to one of its founding states, Virginia! The 2025 Conference will be a joint MAMCA/VMCA Conference and will be in Newport News, VA at the Marriott at City Center from January 4-6th, 2025. The last time Virginia hosted the Mid-Atlantic organization was in 2017 at the same venue and boasted an attendance of over 160 mosquito control professionals. We hope to see you all there and break the record!

> Submitted By: Tim DuBois MAMCA Representative

THE SKEETER

Table of Contents

PAGE 27

AMCA Recap

Submitted By: Charles Abadam Suffolk Mosquito Control



The American Mosquito Control Association (AMCA) held their annual meeting in Dallas, Texas on March 4-8 2024.

The AMCA annual meeting is the **one chance** during the whole year where mosquito control professionals from around the world gather to exchange ideas and provide opportunities to learn about mosquitoes. Mosquito Control is a niche industry all on its own and learning opportunities that are specific to our needs are limited so being able to attend these conferences throughout my career have been pivotal in growing my program in Suffolk. Attending the AMCA annual meetings has exposed me to new ideas and technologies that have enhanced my understanding of mosquito control and biology that I can implement **in ways that make my program efficient in its operation, effective in its application, progressive in its thinking, and honest in its presentation.**

The AMCA is the **pinnacle of mosquito control pageantry.** Every vendor that you've ever dealt with, seen or heard of attends this meeting and the larger companies pull out all the stops. This year there were two vendors that brought the largest exhibits. One vendor brought a practically brand new **helicopter** to display on the vendor floor. Don't ask me what vendor it was because their table was barren and the helicopter was the highlight. I came to find out that the city had blocked off the street that faced the exhibition floor so the helicopter could land there and be wheeled into the conference; it



Helicopter in the conference

would leave in the same way. I thought that was pretty cool. The vendor that really made a show of it was Valent Biosciences. Their exhibit always has great places to sit during the breaks, worthy giveaways (like iPads and techy stuff), free swag that I won't throw away (this year I picked up a moleskin-like journal with a textured grey cover, not bad), and an artistic element that always impresses. This year they had an immersive room, it must've been about 10ft x 30ft, that was digitally mapped with an animated mosquito control cartoon that they produced starring the hero Remona T. Rian who would later morph into Remoa Tri and the villain Captain Culex. The premise was analogous to the story of resistant mosquitoes getting past our defenses and Remoa Tri coming in to save the day.

AMCA Recap, cont'd

This was a great way to promote the premiere of their new pesticide Remoa Tri. It was a little corny but cool to see how **passionate** these vendors can be. I was able to talk to companies I collaborate with (BioGents, Azelis, and Valent Biosciences), representatives of organizations that provide support to our programs (the CDC, and the CDC's Northeast Regional Center of Excellence for Vector Borne Diseases (NEVBD), Connecticut Agricultural Experiment Station (CAES)), professors, students and graduates of universities (Cornell, Western Carolina University, and Johns Hopkins University), and various people that work in mosquito control from around the country and the globe. There were about six rooms that presentations



A random presentation

were given. A moderator kept speakers on time and there were multiple breaks to get you through the day. Attending presentations is the meat and potatoes of the AMCA meeting. This is where your mind can be **blown** after you hear a presentation about a mosquito that targets the nose of humans, or how male mosquitoes apply a "mating plug" into the female after his sperm is in place, or when you realize that you're going through the same problems as other programs and you are not alone in your experience. I was asked to participate and present in one roundtable and 3 symposiums. Presenting in front of professionals from across the national and international spectrum is difficult. To say that I was stressed was an understatement. I won't bother you with the details of my symposiums and presentations here so I'll list them at the end of the article. Much of my focus

during this meeting centered around my work on insecticide resistance and it was fun to connect with all of my collaborators and talk about the specific details of the work. It is particularly fun when the vendors

throw events in the evening where the food is free, the bar is open, the music is jamming and you see the most likely and the least likely of professionals on the dance floor pop, locking, and dropping. These events allow people to relax a bit and let loose. The mosquito control industry **works hard and plays harder.** It's commonplace to find yourself discussing the biology of Culex pipiens while on the dance floor or having a technical conversation about BG Sentinel traps as you order the drink that could put you over the edge. You might not be getting up early for the first sessions the next day and if you do it'll take you until the next break until you're completely present.



3 solid mustaches at AMCA. Bill Reynolds of Leading Edge and Michael Doyle State Entomologist for North Carolina

Continued on next page ...

THE SKEETER

Table of Contents

💪 💪 AMCA Recap, cont'd



A night out at AMCA with the BioGents crew

Jeff Hottenstein of Clarke brought up an important fact to my attention, and I realized **we were the only people from Virginia.** I was the sole representative of Virginia Mosquito Control programs. It feels good to be able to say that but it's also kind of sad. To know that I didn't have anyone to talk to that was from my state, to bounce off ideas of, to share any "Aha" moments to my Virginia colleagues was kind of depressing. I began to think about why Virginia is this way and why other states gladly send their employees to AMCA. It's pretty obvious that the lack of support from our leadership on a state and local level prohibits our attendance to this national conference. It's a travesty that

many mosquito control workers in Virginia won't have the opportunity to experience the AMCA. I know our state and regional annual meetings help to bring our colleagues together from our area but when you get to see the state of mosquito control on a national and international scale your perspective broadens, your network of mosquito professionals widens, and you begin to develop a support system for your mosquito woes. The saying "think globally, act locally" really rings true and the importance of our jobs deepen the more you see mosquito professionals all over the world tackling some of the same problems that you could be dealing with back home in your own program. You could be holding the answer to

someone else's problem and **you don't even know it.** Other programs throughout the commonwealth should make attending the AMCA a priority. The experiences that I have had at AMCA annual meetings are really cool and special, it makes me love my job even more, and motivates me to do the best I can for my program and my crew. Why would a program miss the opportunity to create employees that love their jobs and are motivated to work? I don't know. It seems like a pretty good investment in professional development.

Here are the presentations I participated in. If you are interested in knowing what they are about just contact me and if you'd like to see some topics that were presented in the AMCA agenda let's talk. Email me at <u>cabadam@suffolkva.us</u> or call me at 757-514-7609

Roundtable: "Insecticide Resistance Knowledge Gaps and Needs Roundtable"

Presentation: "Barriers to conducting resistance testing for mosquito control programs"

Symposium: "Variation in pyrethroid resistance and efficacy of triple action adulticide Remoa Tri" **Presentation:** "Giving Remoa a Tri: A Virginia cage field trial"



Presentation with Laura Harrington and Lindsay Baxter of NEVBD at Cornell University

Symposium: "Collaboration and Innovation: CDCs COE Partnerships with AMCA Professionals"

Presentation: "How insecticide resistance monitoring and management has integrated into the Suffolk Mosquito Control program."

Symposium: "From Buzz to Bust: The Future of Mosquito Surveillance for Innovative Control Strategies" **Presentation:** "Mosquito Traffic Light: Should You Stay or Should You Go – collecting data and educating the public in unconventional ways"

What's That? Answer



That is a detailed view of a stubby, digging forelimb of a mole, right? Not quite, closer inspection would reveal that these are just 2 forelimbs on a creature that has 6 legs total along with 2 well-defined eyes and a set of wings.

This insect is a mole cricket.

These crickets are unique in that they have two or four strong blade-like projections on the fore tibia, and the first two segments of the fore tarsus are blade-like as well. Mole crickets spend nearly all their lives underground and are powerful tunnelers. They also do not leap as expected by most members of the cricket family. They are frequently found

in over irrigated yards where they can do substantial turf damage over time. So next time you are out in the field look at the ground and see if you can spot any miniature surface tunnels like those of mammalian moles. If you can then dig a few inches down could reveal an intricate mole cricket tunnel and/or burrow. **Happy hunting!**





Submitted By: Wes Robertson Henrico County SWI

Do you have any interesting photos or stories that you'd like to tell membership? Or maybe you ran across a riveting article in your vector research. Whatever the reason, we are always accepting submissions for

Whatever the reason, we are always accepting submissions for The Skeeter!

Please email The Skeeter Editor, Kaitlyn Price at kcprice@vbgov.com or you can submit online.



Table of Contents

PAGE 31

Jurisdictions, Organizations, and Resources

Virginia mosquito control jurisdictions

- Alexandria Health Department
- Boykins, Town of
- <u>Chesapeake Mosquito Control Commission</u>
- <u>Chincoteague Mosquito Control</u>
- Fairfax County Health Department
- <u>Gloucester County Mosquito Control</u>
- <u>Hampton Environmental Sciences</u>
- Henrico County
- Joint Base Langley-Eustis
- <u>Newport News Vector Control</u>
- Norfolk Vector Control
- Poquoson Mosquito and Drainage
- Portsmouth Mosquito Control
- <u>Prince William County Mosquito & Forest Pest</u>
 <u>Management</u>
- <u>Suffolk Mosquito Control</u>
- <u>Virginia Beach Mosquito Control</u>
- <u>Williamsburg Public Works</u>
- York County Mosquito Control

Know of another jurisdiction or resource to add?

Please submit them to the *Editor*

Neighboring, regional, & national mosquito control organizations

- <u>American Mosquito Control Association</u>
- Mid-Atlantic Mosquito Control Association
- Delaware Department of Natural Resources and Environmental Control
- <u>Maryland Department of Agriculture</u>
- <u>New Jersey Mosquito Control Association</u>
- <u>North Carolina Mosquito and Vector Control</u> <u>Association</u>
- <u>Northeastern Mosquito Control Association</u>
- South Carolina Mosquito Control Association
- <u>Georgia Mosquito Control Association</u>
- Florida Mosquito Control Association

Other resources

- <u>Virginia Department of Health</u>
- <u>Centers for Disease Control & Prevention</u>
- Fairfax County Education and Outreach
 Materials
- <u>Northeast Regional Center for Excellence in</u> <u>Vector-borne Diseases</u>
- <u>VMCA Employment Opportunities</u>
- AMCA Career Center

2024 Sustaining Members

The VMCA gratefully acknowledges the support of the following sustaining members for 2024. 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!



mental

Azelis Dan McCombie (314) 541-1972 daniel.mccombie@azelis.com



Central Life Sciences Jeff O'Neill (302) 312-3950 joneill@central.com



Clarke Jeff Hottenstein (703) 498-9362 jhottenstein@clarke.com



Frontier Precision

Chad Minteer (208) 420-2778 chad@frontierprecision.com Summit ... responsible solutions:

Summit Chemical

Zach Cohen (443) 250-6500 zcohen@summitchemical.com



Target

Steve Molnar (470) 432-3134 steve.molnar@target-specialty.com



Valent Jim Andrews (910) 547-8070 james.andrews@valentbiosciences.com



Veseris Brock Verworn (571) 296-6976 Brock.Verworn@veseris.com VOL. 84, No. 1

2024 VMCA Committees

PhotographyGina Serge ser089@henrico.usMelissa Allard, Janice Pulver, TJ Carner, Carla Caulkins, (tentatively Rachel Kempf, no response yet)Public RelationsKatherine ReuttPenny SmelserSpecial AwardsJennifer Barritt jbarritt@vbgov.comLa Toya WhiteStudent CompetitionJay KiserAnn Herring, Alex Cumbie, Tim DuBois, Wes Robertson, Ciro MonacoTechnical SupportCharles AbadamJanice Pulver	Committee Name	Chairperson	Current Members
Annual Meeting - Local Arrangements Charles Abadam cabadamissuffolksaus Laliberte, Jay Kiser, Tim DuBois, Katherine Reutt Annual Meeting - Program Lauren Lochstampfor lauren.lochstampfor stavamolaretaroat speciality.com Addie Weddle Annual Meeting - Vendor Planning Steve Molnar stavamolaretaroat speciality.com Addie Weddle Audit Penny Smelser penelops.Smelser@norfok.gov Amber Rymer, Joshua Snyder Bylaws Jay Kiser Charles Abadam, George Wojcik, Josh Mitserserflekaus Bylaws Jay Kiser Smith Curations & Preservation Wes Robertson (blogehenhcous) Charles Abadam, George Wojcik, Josh Martine Streampfor, Ciro Monaco, Gina Serge Education Katherine Reutt Jennifer Barrit, Janice Pulver, Lisa Wagenbrenner Historian Tim DuBois dubbis@cortsmouthva.gov Andy Lima, Penny Smelser Historian Katityn Price kcartas@ubox.com Alex Riley, Carla Caulkins Historian Randy Buchanan buco@ethenncous Katherine Reutt Membership Katherine Reutt Jay Kiser Membership Katherine Reutt Jay Kiser Membership Katherine Reutt Jay Kiser Merchandise Pene	Annual Meeting - Hospitality Room		
Annual Weeting - Program jauren.lochstampfor@laifaccounty.gov Annual Meeting - Vendor Planning Steve Molnar steve.molnar@tatioet.specially.com Addie Weddle Audit Penny Smelser penelopes.Smelser@mofolk.gov Amber Rymer, Joshua Snyder Bylaws Jay Kiser Charles Abadam, George Wojcik, Josh Nith Curations & Preservation Wes Robertson (rbb10@thenticous) Charles Abadam, George Wojcik, Josh Smith Curations & Preservation Katherine Reutt Keutiedivotchesseeaka.net Jennifer Barritt, Janice Pulver, Lisa Wagenbrenner Elections Karen Akaratovic Lakaratovic@sutohxa.us Andy Lima, Penny Smelser Historian Tim DuBois duboisternorthoa.us Alex Riley, Carla Caulkins Information Kaltlyn Price kcontrea@ubqox.com Alex Riley, Wes Robertson, Gina Serge, Addie Weddle Legislative Randy Buchanan buc0@thenricous Katherine Reutt Jay Kiser Membership Katherine Reutt Jay Kiser Addie Weddle Nominating Carla Caulkins ccaulkinsechydcheaspeaka.net Melssa Allerd, Janice Pulver, Rachel Kempf Photography Becide Awards Jennifer Barritt jaarnita@box.com Gina Serge ser08@thenticous Annierring, Alex Cumble, Tim CuBois, Weer, In oresponse yet) </th <th>Annual Meeting - Local Arrangements</th> <th></th> <th>LaLiberte, Jay Kiser, Tim DuBois,</th>	Annual Meeting - Local Arrangements		LaLiberte, Jay Kiser, Tim DuBois,
Annual Meeting - Vendor Planning steve.molnar@target.speciality.com Accile Weddle Audit Penny Smelser penclope.Smelser@norlok.cox Amber Rymer, Joshua Snyder Bylaws Jay Kiser penclope.Smelser@norlok.cox Amber Rymer, Joshua Snyder Bylaws Jay Kiser penclope.Smelser@norlok.cox Charles Abadam, George Wojcik, Josh Smith Curations & Preservation Wes Robertson Lauren Lochstampfor, Ciro Monaco, Gina Serge Education Katherine Reutt kreutt@citydchesapeake.net Wagenbrenner Elections Karen Akaratovic kakaratovic@sufdkvaus Andy Lima, Penny Smelser Historian Tim DuBois duboist@portsmouthva.gov Alex Riley, Carla Caulkins Information Kaitlyn Price kconce@uboox.com Tim DuBois, Jay Kiser, Katherine Reutt, Alex Riley, Wes Robertson, Gina Serge, Addie Weddle Legislative Randy Buchanan buc0@bhemfcous Katherine Reutt Jay Kiser Membership Katherine Reutt Jay Kiser Addie Weddle Nominating Carla Caulkins ccaulkins@citydchesapeake.net Gina Serge set0898/hemricous Gina Serge, Janice Pulver, Rachel Kempf Photography Public Relations Katherine Reutt Penny Smelser Kempf, no response yet)	Annual Meeting - Program		
Autor panalopa_Smalsar@nortolk.gov Priliber Hymel, Obsinde Shyder Bylaws Jay Kiser Charles Abadam, George Wojcik, Josh Curations & Preservation Wes Robertson Lauren Lochstampfor, Ciro Monaco, Gina Serge Education Katherine Reutt Jennifer Barritt, Janice Pulver, Lisa Karen Akaratovic Karen Akaratovic Andy Lima, Penny Smelser Historian Tim DuBois dubois@enenico.us Alex Riley, Carla Caulkins Historian Tim DuBois dubois@enenico.us Alex Riley, Carla Caulkins Historian Katityn Price kcprice@ubgov.com Katherine Reutt, Alex Riley, Wes Robertson, Gina Serge, Addle Weddle Legislative Randy Buchanan buc0@@nenico.us Katherine Reutt, Stacie Blackwell Membership Katherine Reutt Jay Kiser Merchandise Penelope Smelser Nominating Carla Caulkins ccaulkins@cityofhesapeakanet Photo Contest Wes Robertson Gina Serge sard@@metico.us Melissa Allard, Janice Pulver, TJ Carner, Carla Caulkins, (tentatively Rachel kempf, no response yet) Carla Caulkins, (tentatively Rachel kempf, no response yet) Public Relations Katherine Reutt Penny Smelser	Annual Meeting - Vendor Planning		Addie Weddle
Bylaws Idiasr@suffokva.us Smith Curations & Preservation Wes Robertson rob10@mentico.us Lauren Lochstampfor, Ciro Monaco, Gina Serge Education Katherine Reutt kreutt@cityofchesspeake.net Jennifer Barritt, Janice Pulver, Lisa Wagenbrenner Wagenbrenner Elections Karen Akaratovic kakaratovic@suffokva.us Andy Lima, Penny Smelser Historian Tim DuBois duboist@cohsmouthva.gov Alex Riley, Carla Caulkins Information Kaittlyn Price ksprice@vboov.com Tim DuBois, Jay Kiser, Katherine Reutt, Alex Riley, Wes Robertson, Gina Serge, Addie Weddle Legislative Randy Buchanan buc06@henrico.us Katherine Reutt Jay Kiser Membership Katherine Reutt Jay Kiser Merchandise Nominating Carla Caulkins ccaulkingeltyofchesspeake.net Melissa Allard, Janice Pulver, Rachel Kempf Photo Contest Wes Robertson Gina Serge, Janice Pulver, TJ Carner, Carla Caulkins, (tentatively Rachel Kempf, no response yet) Public Relations Katherine Reutt Penny Smelser Special Awards Jennifer Barritt Jbarrit@xbgov.com LaToya White Student Competition Jay Kiser Ann Herring, Alex Cumble, Tim DuBois, Wes	Audit	-	Amber Rymer, Joshua Snyder
Curations & Preservationrob106@henricousGina SergeEducationKatherine Reutt kreutt@cityofchesapeake.netJennifer Barritt, Janice Pulver, Lisa WagenbrennerElectionsKaren Akaratovic kakaratovic@suffolkva.usAndy Lima, Penny SmelserHistorianTim DuBois duboist@portsmouthva.govAlex Riley, Carla CaulkinsInformationKaitlyn Price koprice@vbgov.comTim DuBois, Jay Kiser, Katherine Reutt, Alex Riley, Wes Robertson, Gina Serge, Addie WeddleLegislativeRandy Buchanan buc06@henricousKatherine Reutt, Stacie BlackwellMembershipKatherine ReuttJay KiserMerchandisePenelope SmelserPhoto ContestWes RobertsonGina Serge ser08@ienricousPhotographyGina Serge ser08@ienricousMelissa Allard, Janice Pulver, TJ Carner, Carla Caulkins, (tentatively Rachel kempf, no response yet)Public RelationsKatherine ReuttPenny SmelserSpecial AwardsJennifer Barritt Jaarritt@vbooxcomLa Toya WhiteStudent CompetitionJay KiserAnn Herring, Alex Cumble, Tim DuBois, Wes Robertson, Ciro Monaco Technical Support	Bylaws	-	
Educationkreutt@cityofchesapeake.netWagenbrennerElectionsKaren Akaratovic kakaratovic@suffolkva.usAndy Lima, Penny SmelserHistorianTim DuBois duboist@cortsmouthva.govAlex Riley, Carla CaulkinsInformationKaitlyn Price kcorice@vbgov.comTim DuBois, Jay Kiser, Katherine Reutt, Alex Riley, Wes Robertson, Gina Serge, Addie WeddleLegislativeRandy Buchanan buc0@menriccusKatherine ReuttMembershipKatherine ReuttJay KiserMerchandisePenelope SmelserNominatingCarla Caulkins ccaulkins@cityofohesapeake.netMelissa Allard, Janice Pulver, Rachel KempfPhoto ContestWes RobertsonGina Serge ser089@henricousMelissa Allard, Janice Pulver, TJ Carner, Carla Caulkins, Itentatively RachelPhotographyGina Serge ser089@henricousMelissa Allard, Janice Pulver, TJ Carner, Carla Caulkins, Itentatively RachelPublic RelationsKatherine ReuttPenny SmelserSpecial AwardsJennifer Barritt iparrit@vboo.comLaToya WhiteStudent CompetitionJay KiserAnn Herring, Alex Cumble, Tim DuBois, Wes Robertson, Ciro MonacoTechnical SupportCharles AbadamJanice Pulver	Curations & Preservation		Gina Serge
Electionskakaratovic@sulfolkva.usAndy Lima, Penny SmelserHistorianTim DuBois duboist@portsmouthva.govAlex Riley, Carla CaulkinsInformationKaitlyn Price kcprice@vbgov.comTim DuBois, Jay Kiser, Katherine Reutt, Alex Riley, Wes Robertson, Gina Serge, Addie WeddleLegislativeRandy Buchanan buc0@@henrico.usKatherine Reutt, Stacie BlackwellMembershipKatherine ReuttJay KiserMembershipKatherine ReuttJay KiserNominatingCarla Caulkins ccaulkins@cttyofchesapeake.netMelissa Allard, Janice Pulver, Rachel KempfPhoto ContestWes RobertsonGina Serge ser089@henrico.usMelissa Allard, Janice Pulver, TJ Carner, Carla Caulkins, (tentatively Rachel Kempf, no response yet)Public RelationsKatherine ReuttPenny SmelserSpecial AwardsJennifer Barritt jbarritt@vbgov.comLaToya WhiteStudent CompetitionJay KiserAnn Herring, Alex Cumbie, Tim DuBois, Wes Robertson, Ciro MonacoTechnical SupportCharles AbadamJanice Pulver	Education		
Historianduboist@portsmouthva.govAlex Riley, Caria CalikinsInformationKaitlyn Price kcprice@vbgov.comTim DuBois, Jay Kiser, Katherine Reutt, Alex Riley, Wes Robertson, Gina Serge, Addie WeddleLegislativeRandy Buchanan buc06@henrico.usKatherine Reutt, Stacie BlackwellMembershipKatherine ReuttJay KiserMerchandisePenelope SmelserNominatingCarla Caulkins ccaulkins@cityofchesapeake.netGina Serge, Janice Pulver, Rachel KempfPhoto ContestWes RobertsonGina Serge, Janice Pulver, TJ Carner, Carla Caulkins, (tentatively Rachel Kempf, no response yet)Public RelationsKatherine ReuttPenny SmelserSpecial AwardsJennifer Barritt jbarritt@vbgov.comLaToya WhiteStudent CompetitionJay KiserAnn Herring, Alex Cumbie, Tim DuBois, Wes Robertson, Ciro MonacoTechnical SupportCharles AbadamJanice Pulver	Elections		Andy Lima, Penny Smelser
InformationKaitityn Price kcprice@vbgov.comAlex Riley, Wes Robertson, Gina Serge, Addie WeddleLegislativeRandy Buchanan buc06@henrico.usKatherine Reutt, Stacie BlackwellMembershipKatherine ReuttJay KiserMerchandisePenelope SmelserNominatingCarla Caulkins ccaulkins@cityofchesapeake.netPhoto ContestWes RobertsonGina Serge, Janice Pulver, Rachel KempfPhotographyGina Serge ser089@henrico.usMelissa Allard, Janice Pulver, TJ Carner, Carla Caulkins, (tentatively Rachel Kempf, no response yet)Public RelationsKatherine ReuttPenny SmelserSpecial AwardsJennifer Barritt jbarrit@vbgov.comLa Toya WhiteStudent CompetitionJay KiserAnn Herring, Alex Cumbie, Tim DuBois, Wes Robertson, Ciro MonacoTechnical SupportCharles AbadamJanice Pulver	Historian		Alex Riley, Carla Caulkins
Legistativebuc06@henrico.usNatriefine Reutt, Stacle BlackWeitMembershipKatherine ReuttJay KiserMerchandisePenelope SmelserNominatingCarla Caulkins ccaulkins@cityofchesapeake.netPhoto ContestWes RobertsonPhotographyGina Serge ser089@henrico.usPublic RelationsKatherine ReuttSpecial AwardsJennifer Barritt jbarritt@vbgov.comStudent CompetitionJay KiserAnn Herring, Alex Cumbie, Tim DuBois, Wes Robertson, Ciro MonacoTechnical SupportCharles Abadam	Information	-	Alex Riley, Wes Robertson, Gina Serge,
MerchandisePenelope SmelserNominatingCarla Caulkins ccaulkins@cityofchesapeake.netPhoto ContestWes RobertsonGina Serge, Janice Pulver, Rachel KempfPhotographyGina Serge ser089@henrico.usMelissa Allard, Janice Pulver, TJ Carner, Carla Caulkins, (tentatively Rachel Kempf, no response yet)Public RelationsKatherine ReuttPenny SmelserSpecial AwardsJennifer Barritt jbarritt@vbgov.comLa Toya WhiteStudent CompetitionJay KiserAnn Herring, Alex Cumbie, Tim DuBois, Wes Robertson, Ciro MonacoTechnical SupportCharles AbadamJanice Pulver	Legislative	-	Katherine Reutt, Stacie Blackwell
NominatingCarla Caulkins ccaulkins@cityofchesapeake.netPhoto ContestWes RobertsonGina Serge, Janice Pulver, Rachel KempfPhotographyGina Serge ser089@henrico.usMelissa Allard, Janice Pulver, TJ Carner, Carla Caulkins, (tentatively Rachel Kempf, no response yet)Public RelationsKatherine ReuttPenny SmelserSpecial AwardsJennifer Barritt jbarritt@vbgov.comLa Toya WhiteStudent CompetitionJay KiserAnn Herring, Alex Cumbie, Tim DuBois, Wes Robertson, Ciro Monaco	Membership	Katherine Reutt	Jay Kiser
Nominatingccaulkins@cityofchesapeake.netPhoto ContestWes RobertsonGina Serge, Janice Pulver, Rachel KempfPhotographyGina Serge ser089@henrico.usMelissa Allard, Janice Pulver, TJ Carner, Carla Caulkins, (tentatively Rachel Kempf, no response yet)Public RelationsKatherine ReuttPenny SmelserSpecial AwardsJennifer Barritt jbarritt@vbgov.comLaToya WhiteStudent CompetitionJay KiserAnn Herring, Alex Cumbie, Tim DuBois, Wes Robertson, Ciro MonacoTechnical SupportCharles AbadamJanice Pulver	Merchandise	Penelope Smelser	
PhotographyGina Serge ser089@henrico.usMelissa Allard, Janice Pulver, TJ Carner, Carla Caulkins, (tentatively Rachel Kempf, no response yet)Public RelationsKatherine ReuttPenny SmelserSpecial AwardsJennifer Barritt jbarritt@vbgov.comLa Toya WhiteStudent CompetitionJay KiserAnn Herring, Alex Cumbie, Tim DuBois, Wes Robertson, Ciro MonacoTechnical SupportCharles AbadamJanice Pulver	Nominating		
PhotographyGina Serge ser089@henrico.usCarla Caulkins, (tentatively Rachel Kempf, no response yet)Public RelationsKatherine ReuttPenny SmelserSpecial AwardsJennifer Barritt jbarritt@vbgov.comLaToya WhiteStudent CompetitionJay KiserAnn Herring, Alex Cumbie, Tim DuBois, Wes Robertson, Ciro MonacoTechnical SupportCharles AbadamJanice Pulver	Photo Contest	Wes Robertson	Gina Serge, Janice Pulver, Rachel Kempf
Special AwardsJennifer Barritt jbarritt@vbgov.comLa Toya WhiteStudent CompetitionJay KiserAnn Herring, Alex Cumbie, Tim DuBois, Wes Robertson, Ciro MonacoTechnical SupportCharles AbadamJanice Pulver	Photography	_	Carla Caulkins, (tentatively Rachel
Special Awards jbarritt@vbgov.com La l oya White Student Competition Jay Kiser Ann Herring, Alex Cumbie, Tim DuBois, Wes Robertson, Ciro Monaco Technical Support Charles Abadam Janice Pulver	Public Relations	Katherine Reutt	Penny Smelser
Student Competition Jay Kiser Wes Robertson, Ciro Monaco Technical Support Charles Abadam Janice Pulver	Special Awards		LaToya White
	Student Competition	Jay Kiser	
Wes Robertson	Technical Support	Charles Abadam	Janice Pulver
Wes hobeltaoli	Website	Wes Robertson	

VOL. 84, No. 1

THE SKEETER

Table of Contents

THE SKEETER

OFFICIAL NEWSLETTER OF THE VIRGINIA MOSQUITO CONTROL ASSOCIATION

Skeeter Production Team COMMITTEE CHAIR/ NEWSLETTER CONTACT

Kaitlyn Price Virginia Beach Mosquito Control 3556 Dam Neck Road Virginia Beach, VA, 23453 (757) 385-1465 kcprice@vbgov.com

COMMITTEE MEMBERS

Tim DuBois Portsmouth Mosquito Control <u>duboist@portsmouthva.gov</u>

Jay Kiser Suffolk Mosquito Control jkiser@suffolkva.com

Katherine Reutt Chesapeake Mosquito Control <u>kreutt@cityofchesapeake.net</u>

Alex Riley Suffolk Mosquito Control rileysa.suffolk@gmail.com

Wes Robertson Henrico County Public Works rob106@henrico.us

Gina Serge Henrico County Public Works ser089@henrico.us

Addie Weddle Portsmouth Mosquito Control weddlea@portsmouthva.gov

EDITORIAL REVIEW VMCA Executive Board

PHOTOGRAPHY IN THIS ISSUE: CHELSEA PUTNICK, KATHERINE REUTT, JANICE PULVER, CANVA PHOTOS, OTHERS NOTED THROUGHOUT

ON SOCIAL MEDIA



FB: facebook.com/mosquitova IG: @virginiamosquitocontrol



President Karen Akaratovic kakaratovic@suffolkva.us



Vice President Addison Weddle weddlea@portsmouthva.gov



Interim Secretary Katherine Reutt <u>kreutt@cityofchesapeake.net</u>



2024 VMCA Executive Board

Past President Carla Caulkins ccaulkins@cityofchesapeake.net



First Vice President Janice Pulver Janice.Pulver@yorkcounty.gov



Industry Representative Steve Molnar <u>steve.molnar@target-specialty.com</u>



President Elect Lauren Lochstampfor lauren.lochstampfor@fairfaxcounty.gov



Treasurer Jay Kiser j<u>kiser@suffolkva.us</u>



MAMCA Representative Tim DuBois <u>duboist@portsmouthva.gov</u>

