President’s Message

Happy Fall everyone! The mosquito season seems to be slowly coming to an end this year. Hopefully as Thanksgiving approaches this season will officially be over. This year may be one for the records with the high number of EEE and WNV cases throughout much of the state. The activity kept most districts extremely busy, and I think everyone is glad to see the season wrap up.

As the end of the year nears, the board and annual meeting committees are in high gear preparing for our upcoming Annual Meeting. The dates are February 4-6, 2015, at the Hilton Garden Inn in Suffolk. The pre-registration form is included in this Skeeter. We are looking forward to another great meeting and need your help with presentations. Our President Elect Jay Kiser is compiling the agenda and needs presenter information. The presenter form is included and should be filled out and returned to Jay at jkiser@suffolkva.us as soon as possible.

The VMCA will once again host a recertification class at the Hampton Library on January 21, 2015. This will include recertification for Category 8 (Public Health Pest Control), Category 6 (Right-of-Way) and Category 60 (Registered Technician). Class details and registration forms are enclosed. Thank you to the education committee chairperson, Lisa Wagenbrenner, for organizing this course.

Please be sure to read the memorial write-up about Dr. Jorge Arias. We were all very fortunate to have known and learned so much from him. He gave so much to the scientific community and he will be greatly missed.

Hope to see everyone in Suffolk in February.
Jennifer Pierce, VMCA President
Announcements

Upcoming meetings

Mid-Atlantic Mosquito Control Association Annual Conference
Savannah, GA

Virginia Mosquito Control Association Annual Meeting
February 4-6, 2015
Suffolk, VA

American Mosquito Control Association Annual Meeting
March 29-April 2, 2015
New Orleans, LA

Have information on meeting that may be of interest to VMCA members?
Attend a meeting and want to submit a summary?
Send it to the editor (see page 13)!

What’s that?

http://www.geelongaustralia.com.au
Answer on Page 5.

VMCA organizational mailing address
Make sure you send all forms to the proper address.
Virginia Mosquito Control Association
Penelope Smelser, Secretary/Treasurer
2800 Tarrant Street
Norfolk, VA 23509
Phone (757) 683-8662
Email Penelope.smelser@norfolk.gov
**Proposed changes to the VMCA By-Laws**

Article XIII, Section 1 states that changes to the bylaws must be approved by the executive board and sent to the membership at least 30 days prior to the annual meeting. Below are the changes to the bylaws recommended by the board. These will be discussed and voted on at the annual meeting; a 2/3 vote of the members present is needed for passage. In the amended section below, additions are indicated in **bold, red text.**

### Article V  Officers and Committees

#### Section 1. Officers

A. The association officers shall consist of the president, president elect, vice president, first vice president, secretary treasurer, and current past president. The MAMCA representative, **Sustaining member/Industry representative** and TMVCC chairperson are special non-voting officers. *Amended Feb. 14, 1997.*

### Article VII.  Nomination and Election of Officers

#### Section 1. Nominating Committee.  The nominating committee shall be established annually and will be chaired by the current or serving past president.

#### Section 2.  The nominating committee shall submit to the executive committee its nomination(s) for each office to be filled in the ensuing year. All nominations, including write-in candidates, shall carry the consent of the nominee and assurance that they will serve if elected.

#### Sections 3.  The nominating committee chairperson shall prepare an election ballot containing the names of the nominees for offices with space for write-in candidates for each office. The ballot shall:

- Be reviewed and approved by the VMCA executive board and sent to all voting members at least six weeks prior to the annual meeting.
- Automatically contain the name of the President Elect as a nominee for the office of President.
- Contain at least two qualified candidates for the office of First Vice President.
- Voting must be completed before 5:00 PM the day before the annual business meeting.

New voting members or voting members who have not completed the voting process will be able to do so at the annual meeting. In the case of a tie for any elected office, the election shall be decided by the majority vote of the voting members present at the annual business meeting. There will be no nominations from the floor during the business meeting.

#### Section 4.  The sustaining members shall select a representative to sit on the Executive Board for a two year term.

*Rationale:* The Board would like to include a sustaining member/industry representative on the Executive Board. The rep should have a two-year term to be selected by the sustaining members and approved and appointed by the Board. The sustaining member rep would be a non-voting member of the board.
On September 12, 2014, Dr. Jorge Arias left this world for his heavenly home where he can rest and find peace.

Jorge was born on May 12, 1943, in Charlottesville, VA, to Teodoro and Una Scott Arias. He grew up in Panama and graduated from high school in Maryland. He earned a B.A. (1966) in Pre-Medical Sciences and an M.Sc. (1969) in Biology from Whittier College, and a Ph.D. (1973) in Entomology from the University of California, Riverside. For 40 years, Dr. Arias was recognized around the world as an outstanding entomologist committed to protecting public health. Throughout his career, he strived for excellence in everything he did and expected nothing but the best from himself and those around him. He devoted much of his professional career to young biologists, entomologists and scientists through ongoing efforts in the areas of staff and program development. He was a wonderful friend, mentor, and colleague to many and will be remembered as a respected entomologist with a great sense of humor. He was fluent in Spanish, Brazilian Portuguese, and English.

His work took him into the jungles of Brazil where he set up research and training labs for the Instituto Nacional de Pesquisas da Amazonia (INPA). He also led a research team at INPA who studied the biology, ecology, and epidemiology phlebotomine sandflies, triatomine bugs, cutaneous leishmaniasis, and trypanosomiasis in the Amazon basin. This work led to numerous publications and editorial work. He later began a career at the Pan American Health Organization (PAHO), which took him to posts in Panama, Brazil, and Venezuela. His work at PAHO covered a variety of vector-borne diseases including malaria, leishmaniasis, lymphatic filariasis, and Chagas disease. His career at PAHO ultimately brought him to Washington, DC. While posted in the USA, he was responsible for working on policies related to prevention and control of West Nile, dengue, and leishmaniasis in Latin America and the Caribbean. He retired from PAHO in 2003 and shortly thereafter began his second career at the Fairfax County Health Department. He established a West Nile surveillance program and also helped create a robust outreach and educational program during his tenure there. Dr. Arias was a frequent contributor to The Skeeter and presenter at the Virginia Mosquito Control Association’s Annual Meeting. He was always engaged at the meetings and was a frequent participant in many lively discussions. He retired from Fairfax County in 2013.

Throughout his career, Dr. Arias was a member of several scientific societies including American Mosquito Control Association, the Mid-Atlantic Mosquito Association (MAMCA), and the VMCA. He was a regular reviewer of JAMCA articles for several years and received the AMCA’s 2011 Volunteer of the Year Award for his contributions to vector-borne disease outreach efforts. Other recognitions included a meritorious service award from INPA and various awards from PAHO, including the Director Award, which is the highest individual award in the organization. He was an honorary member of the VMCA and was the recipient of both the VMCA and MAMCA R.E. Dorer Awards, which is the highest honor in each of those organizations. He had at least 16 insects named in his honor. He also received various awards and recognitions from the Fairfax County, including an Outstanding Performance Award.

Even with all his professional accomplishments, Dr. Arias would always say that his greatest achievement and pride was his family. He married the love of his life, Kathy, in 1971. She was his life partner, his research assistant, and his best friend for over 40 years. They had many adventures together and created many memories as a family. He is survived by Kathy; their four children, David, Ana, Sara and Tamara; three children-in-law; eight grandchildren; two siblings; and his mother-in-law. (cont. next page)
Arias, continued

Memorial contributions can be made in Dr. Arias’ name to the Collins Center (located in Harrisonburg, VA), a child advocacy center that works with abused children. Dr. Arias was a long-time supporter of the center and would often volunteer his time at the center.

Joshua Smith
Fairfax County Health Department

What’s That? Answer

THAT is one of the mosquitoes recently reported to be on the move. It is an *Aedes notoscriptus*. Normally found in Australia, *Ae. notoscriptus* was discovered in Los Angeles County, California, this summer. This mosquito has a scutal pattern easily confused with *Aedes aegypti*, but *Ae. notoscriptus* has a pale band of scales on its proboscis. In Australia, it is an important vector of dog heartworm and several arboviruses. More details may be found on ProMed.

That mosquito follows the introduction, starting last year, of *Aedes aegypti* into Central California. This year, the mosquito continues to expand its range in that state, showing up this past October in San Diego County. A recent paper in *PLoS Neglected Tropical Diseases* suggests that these populations were introduced from the Southeastern United States.

Yet another mosquito that has been expanding its range is the European West Nile virus vector *Culex modestus*. Last seen in the Kent region of England in 1945, *Cx. modestus* was collected from the area in 2010, and seems to be slowly spreading in that area. A 2012 paper in *Parasites and Vectors* describes the collections.

While *Cx. modestus* is common in central and southern Europe, it had never been collected in Denmark, until this summer. During August, residents of a suburb of Copenhagen reported frequent bites by this mosquito, which can also vector Usutu virus (another *Flavivirus*), and has been implicated in others.

Finally, it may not only be invasive mosquitoes we need to worry about. A recent study in *Environmental Entomology* (subscription required) showed that invasive plants can potentially affect vector populations. Leachates from leaves and flowers of the invasive Amur honeysuckle, *Lonicera maackii*, increased survival and pupation rates in *Culex pipiens* larvae when compared to native plants (sycamore and sugar maple). Larvae were also bigger when exposed to the honeysuckle flowers.
Dear Members,

The Virginia Mosquito Control Association is sponsoring a re-certification course for Categories 6, 8 & Registered Technician (60) on Wednesday, January 21, 2015. It will be held at the Hampton Library, 4207 Victoria Blvd, Hampton, Virginia. Registration is at 9:00 AM. Please be on time!

The fee for this course is $10.00 for VMCA Members, $15.00 for non-members (applicators not for hire), and $30.00 for non-members (applicators for hire). There will be a $2.00 late fee after January 14, 2015.

Should you have any questions or need further assistance, please contact either Lisa Wagenbrenner at (757) 673-3932 or Penelope Smelser at (757) 683-8662.

NAME:_____________________________________  PHONE:___________________
CERTIFICATE NUMBER:_________________________________________________
AFFILIATION/ORGANIZATION:__________________________________________
ADDRESS:_______________________________________________________________
CITY:_________________________ STATE:____________ ZIP:____________________

Please make check payable to VMCA.
Mail or fax form to: Penelope Smelser, Secretary/Treasurer, 2800 Tarrant Street, Norfolk, VA 23509. Phone: 757-683-8662, Cell: 757-478-0504, Fax: 757-683-2500,
Email: penelope.smelser@norfolk.gov

Directions
Location: Hampton Library
Address: 4207 Victoria Blvd, City of Hampton, Virginia
Phone: (757) 727-1154 (Library)
Parking: Please park at the stadium parking lot across the street.

Coming from I-64 West
Take exit 267, make a left on Settlers Landing Road, proceed to bridge and through town, make a left on Kecoughtan Road, go two blocks, Hampton Library on your left. (Library is on the corner of Kecoughtan and Victoria Road).

Coming from I-64 East
Take exit 265A to Lasalle Avenue, make a right, go to Settlers Landing Road, make a left, go to Kecoughtan Road, make a right and go two blocks, Hampton Library will be on the left.

Coming from I-664
Take exit 265A to Lasalle Avenue, make a right, go to Settlers Landing Road, make a left, go to Kecoughtan Road, make a right, go two blocks, Hampton Library is on the left.
VMCA Recertification Course Agenda

January 21st, 2015
Hampton City Library, 4207 Victoria Boulevard

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>9:00</td>
<td>Registration, coffee &amp; donuts Penelope Smelser, VMCA Secretary</td>
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<tr>
<td>9:30 - 9:45</td>
<td>Welcome Jennifer Pierce, VMCA President</td>
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<td>9:45 - 10:45</td>
<td>Vectors, Life Cycle &amp; Control/Surveillance/Environmental Jennifer Pierce, Biologist, Virginia Beach Mosquito Control</td>
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<td></td>
<td>Mosquitoes/other arthropods, IPM, sensitive areas, effects on non-target plants and animals</td>
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<tr>
<td>10:45 - 11:30</td>
<td>Personal Protective Equipment Lisa Wagenbrenner, Biologist, Chesapeake Mosquito Control</td>
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<td>Chemical-resistant protective equipment, protecting yourself, and maintaining PPE</td>
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<tr>
<td>11:30 - 12:15</td>
<td>Formulations and Products Jeff Hottenstein, Regional Sales Manager, Clarke Mosquito Control</td>
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<td></td>
<td>Liquid Formulations, Dry Formulations, Fumigants and Adjuvants</td>
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<tr>
<td>12:15 - 13:15</td>
<td>LUNCH (on your own)</td>
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<tr>
<td>13:15 - 14:00</td>
<td>Legal Aspects Robert Christian, VDACS</td>
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<td>Certification categories and procedures, responsibilities of pesticide applicators, EPA approval of pesticide labeling, restricted use chemicals and pesticide use</td>
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<tr>
<td>14:00 – 14:45</td>
<td>Applying the Correct Amount Phil Meekins, Superintendent, Virginia Beach Mosquito Control</td>
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<td>How much to apply, calibration methods, calibrating equipment and measuring accurately.</td>
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<tr>
<td>14:45 - 15:30</td>
<td>Pesticide Handling, Mixing &amp; Loading Kirby Foley, Operations Director, Chesapeake Mosquito Control</td>
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<td>Personal safety considerations, pre-application decisions, safe mixing, loading, &amp; application.</td>
</tr>
<tr>
<td>15:30 – 16:15</td>
<td>Right-of-Way Pest Control George Wojcik, Public Works Administrator, City of Portsmouth</td>
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<td>Identification, Management and Equipment/Application</td>
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Call for VMCA Award Nominations

Each year at the Annual meeting, VMCA recognizes individuals or a group of individuals who have contributed to making the VMCA the best it can be. The Board is currently accepting nominations of members and peers who deserve recognition. Please send your nominations and supporting documentation via email to Phil Meekins, Awards Committee Chair, pmeekins@vbgov.com, by December 14, 2014. VMCA awards include:

**Outstanding Service Award:** This award is given for service to a VMCA member considered out-standing by their peers. Only VMCA members are eligible.

**Honorary Member:** Any individual who has rendered exceptionally distinguished service in the field of mosquito control and related work may be accorded special recognition by election to honorary membership in the VMCA. Nomination for this honor must be justified in writing and submitted to the Executive committee for review. The Executive committee shall be required to vote unanimously to confirm the honorary membership nominee. Honorary members shall receive the VMCA newsletter, pay no dues and enjoy the same privileges as regular members.

**R.E. Dorer Award:** The R.E. Dorer Award is the highest achievement award of the Virginia Mosquito Control Association. Mr. Dorer graduated from Rutgers University in 1932 and moved to Virginia in 1933. From his position at the Virginia State Department of Health he spearheaded mosquito control efforts for over 50 years. Mr. Dorer’s success in mosquito control came through the State Health Department and as a Commissioner to the Virginia Beach Mosquito Commission for many years.
Virginia Mosquito Control Association
New Membership & Member Renewal Application

**VMCA Membership Application and Renewal Form**

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

*Membership payment is by calendar year*

<table>
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<th>NAME:</th>
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<tr>
<td>PHONE:</td>
<td>Associate $ 10.00</td>
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<tr>
<td>ADDRESS:</td>
<td>Student: *Enclose proof of student status $ 10.00</td>
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<tr>
<td>E-MAIL:</td>
<td></td>
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<tr>
<td>ORGANIZATION:</td>
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<tr>
<td>TOTAL SUBMITTED</td>
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Please “X” here if you cannot receive the newsletter by email  

Questions or comments can be directed to Penelope Smelser, Secretary-Treasurer,  
757-683-8662 or mail to: Penelope.smelser@norfolk.gov

Send payment (made payable to **VMCA**) and mail/fax this form to Secretary/Treasurer—or- fill out the form, save and submit by email.

Penelope Smelser  
VMCA Secretary-Treasurer  
2800 Tarrant Street  
Norfolk, VA 23509  
757-683-8662 office phone  
757-683-2500 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 at least 1/2 time in an accredited college or university and produce valid College/University ID Card.)
VMCA Meeting Registration Form

VIRGINIA MOSQUITO CONTROL ASSOCIATION
PRE-REGISTRATION FORM
ANNUAL MEETING, FEBRUARY 4-6, 2015
Hilton Garden Inn and Suffolk Conference Center, Suffolk, VA

NAME: _______________________________________________________
AFFILIATION: ________________________________________________
MAILING ADDRESS: __________________________________________
CITY: ______________________________ STATE: ___________________
WORK PHONE: ________________ HOME PHONE: _________________
EMAIL: ______________________________________________________

REGISTRATION FEE SCHEDULE
CHECK ONE

Regular Member $90.00
Non-member $100.00
Full-time Student $25.00
One Day Fee (includes banquet) $55.00
One Day Fee (excludes banquet) $25.00

Registration fee includes coffee breaks, banquet, and socials

Registration at the door will be:
Regular & Organization Members $100.00
Non-members $110.00

Please fill out form completely and e-mail, mail, or fax to:
Virginia Mosquito Control Association
Attn: Penelope Smelser, Secretary/Treasurer
2800 Tarrant Street
Norfolk, VA 23509
Email: Penelope.smelser@norfolk.gov
Phone: 757-683-8662
Cell: 757-478-0504
Fax: 757-683-2500

*This form is for Annual Meeting registration only, use separate form for membership.
VMCA Annual Meeting Presentation Form

2015 VMCA Annual Meeting Presentation Submission

Please return completed form to Jay Kiser at Jkiser@suffolkva.us
NO LATER than November 28th, 2014.

Presenter Information

Name:

Organization/Affiliation:

Address:

Phone:

E-mail:

Presentation Information

Title:

Amount of time requested for presentation (please be as accurate as possible and include a few extra minutes for questions):

Audio/Visual Equipment Needed (if other than PowerPoint):
### 2014 Sustaining Members

The VMCA gratefully acknowledges the support of the following sustaining members for 2014. 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!

<table>
<thead>
<tr>
<th>Name</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ted Bean</td>
<td>(814) 671-6516</td>
<td><a href="mailto:tbean@myadapco.com">tbean@myadapco.com</a></td>
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<tr>
<td>Peter Connelly</td>
<td>(772) 563-0606</td>
<td><a href="mailto:peterc@amvac.net">peterc@amvac.net</a></td>
</tr>
<tr>
<td>Jeff Hottenstein</td>
<td>(703) 498-9362</td>
<td><a href="mailto:jhottenstein@clarke.com">jhottenstein@clarke.com</a></td>
</tr>
<tr>
<td>Steven Sullivan</td>
<td></td>
<td><a href="mailto:ssullivan@central.com">ssullivan@central.com</a></td>
</tr>
<tr>
<td>TK Rosolina</td>
<td>(540) 447-6738</td>
<td><a href="mailto:Mrosolina@dynamicaviation.com">Mrosolina@dynamicaviation.com</a></td>
</tr>
<tr>
<td>Joe Andrews</td>
<td>(888) 603-1008</td>
<td><a href="mailto:joea@allprovector.com">joea@allprovector.com</a></td>
</tr>
<tr>
<td>Doug Hill</td>
<td>(800) 570-4277</td>
<td><a href="mailto:Dhill@morrellonline.com">Dhill@morrellonline.com</a></td>
</tr>
<tr>
<td>Gordon Morrison</td>
<td>(919) 452-7145</td>
<td><a href="mailto:g.morrison@bayer.com">g.morrison@bayer.com</a></td>
</tr>
<tr>
<td>John Singletary</td>
<td></td>
<td><a href="mailto:john.singletary@univarusa.com">john.singletary@univarusa.com</a></td>
</tr>
<tr>
<td>Jim Andrews</td>
<td>(910) 547-8070</td>
<td><a href="mailto:j.andrews@valent.com">j.andrews@valent.com</a></td>
</tr>
</tbody>
</table>
Virginia Mosquito Control Organizations & Other Resources

As a result of revisions to the VMCA By-Laws, the organizational member category was eliminated. In order to facilitate communication among mosquito control districts, those that have traditionally been organizational members are listed below along with their websites. If there are other sites that should be listed, please submit them to the editor.

**Virginia Mosquito Control Organizations**

- Alexandria Health Department  
  Boykins, Town of  
- Chesapeake Mosquito Control Commission  
  Emporia, City of  
- Fairfax County Health Department  
  Fort Eustis  
  Gloucester County  
  Hampton, City of  
  Henrico County  
- Newport News, City of  
- Norfolk, City of  
- Portsmouth, City of  
- Prince William County Mosquito & Forest Pest Management  
  Richmond, City of  
- Suffolk, City of  
- US Air Force / Langley Air Force Base  
- Virginia Beach Mosquito Control  
- York County

**Health Information**

- Virginia Department of Health  
- Centers for Disease Control & Prevention

**Other Mosquito Control Organizations**

- Mid-Atlantic Mosquito Control Association  
- American Mosquito Control Association  
- AMCA/Fairfax County Education and Outreach Materials

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**Submissions wanted!**

Have something you’d like to include in the next issue of *The Skeeter*? We are looking for organizational updates, operational news, education and other outreach activities, pictures, stories, or other vaguely vector-related items to include in an upcoming newsletter.

Please send all items to Justin Anderson at janderson152@radford.edu.

The deadline for inclusion in the next issue is: **December 31, 2014.**
The Skeeter

Newsletter of
The Virginia Mosquito Control Association

Justin Anderson
Department of Biology, Box 6931
Radford University
Radford, VA 24142
Phone (540) 831-5639

www.mosquito-va.org

Take the time to volunteer on a committee. An active membership makes for a stronger organization. Contact anyone on the Board to participate.

2014 Virginia Mosquito Control Association Officers

President: Jennifer Pierce (757) 426-5420 JPierce@vbgov.com
President Elect: Jay Kiser (757) 514-7608 jkiser@suffolkva.us
Vice President: Josh Smith (703) 246-8477 joshua.smith@fairfaxcounty.gov
1st Vice President: Jeff Hottenstein
Secretary / Treasurer: Penelope Smelser (757) 683-8662 Penelope.smelser@norfolk.gov
Past President: Joe Simmons (757) 382-3450 jsimmons@cityofchesapeake.net
*TMVCC Representative: Jay Kiser (757) 514-7608 jkiser@suffolkva.us
*MAMCA Representative: Tim DuBois (757) 727-2808 tdubois@hampton.gov
*Non-voting member of the Board

The Skeeter is the official publication 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 Justin Anderson at skeeter@radford.edu.
Committee Chair / Production: Justin Anderson, Radford University
Distribution: Penelope Smelser, Norfolk
Editorial review: All the members of the board.
Production advisor: George Wojcik, City of Portsmouth