

The Skeeter



Newsletter of the Virginia Mosquito Control Association

Volume 75, No. 2

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President's Message

Hello VMCA members, I am happy to be addressing all of you in The Skeeter for the first time as President of the VMCA. I am extremely thankful to have this opportunity and looking forward to the coming year.

I want to thank everyone for participating in our 68th Annual Conference in Suffolk this past February. As usual, this was an outstanding meeting and couldn't have been possible without all the hard work of our members. I want to thank our board members, com-

April, 2015

Jay Kiser VMCA President 2015

mittee members, and presentation speakers for putting forth such a tremendous effort to make our meetings and organization so exceptional.

There are some exciting events coming up over the next few months. The
17th Annual Washington Conference will be taking place May 4-6, 2015.
Registration is still available online at www.mosquito.org/washington conference. Applications for stipends are no longer being accepted, but you
are all encouraged to attend and represent VMCA and your local jurisdic-

tions. The VMCA Educational Committee is putting on their annual adult mosquito identification course May 13-14, 2015. This course will be taught in Chesapeake Virginia. More detailed information, including contact information on how to register, can be found within this edition of *The Skeeter*. National Mosquito Awareness Week will be taking June 21-27, 2015. This is great time to get your citizens involved and educated with what we do and how we can help. Tidewater Mosquito Vector Control Council (TMVCC) will continue having their monthly meetings. More details including May's adulticide rodeo can be found within this edition of *The Skeeter* and our website.

I would like to introduce the 2015 VMCA Executive board members. Jennifer Pierce is Past President, Jay Kiser is President, Josh Smith is President Elect, Jeff Hottenstein is Vice President, George Wojcik is 1st Vice President, and Penny Smelser is Secretary/Treasurer. Other 2015 VMCA board members include Karen Akaratovic as TMVCC Representative, Ann Herring as MAMCA Representative, and it is my honor to announce that Jeff O'Neill will be our new Sustaining Member/Industry Representative. This addition of an Industry Representative position was added to the VMCA board during a vote at our 2015 annual meeting. Jeff O'Neill was selected for our sustaining members. We have a strong board and excellent-looking committees this year; I look forward to working with all of you and hope everyone the best.

Jay Kiser, VMCA President

Announcements

Upcoming meetings

VMCA Identification Course

May 13 & 14, 2015 Chesapeake, VA

Entomology Society of America Annual Meeting

November 15-18, 2015 Minneapolis, MN

Mid-Atlantic Mosquito Control Association Annual Meeting

March 30-April 1, 2016 Nashville, TN

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 the back page)!



Mosquito Haiku

Mosquito is one of the most important vectors of diseases around the world. **Haiku** is one of the most important forms of traditional Japanese poetry. Today, a **haiku** is a 17-syllable verse form consisting of three metrical units of five, seven, and five syllables.

Mosquito Control

Protecting Your Public Health

Thank You Very Much

Submitted by Charles Abadam

Send your haikus to the editor for a future issue!

VMCA organizational mailing address Send all forms to this address.

Virginia Mosquito Control Association Penelope Smelser, Secretary/Treasurer 2800 Tarrant Street Norfolk, VA 23509 Phone (757) 683-8662

Email Penelope.smelser@norfolk.gov

THE SKEETER

VMCA Adult ID Course

The VMCA is holding a 2 day FREE adult mosquito ID course on May 13th and 14th. It will be conducted by the combined efforts of local mosquito control biologists. This is not taxonomy or a refresher course but a more practical training geared toward seasonal interns, summer part-time biology positions or mosquito biologists new to the area. Class size is limited to 20 so please make every effort to send eligible participants. Sign-up is on a first come first serve basis. New participants have preference over returning individuals; if space is available then others will be accepted. Please sign up early. This information is also posted on the VMCA website (http://mosquito-va.org/?page_id=565).

Supplies and microscopes are limited but we will have a few extras on hand. If possible, please bring the following items: microscope with lamp, power strip, extension cord, forceps, petri dishes, wipes, alcohol and notebook. The course will be held at Chesapeake Mosquito Control Commission, 900 Hollowell Lane, Chesapeake, Virginia 23320.

A tentative schedule is given below and subject to change, but starting times will remain the same.

Lunch is on your own but there are plenty of places to eat within a short drive. An on-site refrigerator is available. We will provide coffee, donuts, bagels, fruit, yogurt, sodas, and water for both days.

Please e-mail Lisa Wagenbrenner (<u>lwagenbrenner@cityofchesapeake.net</u>) with participants name and city or county and what supplies you lack from the provided list.

Tentative Schedule for Mosquito Identification Course

Wednesday- May 13, 2015

8:00-9:00 9:00-9:15

9:15-9:30

9:30-9:45 9:45-10:00

10:00-12:00

12:00-1:00

1:00-2:00

Break

Lunch (on your own)

•	•		
7:30-8:00	Light refreshments- fruit, bagels, cream cheese, yogurt, donuts, coffee, sodas, and water		
8:00-8:05	Overview of Course-Lisa Wagenbrenner, Chesapeake MC		
8:05-9:30	General mosquito information- Dreda A. Symonds, Virginia Beach MC		
9:30-9:40	Break		
9:40-10:30	Diseases and economic impact of mosquitoes- Dreda A. Symonds, Virginia Beach MC		
10:30-11:00	Environmental concerns with field work- Lisa Wagenbrenner, Chesapeake MC		
11:00-11:30	Lab protocol- Dreda A. Symonds, Virginia Beach MC		
11:30-12:30	Lunch (on your own)		
12:30-12:45	Anopheles genus-Karen Akaratovic, Suffolk MC		
12:45-1:00	Culex genus– Penny Smelser, Norfolk MC		
1:00-1:15	Minor genera– Jay Kiser, Suffolk MC		
1:15-1:30	Break		
1:30-1:45	Dichotomous Key demonstration-Jay Kiser, Suffolk MC		
1:45-3:00	Identify mosquitoes using microscopes and key/flash cards		
3:00-3:30	Introduce traps and setup demo- Betsy Hodson, York Co.		
Thursday- May 14, 2015			
7:30-8:00	Light refreshments-fruit, bagels, cream cheese, yogurt, donuts, coffee, sodas, and water		

Retrieve traps and TEA demo. Lisa Wagenbrenner, Chesapeake MC

Identify mosquitoes using microscopes and key/flash cards

Identify mosquitoes using microscopes and key/flash cards

Psorophora genus – Jay Kiser, Suffolk MC

Aedes/Ochlerotatus genera (woodland/saltmarsh/open areas) - Tim DuBois, Hampton MC

Aedes/Ochlerotatus genera (natural/artificial containers) - Lisa Wagenbrenner, Chesapeake MC

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2015 VMCA Committees

The VMCA is successful because its members get involved in the operations of the association. Below are the current committees and their chairs. Please join a committee by contacting an officer listed on the last page of this edition of *The Skeeter*!

Committee	Chair(s)	Projects	Additional Committee members
Annual Meeting (Local Arrange- ments)	Tim DuBois Lisa Wagenbrenner	Location of future meetings	Ann Herring, George Wojcik, Lane Carr
Annual Meeting (Program/Agenda)	Joshua Smith	69th annual meeting program	Leah Aguilar
Annual Meeting (Vendor Planning)	Jeff Hottenstein	Vendor correspondence/setup	Jeff O'Neill
Audit	Chris DeHart	Annual Audit	Ann Herring, Mitch Burcham
Bylaws	George Wojcik	Bylaw revision/maintenance	Randy Buchanan, Jeff Hottenstein
Education	Lisa Wagenbrenner	Recertification, Adult ID class	Rachel Kempf, Karen Akaratovic, Jen- nifer Pierce, David Gaines, Tim DuBois, Dreda Symonds
Elections	Penelope Smelser	Sets up online voting, sends out voter information, counts votes and presents winners during busi- ness meeting	
Nominating	Jennifer Pierce	Find candidates for election, Pre- pares/gathers profiles of nominees for ballots	Connie Gregg, Ann Herring
Historian	Tim DuBois	Historical Archives	John Orr, Andy Lima, Wes Robertson
Hospitality Room	Ann Herring	Takes care of annual meeting hos- pitality room	Jamie Durden, LaToya White, Jennifer Pierce
Information/Social Media	Justin Anderson	Skeeter, Facebook, Twitter	Rachel Kempf, Wes Robertson
Legislative	Randy Buchanan	NPDES, VPDES, PESP	Lane Carr, Betsy Hodson
MAMCA	Ann Herring	VMCA liaison to MAMCA, VA update at MAMCA	Tim DuBois
Membership	Penelope Smelser	Keeps updated list of membership	
Photography	Betsy Hodson	Collects photos for website, Skeeter, Facebook	Andy Lima, Tim Dubois, Lisa Wagenbren- ner, Rachel Kempf
Public Relations	Rachel Kempf	Mosquito Awareness Week, Out- reach and education	Randy Buchanan
Special Awards	Kirby Foley	Awards- Dorer, Outstanding Ser- vice	Phil Meekins, Jennifer Pierce
TMVCC	Karen Akaratovic	TMVCC representative	Betsy Hodson, Jamie Durden
TRAST	Charles Abadam	TRAST representative	Dreda Symonds
Website	Lane Carr	Maintains/revises website	Penelope Smelser, Andy Lima
Ad hoc (Merchandise)	Karen Akaratovic	Coordinating the sales merchan- dise for annual meeting	Andy Lima, Lisa Wagenbrenner, Tim Du- bois
Ad hoc (Technical Sup- port)	Jason Pevear	Advises on and maintains VMCA hardware and software, in charge of computer/projector during an- nual meeting	Charles Abadam

AMCA Recap

The 81st American Mosquito Control Association (AMCA) annual conference took place on March 29 – April 2 in New Orleans, Louisiana. Virginia representation was present at this year's meeting. Virginia Mosquito Control Association President Jay Kiser, past President Charles Abadam from Suffolk Mosquito Control, and members Leah Aguilar and Betsy Hodson from York County Mosquito Control were able to attend the meeting. It was the first time Leah and Betsy had attended an AMCA. Charles and Jay both gave presentations: "A comparison of five different lure types used with the BG Sentinel 2.0 surveillance trap" and "Trials and tribulations of troubleshooting Biogents BG-Sentinel" (pictured at right), respectively.

Attending the AMCA annual conference is a wonderful expe-

rience. Apart from the great locations they choose to have the event it is a great chance to learn about the numerous facets of mosquito control. The moment you receive your registration packet and you browse through the AMCA Program the wheels in your brain begin to turn and you wonder what kind of information you'll learn from the plethora of presentations that you'll peruse over the next four days. Your registration package is actually an AMCA emblazoned messenger bag that you will need to hold all the vendor swag, pencils, pens, information packets, agenda updates, notes and business cards. The welcome reception on Sunday opens up the exhibit hall to attendees and your neighborhood friendly vendors – Adapco, All-Pro, Central Life Sciences, Clarke, Univar, Valent BioSciences, etc. - are there to greet you with a smile, some swag, a sales pitch, and loads of information to take back with you to your program. This hall is where everyone congregates when sessions let out for coffee breaks, ice cream socials, lunch and other activities that AMCA may have planned. Vendors of all sorts have booths in the hall i.e. gambusia fish tank operations and distributors, Deet Awareness programs, surveillance trap vendors like BioGents the makers of the BG Sentinel Trap, Georgia Mosquito Control Association, AMCA's Young Professional Group etc. I think it suffices to say that the AMCA is always well attended.

The meeting brings together people from all different mosquito backgrounds. Technicians, managers, directors, and doctors from all over the United States and as far as Australia; from York County, Virginia to Dr. Roger Nasci the Branch Chief of Arboviral Diseases at CDC in Fort Collins, Colorado. It is a pleasure getting to know these people, being able to talk to them about *Aedes albopictus* life cycles, recent developments in chikungunya as an emerging threat, and anything mosquito related.

Knowledge reigns supreme at AMCA and observing people discuss mosquito topics so passionately is motivating. Presentations about the most difficult and simple topics can spark an idea in your own head that provides energy for you to get through a long an arduous summer of mosquitoes. A simple discussion about adult trapping can turn into a chance to do a field study, collaborate on a publication, or just a new friend interested in the same things. These AMCA days are filled with presentations, poster presentations, coffee breaks and coffee breaks and coffee breaks etc. until your head is overflowing with way too much information to retain.

This year there was a field day on Wednesday April 1, the final full day of the conference, at the City of New Orleans Mosquito, Termite & Rodent Control and the Louisiana Mosquito Control Association. We were able to tour their facility and learn about their operations. This is a good opportunity to critique your own operations and, if you see a protocol you like, try incorporating it into your program. Field Days are always a great time because AMCA plans entertainment, tours of the hosting facility, and GOOD FOOD! This year we enjoyed some New Orleans Crawfish, Boudin Balls, Gator Balls, fried fish, red beans and rice, and some tasty gumbo. A local middle school marching band provided some great drum and brass heavy tunes to round out our New Orleans experience.

Every year the banquet presents the winner of the student competition that any student is welcome to compete in. This year was the larg-



Field Day Crawfish So Delicious!

(Continued on next page)





est purse and the winner Maria Cristina Carrasquilla won \$2,500 for her presentation "Sterilization with no evidence of Insemination of *Aedes aegypti* by invasive *Aedes albopictus*." The banquet provides us with our last meal from the conference and we get to say our goodbyes to everyone who won't be staying for our presentation which happens to be the last day of the conference. Too bad for them because it was very well attended and informed many people about the BG Senitnel 2.0 trap and "Recent Developments in Mosquito Surveillance and Trapping Techniques"

Attending the AMCA annual conference is a great experience and opens your mind up to all the different aspects of mosquito control. I highly recommend it. This coming year in 2016 the meeting will be in Savannah; maybe your program this year will let you take some of that Travel & Training to attend. I hope to see ya there.

Submitted by Charles Abadam

MAMCA Update

The 40th Annual Mid-Atlantic Mosquito Control Association Conference was held this past January 13th-15th 2015 at the Hilton Savannah Desoto in Savannah, Georgia. It was a very exciting meeting, and for those of you who were unable to make the meeting, copies of the presentations can be found on the MAMCA website (www.mamca.org). Several interesting talks were given by folks from local localities around the Hampton Roads area; Dreda Symonds with the Public Works/Biology Lab, Virginia Beach, VA explained the "Search for a Predictive Model of EEE Activity in Virginia Beach, VA", Jamie Durden gave us some fascinating information on "Alternative Arboviral Testing Methods in Southeast Virginia", Mary Ann Herring did a presentation on "ATSB Mosquito Bait and Comparison Study Fay-Prince vs. Sentinel BG" both with the City of Suffolk Mosquito Control, and Tim DuBois with City of Hampton Environmental Services gave a presentation on "Recertification Legal Update", as well as the State Report. Also presented at the 2015 Annual Meeting was the R.E. Dorer award, given to Jeff Heusel from Georgia. Heusel served as President of the Mid-Atlantic Mosquito Control Association in 2001, designed and maintains the MAMCA website, served on multiple committees, and has played an integral part of the annual meeting serving as the Audio-Visual Coordinator for over a decade. Thank you Jeff Heusel for all you do. The 2015 MAMCA Board is as follows: Rosmarie Kelly (GA) was elected as president, Abelardo C. Moncayo (TN) vice president, and Tim DuBois (VA) vice president elect; new state directors included Travis L. Shealy (SC), Ann Herring (VA), and Eric Dotseth (WV).

Looking forward, mark your calendars now for the next remarkable meeting of the 41st Annual Mid-Atlantic Mosquito Control Association meeting, March 30th - April 01st, 2016 at The Inn at Opryland Hotel in Nashville, TN.

Submitted by Ann Herring

TMVCC Update

The Tidewater Mosquito and Vector Control Council has booked all sponsors for the 2015 monthly meeting schedule, <u>except August</u>! If you are interested in sponsoring, or you know a vendor who would like to, please have them contact one of the board members. We are also looking for educational speakers for the months of June, August-October, and December. If you or your colleagues are interested in sharing your mosquito control experiences and expertise, please contact one of the board members. Dates, locations, and presentation topics for each meeting are posted on the <u>TMVCC page</u> on the VMCA website as they become available, and monthly reminder emails are sent out to all TMVCC members. Please email TMVCC President, Karen Akaratovic, at <u>kakaratovic@suffolkva.us</u> if you would like your email to be added to the contact list.

March 11th- TK Rosolina from Dynamic Aviation sponsored a meeting at the Suffolk Social Services building. Leah Aguilar, Superintendent of York County Mosquito Control, gave a very informative presentation on BMPs and new regulation changes. If you attended the meeting, please take a minute to complete the <u>survey</u>.

April 8th- Ted Bean from Adapco sponsored this month's meeting, and Mitch Burcham from Langley Air Force Base gave a presentation on termites.

Submitted by Karen Akaratovic

The Meanings of Mosquito Scientific Names

Scientific names are internationally consistent, and allow scientists to communicate across language barriers. Although many of the scientists who described species in the 18th and 19th centuries may have been well-versed in Greek and Latin, scientists in the 20th century and beyond have become further-separated from our language roots. Scientific names can be intimidating—but when broken down into smaller parts, they become much easier to digest. As you study them you'll find that many meanings are intuitive, and the roots hold true for other English words, as well. Many of us may pronounce them differently—but if we say a given name confidently and consistently, the message still comes across clearly, no matter who we are talking to in the world.

To compile this list, I used a book called *Dictionary of Word Roots and Combining Forms*, by Donald J. Borror. It is a tiny reference guide for Greek, Latin, and other languages, with special reference to biological terms and scientific names. It's a very convenient resource for anyone in the science field—I'd highly recommend picking up a copy.

Meanings of come common Virginia mosquito species

Aedes—temple; dwelling (Latin); disagreeable (Greek) aegypti—of Egypt (Latin) albopictus—white-painted (Latin) cinereus—ashes (Latin) vexans—annoying (Latin)

Ochlerotatus—a crowd; mob (Greek) canadensis—of Canada (New Latin) japonicus—of Japan (New Latin) sollicitans—disturb; annoy; worry; make anxious (Latin) taeniorhynchus—banded snout or beak (Greek) triseriatus—three series or rows (Latin) ??? trivittatus—three ways; a crossroads (Latin)

Anopheles—troublesome (Greek) barberi—bearded (Latin) crucians—a cross; torture (Latin) punctipennis—a sting; prick; feather; wing (Latin) quadrimaculatus—four-spotted (Latin)

Culex—a gnat; small fly (Latin) erraticus—wandering (Latin) pipiens—peeping ; chirping (Latin) quinquefasciatus—five-banded (Latin) *restuans*—renewing; reviving (Latin) *salinarius*—of salt; salty (Latin) *territans*—terror (Latin)

Culiseta—little bristle (Latin) inornata—unadorned (Latin) melanura—black-tailed (Greek)

Orthopodomyia—straight-footed fly (Greek) signifera—wildly-marked (Latin)

- Coquilletidia—named for Coquillet perturbans—disturb; ruckus (Latin)
- Toxorhynchites—bowed snout or beak (Greek) rutilus—red (Latin)

Psorophora—itch-bearing (Greek) ciliata—small hair (Latin) columbiae—of Columbia? Dove or pigeon (Latin) howardii—named for Howard

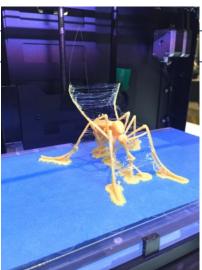
Uranotaenia—heavenly bands or ribbons (Greek) sapphirina—sapphire; blue (Greek)

Submitted by Andy Lima

Ad Hoc Merchandise Committee

At the March VMCA meeting, President Jay Kiser announced the creation of the Ad Hoc Merchandise Committee and appointed Karen Akaratovic from Suffolk Mosquito Control as committee chair. Current committee members include Lisa Wagenbrenner from Chesapeake Mosquito Control Commission and Tim DuBois from Hampton Vector Control. This committee will be in charge of bringing merchandise ideas to the board for approval and sale at the VMCA annual meetings. If you have any suggestions on what type of merchandise you would like to see offered or have any design ideas <u>PLEASE SEND THEM</u> to the committee chair at <u>kakaratovic@suffolkva.us</u>.

Valent BioScience's 3D print of a mosquito Photo by Charles Abadam at the AMCA meeting



VMCA Membership Application and Renewal Form

Virginia Mosquito Control Association New Membership & Member Renewal Application

MEMBERSHIP TYPE: () RENEWAL () NEW Mark an "X" in the appropriate box

Membership payment is by calendar year

NAME:	Regular \$ 15.00	
PHONE:	Associate \$ 10.00	
ADDRESS:	Student: *Enclose proof of student status \$ 10.00	
E-MAIL:		
ORGANIZATION:		
	TOTAL SUBMITTTED	

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: <u>Penelope.smelser@norfolk.gov</u>

Send payment (made payable to <u>VMCA</u>) 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.)

2015 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!



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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

<u>Virginia Department of Health</u> Centers for Disease Control & Prevention

Other Mosquito Control Organizations

<u>Mid-Atlantic Mosquito Control Association</u> <u>American Mosquito Control Association</u>

AMCA/Fairfax County Education and Outreach Materials

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: June 30, 2015.

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



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

2015 Virginia Mosquito Control Association Officers

President: Jay Kiser	(757) 514-7608	jkiser@suffolkva.us
President Elect: Josh Smith	(703) 246-8477	joshua.smith@fairfaxcounty.gov
Vice President: Jeff Hottenstein	(703) 498-9362	jhottenstein@clarke.com
1st Vice President: George Wojcik	(757) 393-8666	wojcikg@portsmouthva.gov
Secretary / Treasurer: Penelope Smelser	(757) 683-8662	Penelope.smelser@norfolk.gov
Past President: Jennifer Pierce	(757) 426-5420	<u>JPierce@vbgov.com</u>
*TMVCC Representative: Karen Akaratovic	(757) 514-7608	kakaratovic@suffolkva.us
*MAMCA Representative: Ann Herring	(757) 514-7608	mherring@suffolkva.us
*Sustaining Member/Industry Rep: Jeff O'Neill	(302) 312-3950	joneill@central.com
*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