The Landing Rate Cou

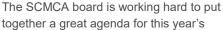
Editor: Larry Motes

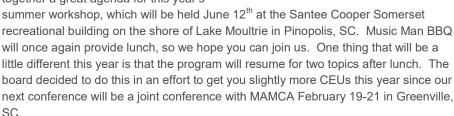
Newsletter of the South Carolina Mosquito Control Association

April 2019-Vol 45 • Issue 2

The President's Message Trey Reed

Spring is here! Well at least it is on the Wednesday afternoon that I'm typing this. Part of life in the great state of South Carolina is that you get to experience all the seasons of the year (sometimes in the same day). Back when I managed a mosquito control program, I always enjoyed these types of weather patterns. There are enough warm days to get out and enjoy the outdoors, but there are still enough cold snaps to keep the phones from ringing too much with mosquito complaints.





National Mosquito Control Awareness week is June 23 – 29. Use that week as an opportunity to educate the public about your efforts to minimize mosquito borne disease and general discomfort from mosquito bites. Summer will be here before you know it, so calibrate those machines and get ready for another busy season.

Finally, I want to thank our Sustaining Members for their continued support to the dedicated professionals in the field of mosquito control. I look forward to seeing you all at the Summer Workshop June 12th!



Trey Reed 2019 SCMCA President

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Training Opportunities

South Carolina Mosquito Control Association Summer Workshop

June 12, 2019 Pinopolis, SC

Mid Atlantic Mosquito Control Association Meeting Joint meeting with SCMCA

February 19 – 21, 2020 Greenville, SC

2019 SCMCA Sustaining Members

Thank you for your time and contributions!



ADAPCO Innovative Mosquito Solutions,

an AZELIS Americas Company

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2019 SCMCA Sustaining Members, continued



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SCMCA Regions & Delegates

Upper Region: Amber Leonard

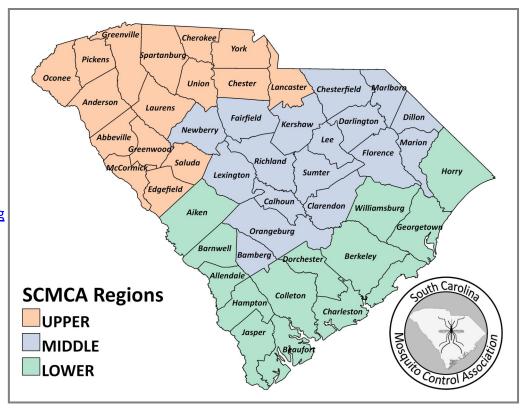
Phone: (864) 596-3327 leonaras@dhec.sc.gov

Middle Region: Odell Waddell Phone: (803) 533—6166

Owaddell@orangeburgcounty.org

<u>Lower Region</u>: Johnny Bruton Phone: (843) 582-3427

JhBruton@nmb.us



Middle Region—Odell Waddell



Odell Waddell was born in Spartanburg, South Carolina. He has been employed with the County of Orangeburg since July 1990. Presently he is the Supervisor of the Mosquito Control Department and the Zoning Administrator.

Odell earned a B. S. Degree in Electro-Mechanical Engineering Technology from South Carolina State University. In his spare time enjoys fishing, walking and going to the gun range.

The SCMCA Board appreciates Odell for filling the Delegate vacancy.

Upper Region

City of Greenwood, SC

Billy Allen with the City of Greenwood says they have started an outreach program for residents to become more aware of how to minimize mosquito breeding areas. When calls come in, a visit is made to the site to look for possible breeding sites as well as help to educate residents on ways to reduce mosquito populations. Magnets with helpful tips about mosquitos and their website/phone number are provided to residents when a visit is made. They are also planning an outreach program with local schools this fall.

City of Fountain Inn, SC

Lori Cooper with the City of Fountain Inn stated they are gearing up for this season and have calibrated their equipment. They will begin spraying soon with Biomist in the city limits of Fountain Inn. The 2018 season activity seemed much better after spraying and only two complaints were received last season. Lori says their office has received training from both Clemson Extension and Clark Pest Control.

Greenwood County Lake Management

Julie Davis with Greenwood County Lake Management stated they are gearing up for the 2019 season. They have a small scale larvaciding operation tailored after Duke Energy and start in mid-to-late April. Larvaciding is carried out using Vectobac liquid via a 50 gallon tank by boat and using Altosid briquettes in shallow areas of the lake with standing water. One cycle takes approximately 10-12 days and one cycle is completed each month. When going to a site, they inspect the area and talk to homeowners about prevention measures at breeding sites.

City of Central

Dean Martin with the City of Central stated that spraying with Biomist will be done every other week beginning late May and continue through late September. The 2018 season seemed slower than the previous year and complaints were also fewer.

City of Mauldin

Steve with the City of Mauldin stated that spraying will be done every other weekend and Envion RTU is being used. The 2018 season was slower than the previous year and not many complaints were received.

City of Clemson

The City of Clemson will begin spraying in May five days per week every other week using Biomist. The 2018 season was not as busy as past seasons.

City of Gaffney

Barry Bundy with the City of Gaffney stated they are ordering materials to gear up for the 2019 season and are planning to use Deltagard and Vectomax tablets. The 2018 season showed an increase in activity over the previous year and he states they had 4 West Nile Virus positive mosquitos reported.

Middle Region

Lexington County, SC

For counties that border Lexington County, if a resident who lives in our county mistakenly contacts your office for a mosquito issue, you can have them contact us at 803-785-8440. If we are not in, please let them know to leave their contact information and we will return their call as soon as possible.

Richland County, SC

We are hiring at Richland County Vector Control. A hiring packet has been submitted to HR to hire an administrative support person. We hope to have them joining our staff on April 15th. We are interviewing for an Environmental Field Coordinator, and hope to find a strong candidate for that position soon. Lastly, we have our Field Technician posting up, and are looking for 3-4 more good people to add to our team. Anyone interested in applying should go to the Richland County website and click on Careers to begin.

We recently held our annual ULV Round -Up/Rodeo with Trey English to get our ULV machines ready for the road. Beverly Whitmire & Lanishea Jones have started catch basin treatments in an attempt to break the West Nile cycle we have been experiencing for the past few years. We plan to begin our routine NJ light trap surveillance next week, barring any unforeseen circumstances. We are hoping to send Kim Todd to Mosquito University 3.0 in Nashville at the end of the month. We have already begun West Nile surveillance for the season, and already submitted our first two birds for the season for testing.

Orangeburg County

Orangeburg County total area is 1,106 square miles. County of Orangeburg Mosquito Department consist of six people total, a supervisor, two daytime drivers and three night time drivers. This department provides a seasonal service, operating from April to early November. This department provides a service to all the rural parts of the county and to any towns inside the county without a Mosquito department. We trap mosquitos for testing and maintain a mosquito count log. We are using BG-Sentinel 2 Traps to capture mosquito for testing and BG-Gat Traps for our mosquito counts. The trucks we used in the evening do our adulticide treatments and each are mounted with Guardian 190 G4 units with Monitor 4 system to record the amount of chemicals being used. The latest equipment we purchased is the Pioneer Eco-Handheld Sprayer. This sprayer is used in areas where our spray trucks cannot go.

One the most important tools we use is our complaint form. On our County of Orangeburg Mosquito Website, we have a complaint form link with a program that is GIS based. This program allows us to generate weekly reports on complaints. From the reports we can see which Mosquito Area the complaint is located.

Use CTRL and click the link below to see the online form:

http://orangeburggis.maps.arcgis.com/apps/GeoForm/index.html?appid=81888ea071bb4b2f9b44c5044fe718eb

Lower Region

Charleston County, SC

Over the course of the winter months, Charleston County Mosquito Control Division personnel carried out several equipment maintenance and calibration, fieldwork, and public education efforts. Equipment maintenance included the overhaul of the 31 New Jersey Light Traps and 9 Guardian ULV spray machines. 8 of the 9 ULV machines were flow and droplet calibrated. The helicopter crew performed a major cleaning, painting, and storage reorganization effort at the hangar and storage building at the Johns Island Executive Airport facility. The helicopter crew, ground larviciding crew, and Field Inspector supervisors made field visits to verify aerial/ground inspection/ treatment sites for the upcoming season. 3 comprehensive helicopter larvae inspections (January/February) at a total of 139 sites resulted in zero positive inspections for larvae presence. The annual winter Citizens Awareness Program (CAP) door-to-door education campaign began Feb. 25 and was completed Mar. 14. This regimen, conducted by the Field Inspectors over a 3-week period, visited 2,132 residences. The first of a series of "Web X" meetings were held with Leading Edge Associates to facilitate the conversion of the current database to MapVision. Two division personnel achieved certifications, Chris Ivey received his FAA Helicopter Powerplant Mechanic accreditation, and Field Inspector Keonte' Gadsden received her South Carolina Pesticide Applicator License in Category 8, Public Health. Jon Loveland and Taxonomist Ed Harne attended the ECU/CDC-sponsored Bottle Bioassay one-day course in Greenville, N.C., and the AMCA Annual Meeting in Orlando. Entomologist Jon Loveland attended the FMCA-sponsored Dodd Adult Mosquito Identification course in Gainsville, Fla. Several employees attended the half-day Clarke Mosquito Control-sponsored workshop in North Charleston. Helicopter Pilot Steve Massar completed 3 days of flight training by Lunsford Air. Chief Helicopter Pilot Mark Kennedy resigned to take a pilot position with Lee County Mosquito Control District in Florida. Administrative Specialist Lisa Blackwell resigned to take a post in the construction field.

Berkeley County, SC

It is hard to tell how the 2019 mosquito season will progress, but so far it is off to a slow start in Berkeley County. There has been very little rainfall in the last month and much of the water that was still standing from a reasonably wet winter has dried up. Even our areas near salt marshes have not caused any problems for us yet. Our spray truck drivers moved to night shift the first week of April and our bi-weekly New Jersey light trapping began the same week. In March we completed our usual focused surveillance of critical areas and treated them with 150-day briquettes as needed. Apart from losing two long time employees, our manager, Jeff Cary, and our senior tech, Herman Pinckney, to retirement at the end of last June, our department has grown quite a bit in the last year. We hired three day shift technicians and one night shift technician last summer, along with one day shift technician and one night shift technician last month. We also hired a taxonomist and a new senior tech earlier this year. As equipment goes, we have purchased a new ULV sprayer and outfitted one of our surveillance trucks with it. We will also be receiving three new trucks to replace that one and accommodate our growing team. All equipment used for adulticidal and larvicidal treatment has been refurbished. We are ready for whatever 2019 brings.

Horry County

The 2019 mosquito season has arrived in Horry County, we have answered numerous mosquito complaints since January, we will be adding around 5000 more larvicide tablets this year which will give us a total of around 20,000 for our catch basins. We have added additional traps to help with surveillance and we have been working on improving our species identification skills by attending courses at Dodd this year and also added a full time mosquito technician. We will also be adding two additional trucks with sprayers to assist in adulticiding.

James Brock | Mosquito Control

Lower Region

City of North Myrtle Beach

2019 is upon us and with the warm winter and abundance of rain it looks like it will be a busy year. We have just purchased the new FieldSeeker Office and ULV mosquito program to help track what and how we handle mosquitos in the city. We have also purchased a third ULV sprayer and truck, in addition to the replacement of our two older sprayers. On or around the 1st of March we started the treatment of about 6000 catch basins. We have our traps out and running. Our biggest change was the purchase of a 10,000 square foot building in which we built new offices and a lab. We had staff attend The Dodd School to learn more about mosquito identification in February. Hope everyone has a very successful year.

City of Myrtle Beach

The City of Myrtle Beach is gearing up for another busy mosquito season. As we enter into this season, our mosquito program will be the proud recipient of a new truck and new Ultra Low Volume (ULV) machine with GPS capabilities, replacing our existing ULV system. The new backpack spreader will allow us to access secluded and hard to reach areas to distribute larvicide granules along with other larvicide products. The City will be participating in SCDHEC's mosquito trapping and testing program for the second year. This program will help us readily identify disease-carrying mosquitos to better concentrate our treatment efforts to eliminate these mosquitos for the protection of citizen's health and welfare. Continued education and outreach will be a priority for our City as we continue to experience high growth and development. We will continue to educate our new residents on what are service entails and how they can help us better control the mosquito population.

Beaufort County

Beaufort County Mosquito Control (BCMC) has had a mild season so far with few service requests being reported. *Culex salinarius* mosquitoes have dominated CDC-LT traps since November, but *Aedes taeniorhynchus* adults have started showing up in traps as well as in larval collections. Biting midges have been a major nuisance for the past few weeks, but BCMC does not control this insect.

Our field crew will spend April larviciding each catch basin in Beaufort County, more than 23,000 in total. This year we will be using Natular XRT that should provide ~180 days of control. We will continue to monitor the efficacy with storm drain traps and retreat as necessary.

BCMC has hired a second laboratory intern who will begin in mid-April. The additional personnel will help increase the county surveillance trap numbers as well as providing assistance with mosquito rearing and bottle bioassays for insecticide resistance.

The aerial program had setbacks in 2018 with unforeseen aircraft malfunctions, but both rotary and fixed-wing aircraft are ready for service. A major program focus will be using the helicopter-mounted, multispectral camera to identify standing water under the tree canopy. This will involve a lot of trial and error to perfect the system.

We will soon begin implementing our new notification system from Swift911. This will allow us to notify citizens by phone, text, email, and social media. Custom map zones can be created with notifications being sent to contacts within the active zones.

BCMC is looking forward to seeing everyone this year at the SCMCA Summer Workshop.

Species Spotlight: Culex coronator

Description

Adults Culex coronator adults are medium sized and brown and white. This mosquito is one of just 2 species of Culex in our area that have pale bands on the hind legs, the other being Culex tarsalis. The 2 species are distinguished by the presence or absence of a white band on the proboscis. Culex tarsalis adults have a distinct white ring on the proboscis, while Culex coronator adults do not, although they may have a pale patch on the underside of the proboscis. Females of Culex coronator feed primarily upon mammals, such as deer and domestic animals, but also occasionally feed on birds. Although Culex coronator is not





considered to be a species of major health importance, several pathogens have been isolated from field-collected females. Venezuelan equine encephalitis virus has been isolated from Central American females, and St. Louis encephalitis virus has been detected in females from the Caribbean.



Larvae of *Culex coronator* are small to medium sized. Setae of the head are multibranched. The siphon is quite long and thin and bears several small spines just before its apex. Four pairs of branched setae arise along the length of the siphon. Larvae are found in a variety of habitats, including rain-filled depressions and water-filled man-made containers, especially those in direct sunlight.



Current Distribution of Culex coronator in the U.S.

Distribution *Culex coronator* is a recent arrival to the southeastern United States. Prior to the year 2000, this mosquito was found only in Texas, New Mexico, and Arizona (also in Central and South America). Since 2001, *Culex coronator* has been found in Louisiana, Mississippi, Alabama, Florida, Georgia, North Carolina, and South Carolina.

2019 Calendar of Events

Date	Meeting/Event	Venue	Location
June 12, 2019	South Carolina Mosquito Control Association Annual Summer Workshop	Santee Cooper Somerset Recreation Building	Pinopolis, SC
June 24-June 30, 2019	National Mosquito Control Awareness Week	http://www.mosquito.org/ meetingsevents	
Feb 19-21, 2020	South Carolina Mosquito Control Association 47 th Annual Meeting held jointly with MAMCA	Hilton Greenville	Greenville, SC

REGISTER NOW!!

Email Olin Towery (toweryo@rcgov.us) to register.

***Note: Although there is no charge to attend the Summer Workshop, donations are welcomed. All donations will be used to help offset the cost of our AWESOME BBQ LUNCH





June 12, 2019
SCMCA 2018 Summer Workshop
Pinopolis, SC

Check SCMCA website for future updates and final agenda

Hope to see you all there!!

South Carolina Mosquito Control Association

Summer Workshop

Santee Cooper Somerset Recreational Building 2222 Pinopolis Rd, Pinopolis, SC 29469

June 12th, 2019

	June 12th, 2019
9:00 - 9:30	Registration
9:30 - 9:35	Welcome and Opening Remarks Trey Reed - SCMCA President
9:35 – 9:55	Mosquito Identification Dr. Chris Evans - SCDHEC
9:55 – 10:40	Breakout Sessions Mosquito Larviciding - TBD Drone Demonstration – David Dilling, Leading Edge Mosquito Surveillance – Robert Cartner, Beaufort County, SC
1 0:40 – 10:55	Break
1 0:55 – 11:25	Pesticide Label Interpretation Cecil Hernandez – Clemson Department of Pesticide Regulation
11:25 - 11:45	Worker Safety and Hazard Communication Alvaro Lambertis – Richland County, SC
11:45 – 12:00	Arbovirus Update Dr. Chris Evans – SCDHEC
12:00 – 1:00	Lunch Music Man – Moncks Corner, SC
1:00 – 1:30	Basic Record Keeping and Program Management Ed Harne – Charleston County, SC
1:30 − 1:50	GIS in Mosquito Control Linda Glover – Frontier Precision
1:50 – 2:10	Utilizing Digital Software in Mosquito Control Sydney Morris – Leading Edge

SCMCA | 400 Powell Rd | Columbia SC 29203



2019 SCMCA TECHNICIAN OF THE YEAR AWARD

Nominee:		Date:	
PLEASE ADD A BRIEF	BIO ON THE BACK OF T	THIS FORM	
Jacket Size:			
County/State Program:			
Address:			
		Zip:	
Job Title:			
Supervisor:		Phone/Email:	
nomination, be specific – w needed.)	who, what, when and where.	R NOMINEE FOR THIS AWARD. (I Attach a letter or other supporting ma	iterial if

Guidelines for Selection:

- 1. Consistent and excellent performance with efforts above and beyond expected duties
- 2. General knowledge of mosquito biology
- 3. Service to community
- 4. Positive attitude: enthusiasm, pride in work
- 5. Team Player
- 6. Must be a member of the association in good standing

Please complete this form and return to:

Tammy Brewer Richland County Vector Control 400 Powell Road Columbia, SC 29203

Phone: (803) 576-2425 Fax: (803) 576-2498

Email: brewer.tammy@richlandcountysc.gov

DEADLINE FOR SUBMISSION: September 27, 2019

web Resources		
Resource	Website	
American Mosquito Control Association	http://www.mosquito.org/	
CDC Division of Vector-Borne Diseases	http://www.cdc.gov/ncezid/dvbd	
CDC Zika Virus Information	http://www.cdc.gov/zika/	
Clemson University CEU Search (See your information)	http://regfocus.clemson.edu/dpr/ ncommercial.htm	
Clemson University Cooperative Extension Beekeeping	http://www.clemson.edu/extension/beekeepers/	
Clemson University Department of Pesticide Regulation	http://regfocus.clemson.edu/dpr/	
EPA Insect Repellents: Use and Effectiveness	http://cfpub.epa.gov/oppref/insect/	
Florida Medical Entomology Laboratory (+ID Guide)	http://fmel.ifas.ufl.edu/	
Florida Mosquito Control Association	http://www.floridamosquito.org/Home/	
Mid-Atlantic Mosquito Control Association	http://www.mamca.org/	
NC Mosquito and Vector Control Association	http://www.ncmvca.org/	
SC DHEC Mosquitoes in South Carolina	http://www.scdhec.gov/mosquitoes	
SC DHEC Reporting Dead Birds in South Carolina	http://www.scdhec.gov/birdtesting	
SC DHEC Zika Virus Information	http://www.scdhec.gov/zika	

Save the Date and Join Us...

For the 47th SCMCA Annual Meeting jointly with MAMCA February 19-21, 2020 at the Hilton in Greenville, SC



South Carolina Aquatic Plant Management Society

SC Bee Keeper Association (Local assoc. links)

Society for Vector Ecology

SC Mosquito Control Association

USGS (Arbovirus Disease Maps)





http://www.sove.org/

http://www.scapms.org/

http://www.scmca.net/

http://www.scstatebeekeepers.org/

http://diseasemaps.usgs.gov/mapviewer/



Meet new colleagues from the Mid-Atlantic region and earn your CEUs!



SOUTH CAROLINA MOSQUITO CONTROL ASSOCIATION, INC.

Attn: Olin Towery, Secretary Treasurer Richland County Vector Control 400 Powell Road Columbia, SC 29203

OFFICE PHONE: (803) 576-2428 FAX: (803) 576-2498

MEMBERSHIP APPLICATION

NAMI	E:		8
ORGANIZATION			
ADDRES	S:		
WORK PHONE			
FAX			
Е-МАП	:		
TYPE (OF MEMBERSHIP/ DUES (Renewal due at Annua	l Meeting)
	Active Member	\$ 10.00	
	*Sustaining Member	\$150.00	
	*Includes one acti	ve membership	
Please make	checks payable to <u>SCMCA</u> and r	eturn to <u>Olin Towery</u> at the	e address above.
For Office U:	se Only:	Region: Upper / M	iddle / Lower
Am ount Paid	\$Date Paid:	Check #	Cash

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SCMCA - Promoting Mosquito Control in South Carolina

The Landing Rate Count
SC Mosquito Control Association
c/o Richland County Vector Control
400 Powell Rd
Columbia SC 29204

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