Editor Information

AMCA Newsletter Editor
Clark Wood
675 Sidwell Court • St. Charles, IL 60174
Office: (800) 323-5727
cwood@clarke.com

Send Articles to:
amca@mosquito.org

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On The Cover

Photos taken from the AMCA 90th Annual Conference Photos in Dallas, TX.

Our mission is to enhance health and quality of life through the suppression of vector-transmitted diseases and the reduction of mosquitoes and other public health pests by providing leadership, information, collaboration, tools, and education.
AMCA RESEARCH FUND

Mosquito control is science-based. Mosquito control professionals use observation of mosquito populations, evaluation of novel control technology and predictive modeling to determine the best way to manage mosquito populations and prevent pathogen transmission. Mosquito control has benefited from a long history of research within mosquito abatement agencies, at public and private universities, and at other qualified research institutions examining how to improve mosquito control to provide a better quality of life for the public.

2023 RESEARCH FUND Awardees

Julianne Miranda-Bermúdez, PhD., “Infrastructure to evaluate community engagement efforts for an Integrated Vector Management Program.” Puerto Rico Vector Control Unit.

Emily Mader, “Analysis of perceived risks and benefits of mosquito abatement and person protection strategies.” Northeast Regional Center for Excellence in Vector-Borne Diseases, Cornell University

CONTRIBUTIONS TO THE AMCARF ARE NOW BEING ACCEPTED!

The AMCA Research Fund is currently accepting contributions for future research on mosquito control and related topics. Contributions can be made online through the Research Fund webpage or by check payable to:

AMCA Research Fund
ATTN: Megan MacNee
1 Capitol Mall, Suite 800
Sacramento, CA 95814

AMCA WOULD LIKE TO THANK THE FOLLOWING CONTRIBUTORS:

• ADAPCO
• Anonymous Contribution
• Canyon County MAD
• Contra Costa Mosquito and VCD
• Michigan MCA
• Sacramento-Yolo Mosquito and VCD
• Schools First Federal Credit Union
• Valent BioSciences
President’s Message

Rui-De Xue, PhD

We have just completed a very successful Annual Meeting with more than 960 participants in Dallas, TX, March 3-8, 2024. Herff Jones as the program chair organized an excellent program. Executive Director Megan MacNee, Events Manager Natalie Perry, and other staff/volunteers did a terrific job. Dr. Kristen Healy, President of the Association, Board members, and committees worked together and accomplished a lot, especially the strategy plan for the association's growth and development in the future in 2024.

I started to serve the AMCA as the President on the morning of March 8. This is my first message for the Newsletter as the Association’s President. It is so honored for me to serve this year as president. I am greatly to thank and appreciate those of you who voted/supported me as the Vice President in 2021 and the members and previous Boards continue to keep the organization going.

It was lucky for me to join former AMCA President, Dr. John Edman's group at the University of Massachusetts at Amherst as a visiting scientist in 1991. His professionalism, mentorship, and leadership inspired me and influenced my career in the field of biology and control of mosquitoes. In 1992, I became an AMCA member and first time attended the AMCA annual meeting in conjunction with the Florida Mosquito Control Association’s annual meeting in Ft. Myers, Florida in 1993. In the past 30-plus years, I as a member have gained and benefited in career growth and development from the AMCA, such as networkers, annual meetings, publications, and collaborations. Now it is time for me to provide the services to other members.

During my AMCA presidential service, I would like to revisit and recall the name change from the American Mosquito Control Association (AMCA) to the American Mosquito and Vector Control Association (AMVCA). This change was recommended by the legislative committee and approved by the AMCA Board in 1993, but the Board held for member votes in 1994. In the past, many members asked and some were concerned about the change. The purpose of the name change to AMVCA is more of an indication of our scope of working on mosquitoes as well as other vectors, such as ticks, fleas, lice, kissing bugs, and other blood-sucking or nuisance arthropods. Currently, about 50% of AMCA members deal with both mosquitoes and other vectors. The name change would extend and promote the mission of mosquito and vector control, and recruit more members for the association. The process may take a couple of years. The first thing for the Board is to appoint an advisory committee to collect information, analyze the benefits of change and the cost of the survey, and make a decision based on the majority of AMCA members’ and potential members’ responses. Please respond to the survey when you receive it.

My other plan is to promote collaboration and partnership with related associations and organizations. This effort would share and exchange information about their mission and training opportunities, and possible conjunction meetings for legislation, annual meetings, and training at the national and state level. The purpose is to strengthen collaboration and reduce travel costs for multiple meetings and training. It was the first time that I organized a successful symposium about collaboration with related societies and associations at the annual meeting, in Dallas. Participants included Dr. Michelle Brown, Executive Director of the Society of Vector Ecology (SOVE), Ms. Megan MacNee, Executive Director of the AMCA, Dr. Erin Cadwalader, Director of Strategic Leadership and Policy of the Entomological Society of America (ESA)’s Vector-borne Disease Networkers, Ms. Christine Phan, Program Analyst for Vector Control Work Group of the National Association of City and County Health Officials (NACCHO), and Dr. Roxanne Connelly, Group Leader from the CDC /Division of Vector-borne Diseases. Each gave excellent presentations to share their missions and potential collaborations and partnership related to mosquitoes and vectors and vector-borne diseases.

The AMCA is your professional association like family and your involvement, support, and help are always needed and appreciated, let us work together to make our organization move forward.
Bay County Mosquito Control Conducts Aerial Larviciding for *Coquillettidia perturbans*

After years of planning and conducting surveillance in *Coquillettidia perturbans* habitats along the Saginaw Bay shoreline, Bay County Mosquito Control successfully completed a pilot project for aerial larval control over invasive phragmites and cattail habitats along a portion of the Saginaw Bay (Lake Huron) shoreline.

Counts of *Cq. perturbans* began to increase in shoreline areas of Bay County beginning in 2016. Monitoring increased each year to better identify areas of high concern and breeding habitats in order to develop a plan for effective larval control. Surveillance consisted of using CDC traps, emergence traps, modified dippers and bilge pumps in cattails and phragmites habitats off the shore of the Saginaw Bay and in similar inland habitats within a mile of the Bay.

On September 18, 2023, second and third instar *Cq. perturbans* larvae were collected in the proposed treatment area confirming the desired timing of insecticide application. A single fixed-wing aircraft treated approximately 600 acres of wetland habitat on September 19, with calm winds and both water and air temperatures in the upper 60s. The northern portion of the treatment block was nearly 2,000 feet off-shore of the Saginaw Bay where cattails and phragmites grow in water about 24” or less in depth. The treatment block extended inland to the south, approximately ½ mile, into marsh/wetlands habitat. Treatment loads went swiftly, averaging 15-25 minutes between loads, with a carrying capacity of about 1,720 lbs./load. Quality control staff on the ground verified accurate application rates and potential skips.

The biological insecticide VectoLex FG was selected due to its environmental compatibility since the application was taking place in a designated State Wildlife Area and into the waters of the Bay. The product, applied at 15 lbs./acre, was also ideal for the timing of the application when larvae are in the second to third instar.

Treatment efficacy will be determined in 2024 using CDC and emergence traps in both treated and control areas.
Allow me to start by expressing my sincere gratitude to Mark Clifton for taking over the Legislative and Regulatory (L&R) Committee. I agreed to help with the Washington Conference planning, but he is doing all the heavy lifting. In case you missed it, Mark presented his plans for the future of the committee at the Annual Meeting in Dallas, and his booth in the exhibit hall gathered over 50 volunteers to help on subcommittees. Please continue to reach out to the association if you are interested in getting more involved so we can keep Mark happy and sane.

I encourage you all to seize the opportunity to be a catalyst for change and attend the Washington Conference this May! The goal is to have at least one person from every state. Don't be discouraged if you aren’t up to speed on the laws and regulations impacting mosquito control; all of that will be covered during the meeting. Your task is to share insights about your role in the field and why it’s important.

This year’s issue papers will spotlight the implementation of the Department of Health and Human Services’ National Strategy for Preventing Vector-Borne Diseases in People, advocating for continuous funding for the CDC’s Division of Vector-Borne Diseases, including asking for a nationwide surveillance platform and urging support for the EPA’s Office of Pesticide Programs to make informed regulatory decisions for vector control tools.

Attending the Washington Conference presents a myriad of benefits, from influencing future laws and regulations to enhancing public relations and gaining insights into effective risk communication. By being actively engaged in advocacy efforts, you not only amplify the voice of public health employees but also contribute to a more informed and empowered workforce.

The conference will begin on Monday, May 13th, in Alexandria, VA, with a welcome reception. Tuesday will be a full day of preparation for Hill visits and one of the best lineups of speakers we’ve ever had at the Washington Conference. On Wednesday, May 15th, our group will buzz Capitol Hill and spread the word to as many lawmakers as we can reach about the important work you all are doing every day. Go to the AMCA webpage and check out the details of the Washington Conference under the events tab. If you haven’t had a chance to do so, test out the action center that makes sending a message to your elected officials effortless. If you have any questions or are apprehensive about attending the meeting in D.C., reach out to Angela Beehler at angela@mosquitocontrol.org.
As many of us know, local governments are becoming the new battleground for many controversial policies and regulations. To help our members develop local, grassroots advocates and stay on top of the local issues that may be affecting their programs, I’ve been sending a monthly Curate report of all local and municipal actions related to several topics that could impact your program. All sustaining members get this report at the first of each month. In February, alone, there were 153 discussions in 115 locations throughout the country. Some people have asked, “How can I best use this information?”.

Monitoring city and county government meeting agendas can help our members stay informed about public hearings and votes. However, since it’s typical for local governments to provide the minimum legally required amount of notice for meetings and votes, monitoring agendas alone will often leave you less than a week to prepare a campaign and agendas often omit critical information. To use the Curate report to its fullest and determine what proposals might be coming down the line, it is best to also monitor the discussions included in the meeting minutes. The discussions or votes will often clue you in on who within the Council are supporters of your cause.

One of the key ways to get ahead of concerning issues before they land on the agenda in your district is to use the report to identify trends as they move through neighboring regions.

Finally, keep in mind that as you see local issues developing, local elected officials often rely on local subject matter experts in the community to help them make decisions. Work to develop a core group of local advocates and educate them or your staff so that they can become the local experts, make introductions between local officials and representatives of your program, and keep your supporters informed about local policy issues and talking points with regular messaging and information on the various topics of concern that could impact your program.

Local policy changes are typically introduced in response to a specific problem. But we all understand that sometimes this approach can lead to harmful and reactionary ordinances. You’ll have more success opposing a proposal if you can build a diverse coalition and focus your message on the overall impact of the proposal on the community as a whole. If you know the issues ahead of time and can get enough stakeholders educated, you’ll strengthen your voice will be amplified.

If you’re not a Sustaining Member and you’d like to see what local initiatives are being discussed in your area, contact your Regional Director about becoming a Sustaining Member. You’ll then have the tools and support to affect issues before they affect you. Good luck this summer and stay ahead of the bite!
The 2023 season was certainly unique in the South Atlantic Region, at least as far as Florida is concerned. The “Sunshine State” was host to seven reported locally transmitted cases of malaria, the first reported in 20 years. The state is no stranger to (re)introduced and invasive species and pathogens, so the mosquito control programs are well equipped for these situations. Florida also experienced 178 locally acquired cases of dengue, 154 of which were reported from Miami-Dade County. Puerto Rico also had a large incidence of locally acquired dengue with 1,025 cases, the most reported since 2013. As of mid-March 2024, there have been 293 locally acquired cases of dengue in Puerto Rico and 3 in Miami-Dade County.

The South Carolina Mosquito Control Association (SCMCA) held their annual conference in November 2023 to celebrate the Association’s 50th anniversary. Ed Harne of Charleston County Mosquito Control (CCMC) received the L.A. Williams, Jr. Award, SCMCA’s highest honor, for his career-long dedication to the Association and South Carolina’s mosquito control profession. Ed retired from CCMC in February 2024 after 39 distinguished years. SCMCA also awarded the unique “Golden Dipper” award to L.A. Williams Jr. in recognition of 50 years of service to SCMCA and his role in the development of the Association.

The Florida Mosquito Control Association (FMCA) also held their annual conference in November 2023. FMCA’s Board and members have been busy over the last few months advocating for the continued investment in Florida’s mosquito control infrastructure. Florida lawmakers introduced HB 7013/SB 1058 in December 2023, targeting special taxing districts, which include mosquito control districts. The Association initially opposed the bills, but efforts by FMCA, AMCA, Florida Association of Special Districts (FASD), and mosquito control professionals across Florida led to significant revisions to these bills. The key victories include the elimination of the 10-year voter re-authorization requirement, addressing concerns about its implications for employee retention and long-term planning; the removal of the requirement for the Florida Coordinating Council on Mosquito Control (FCCMC) to establish model goals, objectives, and performance measures for mosquito control districts; and the adjustment of a mil cap on taxes from 1 mil to 2 mils. HB 7013 initially proposed the reduction of a 10 mil cap on taxes to 1 mil.

The FMCA also held their annual Fly-In conference in January 2023 at Manatee County Mosquito Control District’s new facility. For anyone unfamiliar, this unique conference focuses on the advancement of aerial mosquito control operations using both manned and unmanned aircraft.

Miami-Dade County Mosquito Control hired a new division director in December, with Dr. John-Paul Mutebi taking over for the retired Dr. William Petrie. Acting Director Dr. Isik Unlu has returned to her role as Operations Manager.

Anastasia Mosquito Control District (AMCD) in St. Augustine, Florida plans to have a grand opening ceremony of the Diseases Vector Education Center and SIT mass rearing facility, March 26 before the 19th annual arbovirus surveillance and mosquito control workshop. The workshop will be held at AMCD, March 26-28, 2024, with 80 presentations including 13 international presentations. Also, AMCD will host the CDC/NACCHO’s hurricane preparation and responding workshop, April 22-25, 2024. AMCD has been awarded a mentorship grant to provide training for a mosquito control program from South Carolina and a mosquito and vector control program from North Carolina.

The Lee County Mosquito Control District (LCMCD) has added a new Urban Field Inspector Team to focus on inspection and treatment of cryptic urban habitats. The team has been involved in several neighborhood inspection sweeps as part of the disease response protocol. LCMCD also began regularly scheduled Aedes aegypti sterile male releases in February. Currently, two weekly releases are occurring in a 450-acre area of Fort Myers. In preparation for the expanding release program, the SIT department coordinated with the Information department to create an SIT information campaign plan.

The LCMCD LiDAR Program continues to develop and grow to provide useful data for locating mosquito breeding habitats. The largest point cloud (3D coordinate system) to-date mapped a 1,200-acre section of Ding Darling National Wildlife Refuge on Sanibel Island (Figure 1). The District is partnering with the Refuge Center and the Fish and Wildlife Service to reestablish a native habitat which may prove to be an effective resource in helping control mosquitoes for the Refuge.

Since 2021 the LCMCD Field Validation department has been investigating a larval ectoparasite capable of infecting multiple mosquito genera, with a potential to cause mortality. After sending...
samples to a University of Florida microbiology lab in Gainesville, FL, the parasite was determined to be a previously undescribed species of oomycete, or water mold, in the genus Pythium. Water molds in the genus Pythium are known for their biflagellate motile spores (reproductive stage) which swim through the water to find new hosts. After achieving pure isolates to work from, it was determined that this Pythium species can be grown easily in the lab on V8 agar plates and persists growth at a wider range of temperatures than most other Py species can handle. For this and its potential larvicidal properties, it was named Pythium thermoculicivorax. While working with field collected larval samples, multiple isolates were also distinguished as novel species of the fungal genus Trichoderma. Work has yet to be done with these isolates to learn more about them.

**Puerto Rico Update from Dr. Julieanne Miranda-Bermúdez, Associate Director, Puerto Rico Vector Control Unit**

**Dengue Season in Puerto Rico: Are We Approaching an Epidemic?**

As we approach the traditional peak months of dengue transmission in Puerto Rico, case counts and positive mosquito pools are already very high. While DENV-1 has been the dominant serotype for many years, DENV-2 has overtaken it with DENV-3 close behind. The PRVCU is an independent, non-profit organization of the Puerto Rico Science, Technology, and Research Trust, and we are working very closely with the Puerto Rico Department of Health, Puerto Rico Department of Agriculture, CDC, and industry partners as we face the growing outbreak. According to data provided by the Puerto Rico Department of Health, there has reported 405 cases of dengue as of March 11, 2024. The identified serotypes include and III, that have not been present in Puerto Rico for years. A total of 245 hospitalizations were recorded, with 24 severe cases reported. Fortunately, no fatalities were associated with these cases during the specified period. Puerto Rico is over the epidemic threshold in comparison to past years.

PRVCU’s activities have mostly concentrated on preparing Puerto Rico’s municipalities and emergency management units for the looming outbreak. We have conducted training/calibration tours throughout the territory and are now introducing adulticides that, while widely used in the US against permethrin-resistant Ae. aegypti, are new to Puerto Rico.

**Key Projects and Collaborations**

Over the years, the PRVCU has spearheaded various research and implementation initiatives aimed at combatting mosquito-borne diseases:

- **Collaboration with the Puerto Rico Department of Health:** This project involves working closely with the Puerto Rico Department of Health to develop and implement strategies for responding to dengue cases at the island level. Through this collaboration, we aim to enhance surveillance, prevention, and control measures to effectively address dengue outbreaks and minimize their impact on public health.

- **The “SiScreens” Project:** Supported by funding from HUD, the “SiScreens” project focuses on evaluating the effectiveness of door and window screens in reducing the transmission of mosquito-borne viruses. By conducting rigorous assessments and field studies, we seek to determine the efficacy of screens in preventing mosquito entry into homes and mitigating the risk of mosquito-borne diseases among residents.

- **Establishment of the first international headquarters in El Salvador:** In partnership with the CDC, El Salvador Minister of Health, and the World Mosquito Program, we have established the first international headquarters in El Salvador. This initiative aims to evaluate the use of Wolbachia bacteria in mosquito control efforts. By conducting research and field trials, we aim to assess the effectiveness of Wolbachia-based strategies in reducing the transmission of mosquito-borne diseases in tropical regions.

- **Establishment of the Tropical Islands Training and Evaluation Center:** With funding from the CDC, we have established the Tropical Islands Training and Evaluation Center to enhance vector management capabilities in tropical island settings. This center serves as a hub for training programs, knowledge exchange, and the adaptation of new technologies and methods for vector control. By building capacity and sharing best practices, we aim to strengthen vector management efforts and improve public health outcomes in tropical island communities.

- **Participation in the AMCA Annual Meeting:** Since 2019, we have actively participated in the AMCA Annual Meeting, showcasing our research, innovations, and achievements in mosquito control and public health. Over the years, our team has received multiple awards and recognitions for our contributions to the field, highlighting our commitment to excellence and leadership in vector management. Through our participation in the AMCA Annual Meeting, we continue to engage with peers, exchange knowledge, and advance the field of mosquito control for the benefit of communities worldwide.

**Looking Ahead**

As we confront the escalating threat of dengue and other mosquito-borne diseases, the PRVCU remains steadfast in its commitment to safeguarding public health. With ongoing research, community outreach, and strategic collaborations, we strive to mitigate the impact of mosquito-borne illnesses on our communities.

Stay tuned for more updates on our initiatives and mark your calendars for the 2025 Annual Meeting of the AMCA, hosted by the PRVCU in sunny San Juan, Puerto Rico.
Respectfully submitted is my first update for the NC region. Thanks to Mark Clifton for his engagement and representation NC Regional Director (NCRD) over the past number of years. He has taken on a significant AMCA responsibility, that being the Chair of the Legislative and Regulatory Committee. As such, he stepped down as NCRD and I am filling in for the remainder of his term, which is about two years.

I’ll provide a bit of background for those who do not know me. I am currently serving as Director of Midland County Mosquito Control in Michigan. I have been in this position for nearly ten years. Previous to that, I served as a Medical Entomologist in the Medical Service Corps of the US Navy and retired in 2014.

I was able to meet with a number of NC region AMCA members at the conference in Dallas. I will be looking to attend local mosquito meetings in the region over the next two seasons. So please contact me about your respective districts and conferences.

Below are a few updates from the region:

THOMAS BOHM - WINNIPEG, MANITOBA - CITY OF WINNIPEG PUBLIC WORKS DEPARTMENT

In Winnipeg, we are gearing up for the 2024 season: Equipment is being serviced and our fleet is being assembled. The recruitment process has been a success and we expect a full complement of employees, seeing a slightly higher number of both retention and new applicants than previous years.

There was below average rainfall in 2023 and this past winter has seen similarly low snowfall. Although it is too early to tell, we may see an earlier start than normal, which is typically at the end of April. We will continue with our pre-hatch program and its evaluation, having found it both successful in keeping up with our larviciding activities and having noticed a reduction in our adulticiding program. We are struggling to find vendors for mosquito adulticides, and perhaps this is because we did not meet threshold limits to adulticide in 2023, and have experienced lower than normal adulticide use over the last several years. We will be conducting drone trials on several of our golf courses this season, as last season proved futile with the dry conditions. We will also be continuing to trial a new digital AI mosquito identifier to help facilitate quicker ID times and volume.

MARK CLIFTON - ILLINOIS - NORTH SHORE MOSQUITO ABATEMENT DISTRICT

The NSMAD welcomed Austin Robak as our new GIS manager. Austin has worked in the mosquito control industry for the last 5 years starting first as a GIS specialist with Clarke. We are excited to have Austin onboard to manage our GIS infrastructure.

The NSMAD would also like to welcome Dr. Kristina Lopez as our new Field Validation and Research entomologist. Dr. Lopez will be overseeing our field efficacy and resistance monitoring program. In addition, she will be maintaining a tick and tick pathogen surveillance program. Dr. Lopez brings a wealth of experience to this new role, and we are excited that she has decided to join us!

LUKE CHMIELEWSKI - ILLINOIS - SOUTH COOK COUNTY MOSQUITO ABATEMENT DISTRICT

We got two new Gators and all our district vehicles are furnished with Verizon GPS as of Tuesday. We are going to use an area of high Culex activity near railroad tracks to see if Sumilarv has any effect.

An upward trend has encouraged us in the North Central Region. “An upward trend” is often bad news in regard to mosquito control but when applied to the cooperation we are witnessing between vector and pest control programs, it is a welcome sight to see. It would be an easy task to provide several examples of those who believe in the concept that we are better when we work together. The latest collaboration between the Michigan Mosquito Control Association and the Michigan Pest Management Associations is yet another example. Leadership from each association set up their booths, sponsored, and spoke at each other’s meeting. Entomologists shared pictures from their iPhones of Sabethes cyaneus. “That is a beautiful mosquito”, was mentioned more than a few times as other gathered around to admire it. Like old lifelong friends, members from both associations were asking engaging questions from the speakers, sitting at the tables together, laughing, and having fun losing money in the casino. All in all, we were left with a better understanding of the fascinating and important work we do every day and who it is that is out there trying to make a difference for our communities. The continuing work in building bridges for a brighter future is a most welcome “trend”.

BILSTANUSZEK - MICHIGAN - SAGINAW COUNTY MOSQUITO ABATEMENT

I think worth noting is the early hatch and warm weather. As for SCMAD, looking forward to a new facility and further incorporation of extended release products in urban habitats to target Culex mosquitoes. Also expanding GIS capacity and capability through hiring a Field Technologies Coordinator to manage GIS technologies, software and establish a drone program for SCMAC. We are also looking to incorporate the AMCA Training modules into our staff training inclusive of permanent and seasonal staff.

GARY WAGNER - OHIO - CENTRAL LIFE SCIENCE/ MICHIGAN MOSQUITO CONTROL ASSOCIATION

The latest collaboration between the Michigan Mosquito Control Association and the Michigan Pest Management Associations is yet another example. Leadership from each association set up their booths, sponsored, and spoke at each other’s meeting. Entomologists shared pictures from their iPhones of Sabethes cyaneus. “That is a beautiful mosquito”, was mentioned more than a few times as other gathered around to admire it. Like old lifelong friends, members from both associations were asking engaging questions from the speakers, sitting at the tables together, laughing, and having fun losing money in the casino. All in all, we were left with a better understanding of the fascinating and important work we do every day and who it is that is out there trying to make a difference for our communities. The continuing work in building bridges for a brighter future is a most welcome “trend”.

Carl W. Doud, PhD • North Central Director

North Central Director Report

mosquito.org
Thank you to our 2024 Sustaining Members
Renew your membership today for the 2024 year!

**DISTRICTS**

- Adams County MCD
- Alameda County MAD
- Amelia Island Mosquito Control
- Anastasia MCD
- Animas MCD
- Atlantic County Office of Mosquito Control
- Beach MCD
- Beaufort County Mosquito Control
- Benton County MCD
- Broward County Mosquito Control
- Butte County MVCD
- Canyon County MAD
- Cape Cod Mosquito Control
- Citrus County MCD
- City of Lubbock Vector Control
- Clackamas County VCD
- Coachella Valley Mosquito & VCD
- Collier MCD
- Consolidated MAD
- Contra Costa Mosquito & VCD
- Copper Valley Community Services District
- Davis County MAD
- Delano MAD
- Delaware Mosquito Control Section
- East Flagler MCD
- East Side MAD
- EBRP Mosquito & Rodent Control
- Florida Keys MCD
- Florida MCA
- Fresno Westside MAD
- Greater Los Angeles County VCD
- Iberia Parish MAD
- Indian River MCD
- Jackson County VCD
- Klamath VCD
- Lake County VCD
- Lee County MCD
- Macon MAD
- Magna Mosquito Abatement
- Manatee County MCD
- Merced County MAD
- Metropolitan MCD
- Mosquito & Vector Control Association of California
- MVMD of Santa Barbara County
- North Morrow VCD
- North Shore MAD
- Northwest MAD
- Northwest Mosquito & VCD
- Orange County Mosquito and VCD
- Osceola County Mosquito Control
- Otter Creek Watershed Insect Control District
- Pasco County MCD
- Placer Mosquito & VCD
- Sacramento-Yolo Mosquito and VCD
- Salt Lake City MAD
- San Gabriel Valley Mosquito and VCD
- San Joaquin County MVCD
- San Mateo County MVCD
- Santa Clara County VCD
- Shasta Mosquito & VCD
- South Cook County MAD
- South Lake Valley MAD
- South Walton County MCD
- St. Lucie County MCD
- Sutter-Yuba MVCD
- Tangipahoa MAD
- Teton County Weed & Pest District
- Texas MCA
- Toledo Area Sanitary District
- Warren County Mosquito Commission
- West Side MVCD
- West Umatilla MCD

**INDUSTRY**

- AMGUARD Environmental Technologies
- Azelis A&ES
- Bell Textron Inc
- Central Life Sciences
- Clarke
- Envu Environmental Science
- GroPro Corp.
- Leading Edge
- London Foggers, Inc
- MGK Insect Control Solutions
- Tabula
- Target Specialty Products
- The McPherson Companies, Inc.
- Valent BioSciences LLC
- Vector Disease Control International (VDCI)
- Veseris

**REG/STATE ASSOC.**

- Georgia MCA
- Idaho MVCA
- Louisiana MCA
- Michigan MCA
- Mid-Atlantic MCA
- New Jersey MCA
- North Carolina MVCA
- Northeastern MCA
- Northwest MVCA
- Oregon MVCA
- Pennsylvania Vector Control Association
- South Carolina MCA
- Utah MCA
- Virginia MCA
- West Central MVCA

**STATE AGENCIES**

- Hawaii Dept. of Health, Environmental Services Division
- Pennsylvania Dept of Environmental Protection Vector Management