

TEXAS MOSQUITO CONTROL ASSOCIATION NEWSLETTER

Volume 43

May

2023



Salvador Rico in front of the Emily Morgan Hotel; the Spring Workshop hotel in San Antonio, TX.

Editor – William Sames

Contributors – James Garcia, Salvador Rico, and Nina Dacko



GEOSPATIAL APPROACH FOR HEALTHY COMMUNITIES

Frontier Precision provides complete office and field solutions for mapping, collecting and reporting Integrated Mosquito Management Plan activities. FieldSeeker® GIS for Mosquito Control software is designed to be the hub for all important data so it may be shared, analyzed, or updated throughout an organization.

FieldSeeker Core is a cloud-based system leveraging the Esri® ArcGIS® Online or ArcGIS Enterprise platform to provide users with simple, intuitive tools for mapping, collecting and reporting data related to mosquito control activities. Field and office users benefit from seeing a common up-to-date picture of their operations.



Copyright 2023® by Frontier Precision. All rights reserved worldwide. All other trademarks are registered or recognized trademarks of their respective owners. Trademarks provided under license from Esri.

208.324.8006 | CALL FOR A DEMO TODAY
LEARN MORE: www.frontierprecision.com/mosquito



FIELD & OFFICE SOLUTIONS
LARVICIDING | SURVEILLANCE | SERVICE REQUEST | ADULTICIDING
PUBLIC NOTIFICATION APP | UAS SALES & SERVICES | GIS PROFESSIONAL SERVICES

Table of Contents

TMCA Board of Directors, Standing Committee, Special Committee Lists	4
Message from the President.....	6
Wanted: TMCA Newsletter Editor.....	6
TMCA Administrative Notes and TMCA Dues.....	7
<i>Culex lactator</i> reported in Florida – Is Texas next?	7
TMCA Prepares for the 2024 AMCA Annual Meeting in Dallas	9
Leadership Changes in Harris and Tarrant Counties.....	11
Job Opportunities in The Woodlands Township, Montgomery County.....	12
Week 19, 2023 DSHS Mosquito-Borne Disease Update	13
TMCA Spring Workshop Held at San Antonio Botanical Garden.....	16
2023 TMCA Spring Workshop Sponsor Recognition.....	18
Membership in TMCA Committees	19
TMCA Membership Application.....	21

Advertiser Index

Azelis A&ES	20
Central Life Sciences.....	11
Clarke Mosquito Products Inc.	8
Frontier	2
VDCI.....	5
Valent Biosciences.....	14
Veseris	15

About the Cover: TMCA Treasurer, Salvador Rico provided this picture of him in front of the Emily Morgan Hotel in San Antonio, TX. This was the hotel designated by the TMCA as the Spring Workshop Hotel. The workshop was held at the San Antonio Botanical Garden.

Oct 2022-Oct 2023 Texas Mosquito Control Association Board of Directors

President	James Garcia	City of Baytown Mosquito Control, Baytown, TX
President-elect	Meagan Wise de Valdez	Texas A&M University San Antonio, San Antonio, TX
1st Vice-President	Patrick Prather	Municipal Mosquito, Richardson, TX
2nd Vice-President	Sonja Swiger	Texas A&M AgriLife Extension, Stephenville, TX
Director	Jason Pitts	Baylor University, Department of Biology, Waco, TX
Director	Colton Cooper	Azelis A&ES, Shreveport, LA
Secretary	Bethany Bolling	Laboratory Services Section, TX Dept State Health Services, Austin, TX
Treasurer	Salvador Rico	Harris County PHS Mosquito Control Division, Houston, TX
Past President	Nina Dacko	Harris County PHS Mosquito Control Division, Houston, TX
Ex-Officio	Herff Jones	AMCA South Central Regional Director, New Iberia, LA

To contact a Board member, please send an email to info@texasmosquito.org and list the person you are trying to contact, present your question or concern, and provide your name and contact information.

Oct 2022-Oct 2023 Texas Mosquito Control Association Standing Committees

Legislative	Mike Nichols, Chair	R. Duhrkopf
Membership	Mark Johnsen, Chair	M. Nichols, P. Prather, M. McNairn, S. Swiger
Program	Emily Boothe, Chair	Board of Directors
Publicity – Newsletter, Website, Social Media	Nina Dacko, Chair	W. Sames (Chair, Newsletter Subcomm), C. Steele (Chair, Website Subcomm), S. Rico (Chair, Social Media Subcomm)
Scholarship & Awards	Megan Wise de Valdez, Chair	J. Pitts, B. Bolling, S. Swiger

Oct 2022-Oct 2023 Texas Mosquito Control Association Special Committees

Auditing	Megan Wise de Valdez, Chair	M. Johnsen, P. Beebe, C. Fredregill
Constitution, By-laws & Resolutions	Jason Pitts, Chair	M. Nichols, W. Sames
Financial Support	James Garcia, Chair	J. Flosi, M. Nichols
Local Arrangements	Patrick Prather, Chair	S. Swiger, S. Rico
Nominating	Salvador Rico, Chair	R. Duhrkopf, J. Flosi
Young Professionals	Jason Fritz, Chair	Contact Chair for consideration
Mosquito Systematics, Identification, & Biology	William Sames, Chair	B. Bolling, R. Duhrkopf, J. Flosi
Workshop CEU's	Sonja Swiger, Chair	P. Prather, S. Rico



Anything is possible in 2023.
Mosquitoes are for certain. We can help.

Integrated Mosquito Management Programs For Any Need

- Public Education
- Surveillance and Disease Testing
- Larval Mosquito Control
- Adult Mosquito Control

**Mosquito experts here to help – wherever you are,
whatever you need, whenever you need it.**

Vector Disease Control International

1.800.413.4445 | vdc.net





James Garcia

Message from the President James Garcia

Hello, and welcome to Spring! A month ago, many of us convened in beautiful San Antonio for our Spring Workshop. The Emily Morgan hotel delighted attendees with its rich history and ghostly amenities. The CEU workshop was held at the Botanical Gardens, which clearly was a beautiful site of 38 acres of plants and nature harmoniously bonded. Conference attendees consisted of our active membership, industry partners, our board and committee members, and academia professors.

We're now in full swing of our integrated mosquito management mode down here on the Gulf Coast and others across the State are preparing as well. One of my favorite times of year of course, with the significant rainfalls and the challenge this presents.

With that, it's time to wonder what type of year will be in store for us regarding arbovirus and weather patterns. To date, WNV has already made its presence in samples of mosquito pools in the DFW Metroplex. Our weather forecast can be and is usually as tricky with predictions. The hurricane season forecast is average this year with an estimate of 14 named storms and half of those forecasted to be hurricanes. However, there's a developing El Nino which in theory could create the wind shear needed to lessen the intensity of major storms if shear is dominant during a storm's path. So, El Nino and higher than expected Atlantic water temps; there have been surprises over the past several years with storm intensity, though I think it's time for a break, or let's hope so!

With all the rain, you can bet there will be plenty of mosquitoes this year. Hopefully, you already have your equipment out of storage and ready to go. Don't forget to get your sprayers calibrated. It's one of those essential and regulatory requirements! Speaking of which, have you downloaded a copy of the AMCA's "Best Practices for Integrated Mosquito Management?" It is free and available at [hr november 2021 amca bmp ma.pdf \(ymaws.com\)](http://hr.november2021.amca.bmp.ma.pdf).

Let's move forward. This fall, the TMCA will host its Annual Meeting at the Embassy Suites in Corpus Christi, November 1st-3rd. More to announce for that later, but for now, I wish you all well this mosquito season. Continue to experiment, ask questions, and learn!

Wanted: TMCA Newsletter Editor

If you are interested in becoming the next Editor of the TMCA newsletter, please contact William Sames at mosquitodoctor@yahoo.com. William will continue to serve as Editor until replaced OR until December 31, 2023, whichever comes first. Since 2001, William Sames has served over 9 years as Editor or Assistant Editor of the TMCA Newsletter, and he is ready to give someone else the opportunity to release their creativity and take over the responsibilities of this publication.

TMCA Administrative Notes

Publishing in the TMCA Newsletter. The TMCA newsletter is a medium for getting information to TMCA members and content may be from TMCA officers and members. If you have information of benefit to TMCA members, please submit that information to the TMCA Editor. Newsletters are published in January, May, August, and November. Photos are also welcome. Consider submitting artwork or photos for a cover.

Advertise in the TMCA Newsletter. Advertising rates are \$50 for 8.5 x 11 inches page ad. Half page ads are \$30 (8.5 x 5.5) Submit copy ready artwork in MS Word or PDF to the TMCA Editor.

2023 TMCA Annual Meeting. The TMCA Annual Meeting will be November 1-3, 2023, at the Embassy Suites Hotel in Corpus Christi. The TMCA met at this great venue in 2016, so we are back! Event information forthcoming in August. This will include Registration, a schedule of events, a Call for Papers, Scholarship and Award Information, and how to make reservations. This information will be on the TMCA website.

2024 American Mosquito Control Association Annual Meeting. The AMCA Annual Meeting is scheduled for March 4-8, 2024, at the Sheraton Convention Center in Dallas, Texas. Information for this meeting is being finalized and will be presented in the August TMCA newsletter and at mosquito.org.

2024 TMCA Spring Workshop. The TMCA with Texas AgriLife will hold its Spring Workshop April 9-10, 2024, at the Hilton Garden Inn, Tyler, TX.

Wanted: TMCA Website Manager or Assistant Manager. Corey Steele, the current website manager, was promoted at Harris County and needs help with the input to the website. If you are interested in helping him, please contact him at corey.steele@phs.hctx.net.

Culex lactator reported in Florida – Is Texas next?

William Sames

In the August and November 2022 issues of the TMCA Newsletter, the potential spread of *Aedes vittatus* and *Aedes notoscriptus* into Texas were discussed, respectively. Little did we realize that another invasive species had moved into Florida and had become established. Florida researchers and mosquito surveillance and control personnel published the results of their discovery in the March issue of the Journal of Medical Entomology. The species, *Culex lactator*, was first found in 2018 and subsequently found in 3 counties: Miami-Dade, Lee, and Collier.

If this species established in Florida, could it establish in Texas? For similarities, the northern most collection was in Lee County, Florida, which has a similar latitude to Laredo, Texas. On that basis, it suggests that southern Texas may be suitable for *Culex lactator*, so we should be watching for it.

The publication by the Florida researchers is very informative and contains information about *Culex lactator*'s biology and how to differentiate it from similar species like *Culex quinquefasciatus*. If you do mosquito identifications in Texas, especially in southern Texas, I recommend downloading a copy of this article and becoming familiar with it. It is the best resource to help you identify this species. The citation is below, and it is a free download.

Reeves LE, Sloyer KE, Tyler-Julian K, Heinig R, Rosales A, Domingo C, Burkett-Cadena ND. 2023. *Culex (Phenacomyia) lactator* (Diptera: Culicidae) in southern Florida, USA: a new subgenus and species country record. *J Med Entomol* 60:478-486.

NATULAR® LARVICIDES

WHERE PUBLIC HEALTH MEETS PUBLIC PREFERENCESM



Unlike any other larvicide product on the market, Natular® balances efficacy and stewardship for public health mosquito control. Its active ingredient, spinosad, is the product of a naturally-derived ingredient, and has a unique mode of action that works on all four stages of instars, controlling the most common vector and nuisance mosquito species before they can bite.

And it was the first larvicide to be reviewed as a Reduced Risk product by the U.S. EPA.

Contact your local Clarke representative:

Doug Carroll, dcarroll@clarke.com, 817-600-5353



Natular® DT tablets deliver

up to 60 days of larval control and are perfectly suited for combating container breeding species that vector diseases. The innovative bi-layer tablet design releases a lethal dose quickly while the second layer dissolves slowly for extended control.

**Formulation
Spotlight**



New Natular® G30 WSP

is ideal for treating small bodies of standing water or areas up to 100 square feet. It brings user-application convenience in 10g water soluble pouches and provides up to 30 days of control.

The World Needs



Mosquito Control

www.clarke.com • 800-323-5727

TMCA Prepares for the 2024 AMCA Annual Meeting in Dallas

The 2024 American Mosquito Control Association Annual Meeting will be in Dallas, Texas, March 4-8, 2024 at the Sheraton Dallas Hotel. It will be here before you know it!

The TMCA has host responsibilities associated with supporting this event. These responsibilities will be forthcoming in April or May as the AMCA contracts with the TMCA. There will be plenty of opportunities for your involvement. Meanwhile, mark your calendar for these dates and make plans to be there. Stay tuned for more information!



Sheraton Dallas Hotel

In early March, several TMCA members attended the AMCA Annual Meeting in Reno, NV. While there, they promoted the Dallas meeting, asked questions, and got ideas on what and how we can do things next year. I look forward to hearing their lessons-learned in the coming months.

Meanwhile, here are some things that will be done in support of the meeting.

The TMCA will establish a Local Arrangements Committee to organize TMCA volunteers.

Volunteers will man a 10 x 10 booth in the Exhibit Hall to answer questions about the meeting, Texas, and the TMCA. Some needed each day.

Volunteers will help at the AMCA Registration desk. Some needed each day.

Volunteers needed in the speaker ready room as aides and session room aides. Some needed each day.

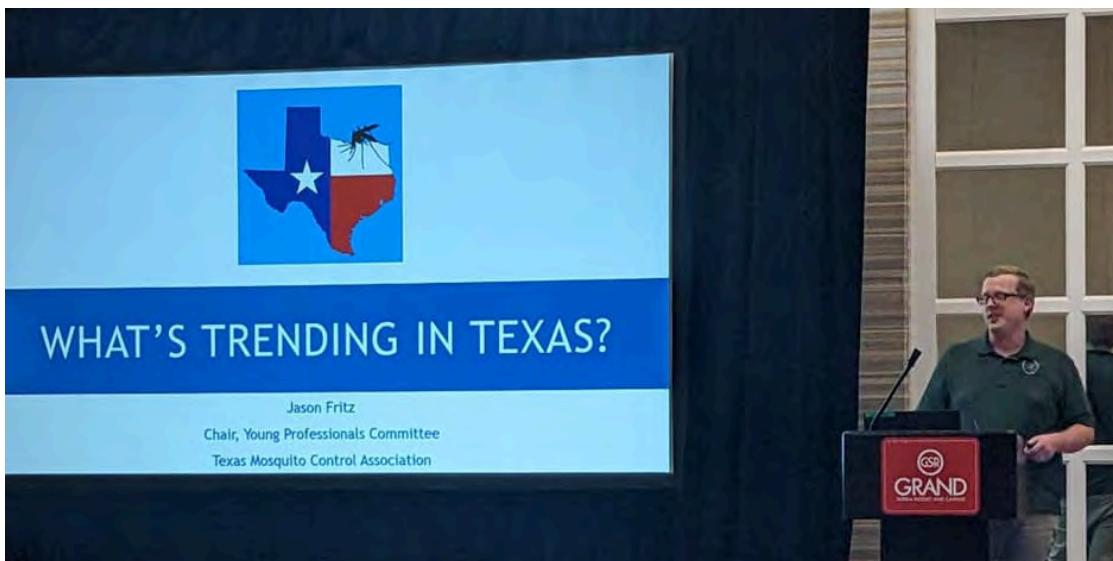
Volunteers needed to check badges as people entered the exhibit hall, banquet, and other venues. Some are needed for the event only.

Volunteers (up to 20) will receive free registration to this meeting. A good savings!

The Board of Directors is meeting in the near future to establish the Local Arrangements Committee and start getting this meeting organized! It will be fun! Plan to be there! Volunteer!



TMCA leadership at the AMCA Annual Meeting: Dr. Bethany Bolling (Secretary), James Garcia (President), Nina Dacko (Past President), Dr. Sonja Swiger (2nd Vice President), Ashley Wilson (Member from Galveston Co.), Jason Fritz (Chair, Young Professionals Committee). While at the meeting, they met people who came by their booth and discussed and promoted the Dallas AMCA Annual Meeting.



Jason Fritz, Williamson County, updating AMCA members on what's happening across social media among vector control organizations. Photos courtesy of Nina Dacko.

THE REDUCED-RISK MOSQUITO ADULTICIDE MADE FOR YOU.

THREE ZENIVEX® FORMULATIONS FOR A VARIETY OF APPLICATIONS

Designed to give mosquito control professionals operational options, Zenivex® products come in a 20% etofenprox formulation that can be used alone or mixed with oil, a 20% alternative that can be mixed with water and a 4% ready-to-use, oil-based formulation. All formulations have low toxicity with a favorable environmental profile that has earned a reduced-risk classification from the EPA. If you want quick, permanent knock-down of adult mosquitoes that is approved for use over agricultural crops and other sensitive areas, turn to Zenivex® adulticide.

For more information on Zenivex® products or to find a sales representative or authorized distributor, visit www.CentralMosquitoControl.com.



Zenivex and Aqua Zenivex are trademarks of Wellmark International.
©2021 Wellmark International



Leadership Changes in Harris and Tarrant Counties

Over the past several months, there have been several leadership changes in mosquito surveillance and control programs. The first occurred when Harris County filled its long vacant Assistant Director position. Nina Dacko, Vector Control Supervisor for Tarrant County, was chosen to fill this position in October 2022. Bethany Hambrick, a member of the Tarrant County Vector Control team, was promoted to fill the position vacated by Nina.

In Harris County, Chris Fredregill, Director, Harris County Mosquito and Vector Control Program (HCMVCP), moved to a position with Target Specialty Products. He is now serving as a Regional Vector Specialist for Target Specialty Products, providing sales consultations, technology assistance, and service in the Western Central U.S, including Texas. Dr. Max Vigilant, Technical Operations Branch Manager HCMVCP, was selected in March 2023 as the Director for the Harris County Mosquito and Vector Control Program.

Everyone is in place just in time for the mosquito surveillance and control season. We wish you the best in your new assignments!

Job Opportunities in The Woodlands Township, Montgomery County

We are in a rebuilding phase for the mosquito control program at The Woodlands Township and would love you to help spread the word to find qualified candidates for the following positions (please click green links for full job descriptions):

Senior Environmental Education Specialist - Mosquito Surveillance

This individual's primary duty is to coordinate the Township's mosquito control program focused on surveillance, RAMP testing, data analysis, larviciding, service requests, and community outreach, while collaborating with our county partners who are responsible for adulticiding. This individual also works with the rest of the Environmental Services Dept to support programming and large department events (7) and Township races (3).

1 position. Permanent, full-time, hourly, eligible for benefits, paid time off + 11 stat holidays. Apply at <https://www.paycomonline.net/v4/ats/web.php/jobs/ViewJobDetails?job=36265&clientkey=1787F8064966957E176472F17D797A00>

Senior Mosquito Surveillance Technician

This individual assists the Sr EE Specialist in conducting the mosquito control program and leads seasonal Technicians in the field. Job areas include surveillance, RAMP testing, data entry, larviciding, outreach, and research projects. This individual will also assist with Dept events/programs.

1 position, new for 2023. Permanent, part-time, hourly, paid time off + 11 stat holidays. Apply here: <https://www.paycomonline.net/v4/ats/web.php/jobs/ViewJobDetails?job=36277&clientkey=1787F8064966957E176472F17D797A00>

Mosquito Surveillance Technician - Seasonal

These individuals conduct surveillance, ID mosquitoes, enter data, larvicide, do community outreach and assist with RAMP testing.

3 positions. Seasonal, part-time, hourly. Term runs from May to the first week of December, however we will also consider college students returning to school in the fall. Apply via this link: <https://www.paycomonline.net/v4/ats/web.php/jobs/ViewJobDetails?job=36433&clientkey=1787F8064966957E176472F17D797A00>

Interested candidates should apply through the job portal (links above) and are encouraged to do so quickly, as we are trying to fill the Sr EE Specialist asap and the others soon after.

Megan McNairn, Environmental Services Manager

2023 Mosquito-Borne Disease Summary

Below are selected pages from the latest 2023 mosquito-borne disease summary from the Texas Department of State Health Services. To see the full summary or other weekly reports, please visit the DSHS website at [DSHS Arbovirus Weekly Activity Reports | Texas DSHS](https://www.dshs.texas.gov/mosquito-borne-diseases/dshs-arbovirus-weekly-activity-reports). From this page you can access previous years' summaries and compare them to 2023. These may be useful in planning your program's activities this year.



TEXAS
Health and Human
Services

**Texas Department of State
Health Services**

2023 DSHS Arbovirus Activity Report
Week #19 (ending May 13, 2023)
Report Date: May 16, 2023

Table 1. 2023 Arbovirus Activity Summary, Texas, Week 19

Arbovirus	Mosquito Pools	Avian	Veterinary	Sentinel Chicken	Human					
					Febrile Illness	Neurologic Illness	Severe Dengue	TOTAL (HUMAN)	Deaths	PVD ²
California Serogroup ¹								0		
Chikungunya								0		
Dengue					1			1		
Eastern Equine Encephalitis								0		
St. Louis Encephalitis								0		
West Nile	8							0		
Zika								0		
TOTAL REPORTS	8	0	0	0	1	0	0	1	0	0

¹California Serogroup includes California encephalitis, Jamestown Canyon, Keystone, La Crosse, snowshoe hare, and trivittatus viruses.

²PVD - Presumptive viremic blood donors are people who had no symptoms at the time of donating blood through a blood collection agency, but whose blood tested positive when screened for the presence of West Nile virus or Zika virus. Unless they meet the case reporting criteria, they are not counted as a case for official reporting purposes and are not included in the "Total (HUMAN)" column.

Note: Human mortality from arboviral conditions is aggregated and reported monthly once documentation has been received and verified.

For more detailed information about West Nile virus, including past weekly and annual reports, please visit

<https://www.dshs.texas.gov/mosquito-borne-diseases/dshs-arbovirus-weekly-activity-reports>

For more detailed information about Zika, please visit <http://www.texaszika.org/>.

Table 2. 2023 *Aedes*-Associated Arbovirus Activity by County†, Week 19

County	CHIKV		DENV		ZIKV		PVD
	M	H	M	H	M	H	
Dallas*				1			
Total Number of Reports	0	0	0	1	0	0	0

M- mosquito H- human PVD- Presumptive viremic blood donors

CHIKV - Chikungunya Virus

DENV - Dengue Virus

ZIKV - Zika Virus

*Case acquired by mosquito transmission in Val Verde County

†County level data is not reported for conditions with <5 cases reported in a year.

Note: All WNV positive mosquito pools were from Tarrant County. Very interesting data on the travel case of Dengue Fever in Dallas County. It was acquired within Texas (Del Rio, Val Verde County). That makes the control of *Aedes aegypti*, the primary vector of Dengue Fever, an important part of your program especially if you live in Texas-Mexico border counties.

The Economic Cost of Mosquito Resistance

Originally published in the
August 2022 edition of Public Health Landscape
www.publichealthlandscape.com

To account for the full economic impact of mosquito resistance, one must layer in the amount being spent on insect management and how much of that investment is lost to resistance, but also the economic impact of losses to the overarching objectives of a given program.

To calculate the impact, you must first calculate what is at risk.

According to the World Health Organization (WHO), vector borne diseases account for 17% of all infectious disease and more than 700,000 deaths annually. In this context; we research, analyze, and report on outbreak events and may consider the impact of resistance through that lens.


To do so, we must also account for variability between local and regional infrastructures, strategic and operational approaches to vector control, available technologies, the social and political climate of the areas affected, as well as surveillance activities and the quality of data coming from reporting systems, if any.

Extend this view to cross all geographies and vector borne diseases, and the complexity of calculations quickly becomes mind numbing. However, there is a simpler way to think about resistance that is even more pressing.

What is the cost of resistance when faced with a future (or imminent) epidemiological event?

What is the incremental cost of having to rely on tools that are somewhat, but not entirely ineffective?

Costs that manifest not only as dollars but also quality of life. Since the overarching objective of vector control is reducing the incidence of vector-borne disease, then any impacts of insecticide resistance on disease burden must be considered.



Veseris means greater impact for you and your community.

As demand for mosquito control services grows, pest management professionals are turning to Veseris to expand their offerings and drive business forward.

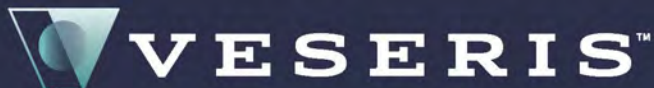
Along with mosquito control essentials and customer favorites like MasterLine Kontrol, we deliver the insight, services, and support you need — where and when you need them.

Reach out to our experts for local advice and nationwide distribution. Veseris is ready to help you get started.

Larvicides | Adulticides | Foggers | Barrier Treatment Products | And More

Learn how Veseris can positively impact your community.

Visit [PestWeb.com/markets/public-health](https://www.pestweb.com/markets/public-health) or call **800-609-9414** to speak to a rep today.

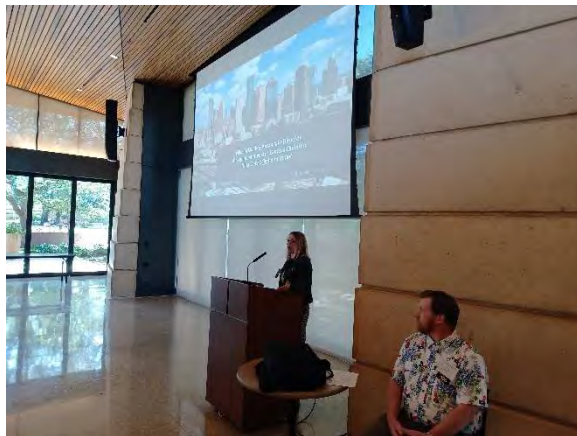


TMCA Spring Workshop Held at San Antonio Botanical Garden

The 2023 TMCA Spring Workshop, April 11-12, was held at the San Antonio Botanical Garden with the Emily Morgan Hotel across from the Alamo being the workshop hotel. Attendance was 54 with 11 vendors, and the TMCA Membership is now at 188 persons. All photos courtesy of Salvador Rico.



Salvador Rico at the Alamo; a picture of a room at the Emily Morgan Hotel.



The TMCA Board met for their quarterly meeting; Nina Dacko presented.



Attendees at the San Antonio Botanical Garden.



Vendors set up outside and all enjoyed the weather.



Dr. Bethany Bolling presented, while Patrick Prather and Dr. Sonja Swiger supervised.



Dr. Megan Wise-de-Valdez and Patrick Prather presented.



Dr. Gabe Hamer presented and a parting shot of the vendor display area.

2023 TMCA Spring Workshop Sponsor Recognition

These sponsors supported the TMCA Spring Workshop as exhibitors and sponsors of meeting events.
Consider them when choosing your products and services.

1) Azelis Agricultural & Environmental Solutions

Colton Cooper
550 Aero Lane, Sanford, FL 32771
Phone: 225-287-2120
Email: colton.cooper@azelis.com
(Exhibitor, Sponsor - Lunch)



2) Central Life Sciences

Gary Ross
P.O. Box 3432, Burleson, TX 76028
Phone: 682-300-0949
Email: gross@central.com
(Exhibitor, Contributing Sponsor)



3) Clarke

Doug Carroll
675 Sidwell Court, St. Charles, IL 60174
Phone: 817-600-5353
Email: dcarroll@clarke.com
(Exhibitor)



2023 TMCA Spring Workshop Sponsor Recognition (Continued)

These sponsors supported the TMCA Spring Workshop as exhibitors and sponsors of meeting events.
Consider them when choosing your products and services.

4) Municipal Mosquito

Patrick Prather
Richardson, TX
Phone: 972-322-7669
Email: patrick@municipalmosquito.com
(Sponsor – Hospitality Hour)

The logo for Municipal Mosquito, featuring the words "MUNICIPAL MOSQUITO" in a bold, black, sans-serif font.

5) Target-Specialty Products

Chris Fredregill, Mike Nichols
1225 N Post Oak Road, Houston, TX 77055
Phone: 713-306-0566
Email: chris.fredregill@target-specialty.com
(Exhibitor, Sponsor - Coffee/Snack Break)



6) Valent BioSciences

Candace Royals
3225 S. MacDill Ave #129-190, Tampa, FL
33629
Phone: 813-505-8852; Email:
candace.royals@valentbiosciences.com
(Exhibitor, Sponsor – Breakfast-Coffee)



7) Veseris

Keith Haas
1919 Jacintoport Blvd., Houston, TX 77015
Phone: 713-203-0436
Email: Keith.haas@veseris.com
(Exhibitor, Sponsor – Breakfast)



Membership in TMCA Committees

Interested in serving on a TMCA Committee? If yes, you may contact the Committee Chair **OR** go to the TMCA website and sign up online at <https://www.texasmosquito.org/membership-and-committees>. To join a committee, send a request to info@texasmosquito.org.



LOCAL CONTACT:
Colton Cooper
Technical Sales Rep

Colton.Cooper@azelis.com
(225) 287-2120

Target-specific, biorational solutions to achieve desired insect control while minimizing risks to other organisms and the environment.

Azelis A&ES proudly partners with Valent BioSciences to deliver innovative solutions for public health. Whether your goal is reducing vector-borne diseases or managing nuisance insects, we can help. See how our solutions help you achieve the desired control while minimizing risks to other organisms. Find the right formulation to match your application needs at AzelisAES-US.com.



Innovation
through
formulation

**Azelis Agricultural &
Environmental Solutions**

visit AzelisAES-US.com

Texas Mosquito Control Association

Membership Application

Purpose: To assist in promoting public health and comfort through the control of disease transmitting and pestiferous mosquitoes, to provide for the scientific advancement of Association members, and to stimulate public interest in mosquito control activities.

Publications: A Newsletter is published quarterly and emailed to active members. The Association web site is located at <http://www.texasmosquito.org>

TMCA Annual Fall Meeting: Held in October at an announced site within the state. Papers presented at this meeting are primarily technical reports dealing with new and improved methods of mosquito control, new insecticides, and application techniques. Basic research related to mosquito life cycles, bionomics, diseases, and natural histories are also presented. Distributors display and answer questions about their equipment and chemicals. A registration fee is required to attend.

TMCA Spring Workshop: Held each year during February, March, or April at an announced site within the state. This is a basic training workshop on the operational aspects of mosquito control. Topics include general mosquito biology, mosquito borne diseases, sampling and surveillance techniques, methods of mosquito control, public relations, equipment maintenance, chemicals and chemical safety, record keeping, administrative problems, and advanced operational training in calibration, droplet size determination, mosquito identification, and surveillance devices and techniques. Distributors are present to display and demonstrate their products. Registration is free, and several meals are usually provided by the TMCA to help reduce costs to attendees.

CEU's: CEU's for the Texas Department of Health Vector Control Certified Applicator License are offered at the Spring Workshop. Fees are \$20 per hour of CEU requested for non-members, free to all TMCA members. A copy of the TDA regulations can be downloaded from the TMCA web site at <http://www.texasmosquito.org>

Annual Dues: Dues are payable on a calendar year basis. Active Memberships are \$30 per year, and Supporting Memberships are \$60 per year.

Name: _____ Date: _____

Affiliation: _____ Position: _____

Work Mailing Address: _____

City & State: _____ Zip: _____

Phone: _____ Fax: _____ Email: _____

Membership type applied for: Active (\$30): _____ Sustaining (\$60): _____

Make check payable to: Texas Mosquito Control Association

Return application & remittance to: Dr. Mark Johnsen,
Chair, TMCA Membership Committee
10213 Buckwood Ave
El Paso, Texas 79925

Phone: 979-595-7711 Email: TMCAmembership@gmail.com