

2023

**West Central Mosquito
And Vector Control
Association**

49th Annual Meeting



**Hilton Garden Inn
St. George, Utah
February 7-9, 2023**

2023 WCMVCA Officers

Broox Boze, President

Tim Moore, President Elect

Scott Bradshaw, Past President

Gary Hatch, Treasurer

Tom Janousek, Secretary

Elizabeth VinHatton, Executive Board Member

Michael Lamere, Executive Board Member

Loren Cunnington, Executive Board Member

Levi Zahn, Executive Board Member
AMCA West Central Director



2022-2023
Vendor and Sustaining Members

AMGARD Environmental Products
Azelis A&ES
Central Life Sciences
Clarke Mosquito Control
Co-Diagnostics, INC.
Fleettrack GPS
Frontier Precision
Leading Edge
Target Specialty Products
Valent Biosciences
Van Diest Supply Company
Vector Disease Control International
Veseris

PROGRAM OVERVIEW

Tuesday February 7th

- 1:30-5:00 PM Pre-Conference Workshop
Drone Demonstration
Sponsored by **VDCI**
- 6:00-7:00 PM WCMVCA Board Meeting

Wednesday February 8th

- 7:00 AM Registration
Sponsored by **TARGET**
- 7:00 AM Breakfast
Sponsored by **CLARKE**
- 7:30 AM Exhibitors/Vendors Display Open
- 8:30 AM Morning General Session
- 10:00 AM Break – Sponsored by
CO-DIAGNOSTICS, INC.
- 10:30 AM Morning General Session Cont.
- 12:00 PM Lunch – Sponsored by
VALENT BIOSCIENCES
- 1:15 PM Afternoon General Session
- 2:10 PM Break – Sponsored by
FRONTIER PRECISION
- 2:40 PM Afternoon General Session Cont.
- 4:05 PM Adjourn

Thursday February 9th

- 7:00 AM Registration
- 7:00 AM Breakfast
Sponsored by **AZELIS A&ES**
- 8:30 AM Morning General Session
- 10:00 AM Break
Sponsored by **VESERIS**
- 10:30 AM Mid-Morning General Session
- 12:00 PM Meeting Adjourns

Submission of Presentations

Audio Visual organizer: Joel Shegrud
Davis County Mosquito Abatement District

**Tuesday, February 7th
Workshop**

Moderator: Tim Moore

Grand River Mosquito Control District
Grand Junction, CO

1:30-5:00 Pre-Conference Workshop

Drone Demonstration by



Workshop at:
Southwest Mosquito Abatement District
1460 S. Sandhill Drive
Washington, UT 74780

Sponsored by:

Vector Disease Control International

6:00-7:00 WCMVCA Board Meeting

Wednesday, February 8th
MORNING GENERAL SESSION
Moderator: Broox Boze
WCMVCA President

- 7:00 Registration
 Sponsored by Target Specialty Products
- 8:30 **Opening Comments**
- 8:35 **Welcome Address** – Victor Iverson.
 Washington County Commissioner.
 St. George Utah.
- 8:45 **Keynote Speaker:**
 The Natural History of Mosquitoes.
 Lawrence E. Reeves. Florida Medical
 Entomology Laboratory. Vero Beach, FL.
- 9:15 **AMCA Update** - Levi Zahn. West Central
 Regional Director. AMCA.
- 9:30 **The Impact of New Pesticide
 Regulations to Protect Endangered
 Species.** Daniel Markowski. Technical
 Advisor. AMCA.
- 9:40 **Update of Vector-Borne Diseases in Utah.**
 David Blodgett. Utah Public Health
 Department. St. George, UT.
- 9:50 **Vendor Introductions:**
 Loren Cunnington. WCMVCA Board
 Member. Industry Representative.
- 10:00 **Morning Break**
 Sponsored by Co-Diagnostics, INC.
- Slideshow Provided by
 Southwest Mosquito Abatement District

- 10:30 **Effect of Incandescent Light on Collection of WNV Vectors Using CDC Miniature Light Traps.** Broox Boze. Technical Director, Vector Disease Control International. Fort Collins, CO.
- 10:40 **Utility and Methods for Assessing Vector Competency.** Nathaniel Byers. ORISE Fellow, Centers for Disease Control. Fort Collins, CO.
- 10:55 **The Mystery of IGRs.** Loren Cunnington. Central Life Sciences. Fort Collins, CO.
- 11:10 **The Quest for Ticks in Utah.** Hannah Rettler. Utah Department of Health and Human Services. Salt Lake City, UT.
- 11:25 **Public Relations and Outreach Activities for Mosquito Control in the West Central Region.** Scott Bradshaw. Tooele Valley Mosquito Abatement District. Tooele, UT.
- 11:35 **Citizen Science and NASA's Mosquito Habitat Mapper Program.** Rusty Low. Institute for Global Environmental Strategies. Denver, CO.
- 11: 45 **Mosquito Control, Native Pollinators, and Managed Bee Populations.** Amanda Barth. Rare Insect Conservation Project Lead. Utah State University. Logan, UT.
- 12:00 **Lunch**
Sponsored by Valent Biosciences

Wednesday, February 8th
AFTERNOON GENERAL SESSION
Moderator: Levi Zahn

- 1:15 **Dynamic Aerial Oviposition by *Sabethes chloropterus* Mosquitoes: A Detailed Analysis of Targeting and Success as Impacted by Hole Size and Orientation.** Nicola Costello-Zaragoza. Metropolitan State University. Denver, CO.
- 1:25 **High Elevation Mosquito Studies in Southern Utah.** James Pollard. Southern Utah University. Cedar City, UT.
- 1:35 **Application of the Hemotek® Membrane Feeding System in Hematophagous Insect Colony Establishment and Behavioral Bioassay Development.** Peyton Navarro. Metropolitan State University. Denver, CO.
- 1:45 **Skip Oviposition by the Neotropical Jungle Mosquito *Sabethes chloropterus* Influenced by Ovisite Attractants.** Ray Blons and Tucker Payne. Metropolitan State University. Denver, CO.
- 2:00 **Duet HD Aerial Trials at Salt Lake Mosquito Abatement District.** Ryan Arkoudas and Andrew Rivera. Clarke Mosquito Control. Logan, UT.
- 2:10 **Afternoon Break**
Sponsored by Frontier Precision

- 2:40 **Polymerase Chain Reaction (PCR) Mosquito Testing in South America, the Caribbean, and the United States.** Denny Crockett. Director of Commercialization, Co-Diagnostics. Salt Lake City, UT.
- 2:55 **You'll Need a lot of Male Mosquitoes for That!" A Live-Narrated MosquitoMan Film on Mosquito Factories and Epic Mass-Release Trials of Mosquito Control by Exploitation of their Monogamous Behavior.** Robert Hancock. Metropolitan State University. Denver, CO.
- 3:25 **Collaboration Partnerships: The Key to Wildlife Conservation and Human Safety in a Rapidly Growing Urban Community.** Christian Edwards. Utah Division of Wildlife Resources. St. George, UT.
- 3:40 **Current Progress on Developing Endectocides to Control West Nile Virus.** Brian Foy. Colorado State University. Fort Collins, CO.
- 3:55 **New Technologies: Calibration Calculator and Characterization Cloud Applications.** Beth Ranson. Valent Biosciences. Florida Keys, FL.
- 4:05 Adjourn Wednesday General Session

Thursday, February 9th
MORNING GENERAL SESSION
Moderator: Scott Bradshaw

- 7:00 **Breakfast**
Sponsored by Azelis A&ES
- 8:30 **Morning Introductions and Announcement**
- 8:35 **Children of the Corn: Using Unmanned Aircraft to Fight Demons.** Piper Kimball.
Leading Edge Technologies. Port Orange, FL
- 8:50 **Barcoding Blood Meals: New Insights on Mosquito Host Associations.** Lawrence E. Reeves. Florida Medical Entomology Laboratory. Vero Beach, FL.
- 9:20 **Overview of the CDC Bottle BioAssay Kit Program.** Janet McAllister. Research Entomologist, Centers for Disease Control. Fort Collins, CO.
- 9:35 **Low-label applications of Malathion for Adult Mosquito Control.** Chris Lesser. Director, Manatee County Mosquito Control. Palmetto, FL.
- 9:50 **Insecticidal Particles as Larvicides and Oviposition Deterrents.** Lee Cohnstaedt. Kansas State University, United States Department of Agriculture. Manhattan, KS.
- 10:00 **Morning Break**
Sponsored by Vesperis

Thursday, February 9th
MID-MORNING GENERAL SESSION
Moderator: Tom Janousek

- 10:30 **Interactions between Health Departments and Mosquito Control Districts.** David Blodgett. Utah Public Health Department. St. George, UT.
- 10:45 **Virgin River Program: Cooperation for Conservation.** Steve Meisner. Washington County Water Conservancy District. St. George, UT.
- 11:00 **Web GIS – How a Single Source of Information Benefits Your Organization.** Tyler McGarrity. Frontier Precision. Corvallis, OR.
- 11:15 **Flood Plain Mapping of the Missouri River Near Williston North Dakota.** Levi Zahn. Williston Vector Control District. Williston, ND.
- 11:25 **Fleettracking/Asset Management Solutions.** Brian Hugie. Fleettrack GPS. St. George, UT.
- 11:35 **Analysis of *Culex* Peak Activity in Northern Colorado.** Broox Boze. Vector Disease Control International. Fort Collins, CO.
- 11:45 **Mosquitoes in Phoenix.** Tom Janousek. Pest Consulting Services. Omaha, NE.
- 12:00 **ADJOURN**

This meeting is made possible due to the generous support of these sponsors:

Pre-Conference Workshop



Registration



Program



Wednesday Breakfast



Wednesday Morning Break



Wednesday Lunch



Wednesday Afternoon Break



Thursday Breakfast



Thursday Morning Break



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Past Presidents

1975 -- Louis Ogden, Colorado
1976 -- Donald Forcum, Wyoming
1977 -- Fred Malone, New Mexico
1978 -- Harold Butterfield, Nebraska
1979 -- John Lloyd, Wyoming
1980 -- Jay Linam, Colorado
1981 -- Garth Graves, New Mexico
1982 -- Bruce Francy, Colorado
1983 -- Everett Spackman, Wyoming
1984 -- William Rapp, Jr. Nebraska
1985 -- Donald Forcum, Wyoming
1986 -- Gerald Hollandsworth, Colorado
1987 -- Curtis Montman, New Mexico
1988 -- Chester Moore, Colorado
1989 -- Kenneth Minson, Utah
1990 -- Kenneth Conright, Colorado
1991 -- Gary Maupin, Colorado
1992 -- Jim Harrison, Colorado
1993 -- Sammie Dickson, Utah
1994 -- Fred Holbrook, Wyoming
1995 -- Eugene Mortimer, New Mexico
1996 -- Pamela Reynolds, New Mexico
1997 -- C. Mills Reeves, Jr., Texas
1998 -- Wayne Kramer, Nebraska
1999 -- Joseph Targehetta, New Mexico
2000 -- Gary Hatch, Utah
2001 -- Mike McGinnis, Colorado
2002 -- Brad Asay, Wyoming
2003 -- Monte Deatrich, Colorado
2004 -- Evan Lusty, Utah
2005 -- Tom Janousek, Nebraska
2006 -- Mike Doyle, Colorado
2007 -- Robert Brand, Utah
2008 -- Janet McAllister, Colorado
2009 -- Keith Wardlaw, Wyoming
2010 -- Tony Stilwell, Colorado
2011 -- Brian Hougaard, Utah
2012 -- Kristine Bennett, Colorado
2013 -- Zane McCallister, Colorado
2014 -- Janine Runfola, Colorado
2015 -- Jessica Schurich, Colorado
2016 -- Stephanie Whitman, Wyoming
2017 -- Francis Bosch, North Dakota
2018 -- Marshall Lipps, Colorado
2019 -- Ary Faraji, Utah
2020-2021 -- Scott Bradshaw, Utah
2022 -- Broox Boze, Colorado

See you at the 50th Annual Meeting in



**COLORADO
SPRINGS**

Dates and Venue TBD

Check our website for updates

westcentralmosquitoandvector.org