# Florida Mosquito Control Association 2022 Dodd Short Courses

January 31-February 3, 2022



Hilton University of Florida Conference Center Gainesville

1714 SW 34th Street Gainesville, Florida 32607

# **Course Times**

AM:

8:00 - 9:30 CLASS 9:30 - 10:00 BREAK 10:00 - 11:30 CLASS

LUNCH (Not Provided) 11:30AM -1:30PM

PM:

1:30 - 3:00 CLASS 3:00 - 3:30 BREAK 3:30 - 5:00 CLASS

The blacked-in calendar slots are the days and time periods the courses will be taught. In the example provided below, the class would meet Tuesday 1:30pm - 5:00pm, all day Wednesday, and from 8:00am - 11:30am on Thursday.

	MON 1/31	TUES 2/1	WED 2/2	THUR 2/3	FRI 2/4
AM					
PM					

# **Course List**

Aerial 101

Advanced Aerial\*

Advanced Medical Entomology

Advanced Mosquito Control (Advanced Inspector)

Arbovirus Detection in Mosquito Pools: Approaches

and Considerations

Aquatic Plants of Natural and Manmade Waterbodies\*

**Aquatic Weed Control** 

Basic Insecticide Resistance Testing Using the CDC

**Bottle Bioassay** 

Basic Mapping and Cluster Analysis in QGIS\*

Best Communication Practices for Your Program's

Public Image

Best Practices in Outreach Education

Chemical Spill Response Training

Commissioner's Caucus

Director's Caucus

**Domestic Inspections** 

Equipment Roundup & New Technologies for Mosquito Control

Fostering Relationships Between Mosquito Control and Beekeepers

Identification of Adult Mosquitoes of Florida

Identification of Larval Mosquitoes of Florida

**Interpreting Pesticide Labels** 

Introduction to Mosquito-Borne Arboviruses in Florida

Introduction to Mosquito Control (Online!)

Larvicides, Larviciding, and Resistance Management\*

Mixing, Calibrating, and Recording Pesticides\*

Other Dipterans of Public Health Importance in Florida\*

Sentinel Chicken Disease Surveillance

Sterile Insect Technique for Mosquito Control\*

Ticks and Tick-Borne Diseases\*

<sup>\*</sup>New Courses

# Agenda at a Glance

	COURSE	M (Ja	n-31)	T (Fe	eb-1)	W(Fe	eb-2)	TH (F	eb-3)
		AM	PM	AM	PM	AM	PM	AM	PM
Α	Aerial 101					Α			
В	Advanced Aerial						В		
С	Advanced Medical Entomology			(					
	Advanced Inspector/Advanced			l .		-	ļ.		
D	Mosquito Control					D			
Е	Arbovirus Detection in Mosquito		Е						
	Aquatic Plants of Natural and							_	
F	Manmade Waterbodies							F	
G	Aquatic Weed Control				(	3	•		
Н	Basic Insecticide					Н			
	Basic Mapping and Cluster								
'	Analysis QGIS								
	Best Communication Practices for								
J	Your Program's Public Image				J				
K	Best Practices in Outreach					ŀ	<		
L	Chemical Spill Response Training			ı	_				
М	Commissioner's Caucus								1
N	Director's Caucus							1	١
0	Domestic Inspections			(	)				
Р	Equipment Roundup & New				Р		<b>D</b>		
	Technologies								
0	Fostering Relationships Between						3		
Q	MC and Beekeepers						≺		
R	Identification of Adult Mosquitoes			F	₹				
S	Identification of Larval							S	
T	Interpreting Pesticide Labels		Т						
U	Intro to Mosquito Borne		U						
	Arboviruses in Florida		U						
V	Larvicides, Larviciding, and							V	
	Resistance Management							v	
W	Mixing, Calibrating, and Reporting								w
	Pesticides								•
X	Other Dipterans of Public Health							<b>\</b>	
	Importance in Florida							Í	`
Υ	Sentinel Chicken Disease			`	<b>Y</b>				
Z	Sterile Insect Technique for						Z		
	Mosquito Control								
AA	Ticks and Tick Borne Diseases					Α	A		
Rev 1	Aquatic Plant Control (APC): Gener						Rev 1		
Rev 2	APC: Labels, Calib., and Application								Rev 2
Exam 1	Advanced	Mosquite	Control	<u> Exam : F</u>	riday 2/4	4 8-12 PI	<u>M</u>		

# **COURSE A**

#### Aerial 101

INTENDED AUDIENCE: Mosquito control employees from programs without aircraft or those who do not work with aircraft.

PREREQUISITES: None

COURSE DESCRIPTION: This course provides an introduction to the use of aircraft in mosquito control and will cover the following topics: history, aircraft types, importance of correct droplet size, comparing larviciding and adulticiding, and larvicide and adulticide products.

CEUs: 1.5 Aerial and 1.5 CORE 487 or CORE 482

CONTACT: Mark Latham, Retired Director--Manatee County Mosquito Control District | manateemcd@aol. com

	MON 1/31	TUES 2/1	WED 2/2	THUR 2/3	FRI 2/4
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# **COURSE B**

#### **Advanced Aerial**

INTENDED AUDIENCE: Mosquito control employees who have at least a basic understanding of the science of aerial application.

PREREQUISITES: Must have completed Aerial 101 course or have a position participating in the aerial application by their District/employer.

COURSE DESCRIPTION: This course provides a deeper look into the science of aerial application and will include the following: a discussion of operational setups/parameters, impacts of prevailing meteorology on spray movement, computer modeling to predict droplet movement and estimation of offsets, effects of habitat/vegetative canopies on spray particle movement, and basic approaches to spray trial setups. CEUs: 1.5 Aerial and 1.5 CORE 487 or CORE 482

CONTACT: Mark Latham, Retired Director--Manatee County Mosquito Control District | manateemcd@aol. com

	MON 1/31	TUES 2/1	WED 2/2	THUR 2/3	FRI 2/4
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# **COURSE C**

#### **Advanced Medical Entomology**

INTENDED AUDIENCE: Open to all mosquito control personnel

PREREQUISITES: Completion of the Introduction to Mosquito Control course

COURSE DESCRIPTION: This is a four-year rotating course (Advanced Medical Entomology A through D) which covers arthropods of public health importance, vector-borne diseases, and related topics. In Advanced Medical Entomology A (2022), students will learn about and discuss the following topics: Chagas disease, bed bugs, myiasis, lice, mites, scabies, and Ekbom's syndrome. Course material is presented using PowerPoint presentations and class discussions.

CEUs: 6 Public Health

CONTACT: Dr. Eva Buckner, University of Florida, Institute of Food and Agricultural Sciences Florida Medical Entomology Laboratory | eva.buckner@ufl.edu

	MON 1/31	TUES 2/1	WED 2/2	THUR 2/3	FRI 2/4
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# **COURSE D**

#### **Advanced Mosquito Control**

INTENDED AUDIENCE: This 3 ½ day course is intended for students who are seasoned mosquito control professionals with a minimum five years on the job experience.

PREREQUISITES: Completion of Introduction to Mosquito Control.

COURSE DESCRIPTION: Students of this course will be presented with information leading to increased knowledge of advanced techniques of mosquito control operations including the following: IPM, Federal & State laws and regulations, mosquito borne diseases, mosquito surveillance and ID, mosquito control chemistries and modes of action, chemical safety, and mathematics used in the industry. This course will not provide students with all materials necessary to pass the Advanced Mosquito Control exam; students will also need the benefit of real-world experiences working in mosquito control operations for passage of the examination. Exam is not required.

CEUs: 6 Public Health and 6 CORE 487 or CORE 482

CONTACT: Dr. Shelley Whitehead, Manatee County Mosquito Control District | shelley.whitehead@manateemosquito.com

 $Christopher Lesser, Manatee County \, Mosquito \, Control \, District \, | \, Christopher. \\ lesser@manateemosquito.com$ 

	MON 1/31	TUES 2/1	WED 2/2	THUR 2/3	FRI 2/4
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# **COURSE E**

# Arbovirus Detection in Mosquito Pools: Approaches and Considerations

INTENDED AUDIENCE: Anyone interested in learning about virus detection strategies and methods (i.e. district managers, laboratory managers, biologists, and lab technicians of mosquito control districts, universities, and other agencies).

PREREQUISITES: None

COURSE DESCRIPTION: This course will cover key topics of arbovirus detection in mosquito pools including basic virology, assays, workflow strategies, laboratory capacity-building, and results interpretation. The information covered will be basic enough to appeal to a wide audience, but technical enough to assist attendees in making informed decisions when implementing new or improving existing arbovirus detection programs based on target pathogens, number of expected specimens, and personnel and laboratory capacity.

CEUs: 3 Public Health

CONTACT: Kristy Burkhalter, Centers for Disease Control and Prevention | ktb3@cdc.gov

	MON 1/31	TUES 2/1	WED 2/2	THUR 2/3	FRI 2/4
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#### **COURSE F**

#### Aquatic Plants of Natural and Manmade Waterbodies

INTENDED AUDIENCE: This course is for mosquito control personnel whose job responsibilities involve aquatic weed control and associated mosquito management, community outreach, and/or customer service.

PREREQUISITES: None

COURSE DESCRIPTION: Course topics will include an overview of aquatic plants commonly found in Floridian lakes, ponds, ditches, and canals. Aquatic plant habitat types, growth forms, non-native and/or invasive status, and their identification key will be presented. Some of the plants will be discussed in their association with mosquito larvae and control. Discussion will include the impacts of aquatic plants on non-point source pollution, followed by a Q&A session and open forum discussion.

CEUs: 1.5 Aquatic Pest Control and 1.5 CORE 487 or CORE 482

CONTACT: Dr. Hyun Jung Cho, Bethune-Cookman University | choh@cookman.edu Joseph Faella, Brevard County Mosquito Control District | joseph.faella@brevardfl.gov

	MON 1/31	TUES 2/1	WED 2/2	THUR 2/3	FRI 2/4
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# **COURSE G**

#### **Aquatic Weed Control**

INTENDED AUDIENCE: This course is for mosquito control personnel whose job responsibilities require them to be certified in the Aquatic Weed Control category.

PREREQUISITES: None

COURSE DESCRIPTION: This course will cover aquatic plant identification, IPM in aquatic, right-of-way and natural areas, and aquatic herbicide resistance. Approximately 85 plant species will be discussed. IPM case studies will be covered. Resistance topics will include modes of action and options for alternating modes of action for resistance management.

CEUs: 11 Aquatic Weed

CONTACT: Dr. Lyn Gettys, University of Florida | Igettys@ufl.edu

	MON 1/31	TUES 2/1	WED 2/2	THUR 2/3	FRI 2/4
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# **COURSE H**

# Basic Insecticide Resistance Testing Using the CDC Bottle Bioassay

INTENDED AUDIENCE: Beginners to insecticide resistance testing, both lab and administrative personnel.

PREREQUISITES: None

COURSE DESCRIPTION: This ½ day course will present the basic phenotypic assay for detecting insecticide resistance. How to perform the test, what the test is measuring, and how it differs from other tests will be covered. In addition to data analysis, some discussion of next steps to take if resistance is discovered will be incorporated.

CEUs: 3 Public Health

CONTACT: Dr. Casey Crockett, ADAPCO | ccrockett@myadapco.com

	MON 1/31	TUES 2/1	WED 2/2	THUR 2/3	FRI 2/4
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### **COURSE I**

#### Basic Mapping and Cluster Analysis in QGIS

INTENDED AUDIENCE: Any personnel interested in learning the basics of QGIS.

PREREQUISITES: None

COURSE DESCRIPTION: This course will cover GIS functions useful for map creation and mosquito control data visualization focused on vectors important to human/veterinary health using the free, open-source software package QGIS. Students will perform data importation, visualization, and map construction. Students will be provided data from weekly mosquito control trap collections, and will install QGIS on their computers accessed through a course folder provided by the instructors. QGIS is a well-documented open-source GIS platform and provides an alternative GIS platform for personnel who do not have access to an ArcGIS license. This course is a hands-on workshop approach, and will require students to bring their own laptops.

CEUs: 6 CORE 487 or 6 CORE 482

CONTACT: Dr. Lindsay Campbell, Florida Medical Entomology Laboratory, Department of Entomology & Nematology, IFAS, University of Florida | Icampbell2@ufl.edu

Dr. Narayani Barve, Department of Natural History, University of Florida

	MON 1/31	TUES 2/1	WED 2/2	THUR 2/3	FRI 2/4
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# **COURSE J**

### Best Communication Practices for Your Program's Public Image

INTENDED AUDIENCE: This course is for mosquito control personnel who may be interested in contact with the public, who may work with print and broadcast media, who present informative presentations to community groups, and those who wish to ensure the public has a more complete understanding of the role individuals play in mosquito control.

PREREQUISITES: None

COURSE DESCRIPTION: The course includes guidance on how to create consistent and fact-based messaging to build trust and confidence in mosquito control. Coursework covers: developing your message house for mosquito control, using hard and soft facts to make the case for mosquito control, new methods for delivering messages to your community, how to be a more effective spokesperson, educating your public and dispelling myths, improving your writing style to effectively communicate information in a low-attention world, handling adversarial questions, and developing community advocates.

CEUs: 2 Public Health and 1.5 CORE 487 or CORE 482

CONTACT: Laura McGowan, The McGowan Group | laura@mcgowansonline.com Robin King, Collier Mosquito Control District | rking@cmcd.org

	MON 1/31	TUES 2/1	WED 2/2	THUR 2/3	FRI 2/4
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# **COURSE K**

#### **Best Practices in Outreach Education**

INTENDED AUDIENCE: Anyone interested in enhancing or improving their agency's educational outreach program.

PREREQUISITES: None

COURSE DESCRIPTION: This 1-day course will provide participants an opportunity to learn about and share ideas related to community outreach events, social media ideas, and presentation programs. Participants are encouraged to bring examples of materials used in tabling displays or anything outreach related, including handouts and giveaways used, to share with the group. Participants are also encouraged to bring examples of materials used in classrooms, educational activities, and hand-outs used for outreach to share with the group. The course will provide a review of a variety of resources available to spark ideas. CEUs: None

CONTACT: Jillian Meek, Pasco County Mosquito Control District | jmeek@pascomosquito.org

	MON 1/31	TUES 2/1	WED 2/2	THUR 2/3	FRI 2/4
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# **COURSE L**

#### **Chemical Spill Response Training**

INTENDED AUDIENCE: Government employees and first responders. Federal law requires annual emergency response training for all employees who may respond to a chemical spill, regardless if employed by the private sector or local government. For the training to qualify, it must review specific topics as specified by OSHA and EPA. This course fulfills those requirements.

PREREQUISITES: None

COURSE DESCRIPTION: This class meets the requirements under both OSHA and EPA for responding to chemical release. This is a certification course. Topics covered include the following: review of OSHA, EPA, and DOT rules governing spills; hazard assessment; spill reporting requirements, PPE, toxicology and chemical hazards, spill containment procedures/materials, decontamination, waste disposal, and review of recent incidents. All students completing the course will receive documentation indicating they are qualified to respond to chemical release.

CEUs: 4 CORE 487 or 4 CORE 482

CONTACT: Chris Pappas, Sigma Consulting and Training, Inc. | chris@sigmatrainingservices.com

	MON 1/31	TUES 2/1	WED 2/2	THUR 2/3	FRI 2/4
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# **COURSE M**

#### Commissioner's Caucus

INTENDED AUDIENCE: Mosquito control commissioners or trustees.

PREREQUISITES: None

COURSE DESCRIPTION: This course will present topics of interest to mosquito control commissioners. These topics may include, but will not be limited to, commissioner responsibilities, personnel issues including compensation and performance evaluations, reporting requirements, audits, board meeting organization and conduct, arbovirus updates, and other issues. Commissioners are encouraged to suggest topics and speakers to the commissioner contact.

CEUs: None

CONTACT: Phil Goodman, Florida Keys Mosquito Control District | goodmanpl@aol.com

	MON 1/31	TUES 2/1	WED 2/2	THUR 2/3	FRI 2/4
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# **COURSE N**

#### **Director's Caucus**

INTENDED AUDIENCE: This course is for mosquito control directors, assistant directors, administrators, and senior staff.

PREREQUISITES: None

COURSE DESCRIPTION: This course is a discussion of current issues that are impacting mosquito control in Florida. The course will provide a few presentations on the current topics and follow a discussion format that allows a free interchange of ideas.

CEUs: None

CONTACT: Sherry Burroughs, Indian River Mosquito Control District | s.burroughs@irmosquito2.org

	MON 1/31	TUES 2/1	WED 2/2	THUR 2/3	FRI 2/4
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# **COURSE O**

#### **Domestic Inspections**

INTENDED AUDIENCE: This course is for mosquito control personnel whose job responsibilities involve domestic inspections and associated mosquito management, community outreach, and/or customer service.

PREREQUISITES: None

COURSE DESCRIPTION: This course will be taught at the beginner to intermediate level, but all levels are welcome. Topics will include an overview of domestic mosquitoes, diseases and habitats of concern; inspection criteria and typical findings; common sources of mosquito production; and adult trapping and larval treatment considerations. A case study format will be presented to simulate a typical response to a human case notification by the Department of Health, and all course concepts will be applied in a handson field activity on hotel grounds, followed by a Q&A session and open forum discussion.

CEUs: 3 Public Health and 3 CORE 487 or CORE 482

CONTACT: Mike Buono | michael.buono@brevardfl.gov

Steve Whitt | steven.whitt@brevardfl.gov

Jonathan Koagel | jonathan.koagel@brevardfl.gov

Joseph Faella | joseph.faella@brevardfl.gov

	MON 1/31	TUES 2/1	WED 2/2	THUR 2/3	FRI 2/4
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# **COURSE P**

#### Equipment Round up and New Technologies for Mosquito Control

INTENDED AUDIENCE: Anyone interested in various equipment and willing to discuss it with other participants. Individuals who routinely maintain, modify, or fabricate their own equipment for mosquito control.

PREREQUISITES: Basic mechanical, fabrication, or calibration knowledge.

COURSE DESCRIPTION: Opportunity for mosquito control personnel to show off their equipment and/or ideas for improving equipment. This is a great way for mechanics and equipment specialists to discuss the equipment they use to increase efficiency in their program. Participants are strongly encouraged to bring equipment they have designed, fabricated or modified, as well as photos, drawings, and parts lists. The course will take place outside in the parking lot. There is a coveted trophy involved for the winning program who has the best equipment or innovations.

CEUs: 6 CORE 487 or CORE 482

CONTACT: CJ McCutcheon, Pasco County Mosquito Control District | cmccutcheon@pascomosquito.org

	MON 1/31	TUES 2/1	WED 2/2	THUR 2/3	FRI 2/4
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# **COURSE Q**

# Fostering Relationships Between Mosquito Control and Beekeepers

INTENDED AUDIENCE: Open to all mosquito control personnel

PREREQUISITES: None

COURSE DESCRIPTION: This course is intended to give the attendee a basic understanding of honey bees, beekeeping, apiary inspection, and how to approach local problem solving between mosquito control and beekeepers by utilizing communication strategies. Students will receive handouts with resources which they can further utilize for themselves or distribute to their beekeepers (UF EDIS Documents, Apiary Inspection information, pertinent contact information, etc.). This year's course will include a tour of the University of Florida's Honey Bee Research and Extension Laboratory.

CEUs: 6 Public Health

CONTACT: Caitlin Gill, FDACS | Caitlin.Gill@FDACS.gov

	MON 1/31	TUES 2/1	WED 2/2	THUR 2/3	FRI 2/4
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# **COURSE R**

### Identification of Adult Mosquitoes

INTENDED AUDIENCE: Individuals whose job requires identification of adult mosquitoes as part of research or vector surveillance, or those whose job will be enhanced by the ability of being able to identify adult mosquitoes.

PREREQUISITES: None, although basic knowledge of mosquito anatomy and familiarity with a stereomicroscope would be helpful.

COURSE DESCRIPTION: This course will cover the morphology of the adult mosquito, the recognition of mosquito genera that occur in Florida, and the identification of selected mosquito species to genus using "Keys to the Adult Females and Fourth Instar Larvae of the Mosquitoes of Florida" by Darsie and Morris. The required text and microscope will be provided in class.

CEUs: 12 Public Health

CONTACT: Dr. Derrick Mathias, University of Florida, Florida Medical Entomology Laboratory | d.mathias@ufl.edu

Jason Stuck, Pinellas County Mosquito Control | jstuck@co.pinellas.fl.us

	MON 1/31	TUES 2/1	WED 2/2	THUR 2/3	FRI 2/4
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# **COURSE S**

#### Identification of Larval Mosquitoes

INTENDED AUDIENCE: Those whose main job responsibility is to identify larval mosquitoes, those who perform surveillance work, or those whose job will be enhanced by the knowledge of being able to identify larval mosquitoes.

PREREQUISITES: None; some basic knowledge of mosquito identification will be helpful.

COURSE DESCRIPTION: This course reviews the morphology of the larval mosquito, the recognition of the genera which occur in Florida, and the identification of Florida's most important mosquito species using the keys in the "Keys to the Adult Females and Fourth Instar Larvae of the Mosquitoes of Florida" by Darsie and Morris. Textbook are provided in class, students must bring their own compound microscopes. CEUs: 6 Public Health

CONTACT: Wade Brennan, Sarasota Mosquito Management Services | wbrennan@scgov.net Jason Stuck, Pinellas County Mosquito Control | jstuck@co.pinellas.fl.us

	MON 1/31	TUES 2/1	WED 2/2	THUR 2/3	FRI 2/4
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# **COURSET**

#### **Interpreting Pesticide Labels**

INTENDED AUDIENCE: This course is intended for all mosquito control professionals.

PREREQUISITES: None

COURSE DESCRIPTION: A review of the history and evolution of pesticide regulation, dispel pesticide myths, briefly describe the federal pesticide registration process and the dynamics of label development. Interpreting pesticide labels will cover mandatory v. advisory labeling, the review of actual federally registered mosquito control pesticide labels in an open discussion and Q&A format. The consequences of misuse and the liabilities of noncompliance will also be explained.

CEUs: 3 CORE 487 or 482

CONTACT: Carlton Layne, Aquatic Ecosystem Restoration Foundation (AERF) | layn1111@bellsouth.net

	MON 1/31	TUES 2/1	WED 2/2	THUR 2/3	FRI 2/4
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# **COURSE U**

#### Introduction to Mosquito Borne Arboviruses in Florida

INTENDED AUDIENCE: This course is for mosquito control personnel or health department personnel. PREREOUISITES: None

COURSE DESCRIPTION: This course will provide attendees with the basics on mosquito-borne diseases in Florida, including diseases caused by West Nile, St. Louis encephalitis, Eastern equine encephalitis, Zika, dengue, and chikungunya viruses. The course will cover the mosquito vectors, transmission cycle, distribution, symptoms, and public health response for each disease.

CEUs: 3 Public Health

CONTACT: Dr. Andrea Morrison, Florida Department of Health | Andrea.Morrison@flhealth.gov

	MON 1/31	TUES 2/1	WED 2/2	THUR 2/3	FRI 2/4
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# **COURSE V**

#### Larvicides, Larviciding, and Resistance Management

INTENDED AUDIENCE: This course is intended for all mosquito control personnel. PREREQUISITES: General experience in vector control or product research and development. COURSE DESCRIPTION: This 1/2-day course will cover three main topics including:

- 1. Larvicides: Introduction of biorational larvicides, active ingredients, and modes of action.
- 2. Larviciding: Common formulations, field application, efficacy evaluation, data interpretation, factors affecting field efficacy.
- 3. Resistance Management: Risk assessment of resistance, factors leading to resistance evolution, resistance testing, data analysis, interpretation and application.

CEUs: 3 Public Health

CONTACT: Dr. T. Steven Su, EcoZone International LLC | stevensu1995@gmail.com Dr. Peter Jiang, Gainesville Mosquito Control | jiangy1@cityofgainesville.org

	MON 1/31	TUES 2/1	WED 2/2	THUR 2/3	FRI 2/4
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# **COURSE W**

#### Mixing, Calibrating, and Recording Pesticides

INTENDED AUDIENCE: This  $\frac{1}{2}$  day course is intended for mixers, handlers, and spray technicians working in Public Health Pest Control and/or Aquatic Weed Control

PREREQUISITES: None

COURSE DESCRIPTION: This class is designed to give the student a better understanding of mixing, calibration, and recording the amount of pesticide applied to a given area. The student's reporting accuracy should be improved by the end of this course. Topics covered include the following: understanding the label, Federal laws, why we perform calibration, and mathematical calculations.

CEUs: 1.5 CORE 487 or CORE 482 and 1.5 Aquatic Weed

CONTACT: Joe Walter, University of Florida IFAS Extension | jwalter@ufl.edu

	MON 1/31	TUES 2/1	WED 2/2	THUR 2/3	FRI 2/4
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# **COURSE X**

#### Other Dipterans of Public Health Importance in Florida

INTENDED AUDIENCE: This course is intended for all personnel within mosquito control, however those who directly deal with the public (i.e. treatment requests, outreach, etc.) may find the course most useful.

PREREQUISITES: None.

COURSE DESCRIPTION: This course is an introduction on the biology, ecology, and public health importance of other dipterans (true flies) besides mosquitoes. By the end of the course, students should be well equipped to handle public questions and concerns about the discussed flies. The purpose of this course is not to train how these dipterans may be treated but instead to equip mosquito control personnel with information on these common pests to better assist the public when treatments are not feasible.

CEUs: 3 Public Health and 3 CORE 487 or CORE 482 CONTACT: Jessica Ber, FDACS | Jessica.Ber@FDACS.gov

Caitlin Gill, FDACS | Caitlin.Gill@FDACS.gov

	MON 1/31	TUES 2/1	WED 2/2	THUR 2/3	FRI 2/4
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# **COURSEY**

#### Sentinel Chicken Disease Surveillance

INTENDED AUDIENCE: Anyone who currently runs a sentinel chicken program or intends to in the future. PREREQUISITES: None

COURSE DESCRIPTION: This course will focus on flock maintenance and care, chicken diseases and ailments, field cages and bleeding techniques, sample processing and shipping, and what happens behind the scenes at the Department of Health, along with explanations of different types of tests and result interpretation.

CEUs: 2 Public Health and 2 CORE 487 or CORE 482

CONTACT: Beth Kovach, Charlotte County Mosquito & Aquatic Weed Control | beth.carey-kovach@charlottecountyfl.gov

	MON 1/31	TUES 2/1	WED 2/2	THUR 2/3	FRI 2/4
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# **COURSE Z**

#### Sterile Insect Techniques for Mosquito Control

INTENDED AUDIENCE: This  $\frac{1}{2}$  day course is intended for students who are mosquito control professionals and interested in sterile insect technologies.

PREREQUISITES: Completion of Introduction to Mosquito Control. Students will need a general understanding of mosquito control and basic familiarity with common container breeding species. COURSE DESCRIPTION: This course will explore male release strategies currently employed by mosquito control agencies in the United States, including the traditional sterile insect technique (SIT) using irradiated male mosquitoes, Wolbachia infected male mosquitoes and male-selecting, self-limiting genetically modified male mosquitoes. The course will include a general introduction to SIT and male release strategies, and how they are applied and the current body of research regarding these methods. It will also include examples of efforts by current mosquito control districts and industry representatives utilizing SIT and other male release strategies, as well as emerging technologies in SIT and the importance of community engagement.

CEUs: 3 Public Health

CONTACT: Dr. Keira J. Lucas, Collier Mosquito Control District | klucas@cmcd.org

	MON 1/31	TUES 2/1	WED 2/2	THUR 2/3	FRI 2/4
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# **COURSE AA**

#### Ticks and Tick-Borne Diseases

INTENDED AUDIENCE: Those interested in ticks and tick-borne disease, and field personnel who may encounter ticks in their work.

PREREQUISITES: None; students should bring a dissecting microscope.

COURSE DESCRIPTION: This course will cover ticks and tick-borne diseases. Lectures will include tick biology, identification, common ticks in Florida, control, and tick-borne disease. A lab section will provide students with the opportunity to examine specimens and learn morphological identification, ending with identifying unknown specimens.

CEUs: 3 Public Health and 3 CORE 487 or CORE 482

CONTACT: Dr. Cynthia Lord, University of Florida | clord@ufl.edu

Dr. Sandra Allan, USDA | sandy.allan@usda.gov

Yuexun Tian, University of Florida | yuexun.tian@ufl.edu

	MON 1/31	TUES 2/1	WED 2/2	THUR 2/3	FRI 2/4
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# Certifications, Reviews, & Exams

FDACS is no longer providing exams in-person. All FDACS exams will be administered virtually.

Questions related to these exams should be directed to Caitlin Gill (Caitlin.Gill@FDACS.gov) or Jessica Ber (Jessica.Ber@FDACS.gov).

#### \*NEW\* Aquatic Plant Control Exam Review!

Wednesday, February 2 7:00PM-9:00PM
General Review
Classroom: Hickory

Thursday, February 3 7:00PM-9:00PM Labels, Calibration, and Application Math Review <u>Classroom:</u> Hickory

Questions related to these reviews should be directed to Susan Haddock (szcrmchz@ufl.edu).

#### **Advanced Mosquito Control Exam**

Friday, February 4 8:00AM-12:00PM Classroom: Century C Ballroom

\* Please bring a writing utensil, preferably a pencil, and a calculator. \*

Questions related to this exam should be directed to Dr. Shelley Whitehead (shelley.whitehead@manateemosquito.com).