Products that maybe used for mosquito control treatments

Selecting the product to use for mosquito control is similar to a doctor determining which prescription should be prescribed to restore or maintain health. The product selected to treat a particular area will depend on the life stage of the mosquito, the genus and species of mosquito, the susceptibility of the mosquito being targeted, water quality, density of vegetation, size of area to be treated, density of mosquito population, water temperature, and weather.

LCMCD Control Compounds, 2012

Adulticide Materials

Active Ingredient	Trade Name	Reg. No
Malathion	Fyfanon ULV	67760-34
Permethrin	Kontrol 30-30	73748-5
naled	Dibrom	5481-480
permethrin	Biomist 31-66	8329-43
pyrethrin	Pyrocide 7067	1021-1199
sumithrin	Anvil 10 + 10	1021-1688-8329



Larvicide Materials

Active Ingredient	Trade Name	Reg. No.
B. sphaericus	VectoLex WSP	73049-20
	VectoLex CG	3049-20
B. sphaericus and B.t.i	Fourstar	83362-3
	VectoMax CG	73049-429
	VectoMax WSP	73049-429
B.t. israelensis	VectoBac 12AS	73049-38
	VectoBac GS	73049-10
POE(2) isostearyl alcohol	Agnique MMF	53263-28
	Arosurf MSF	8329-74
	Agnique MMF G	53263-30
methoprene	Altosid XR Briquets	2724-421
	Altosid SR-20	2724-446
	Altosid XRG	2724-451
	Altosid SBG	2724-489
petroleum hydrocarbon	Golden Bear GB - 1111	8898-16
spinosad	Natular XRT	8329-84
•	Natular G	8329-80
temephos	Abate 4E	8329-60
•	ProVect Mini-G	192-213
	ProVect 4E	769-678



Employee Training

01/17-19	Aerial Fly-In
01/30-02/03	Dodd Plenary Classes
02/03	Hazardous Material Spill Response
02/23	Aviation Safety/Helicopter Egress
03/01	Family Medical Leave Act
03/06	Family Medical Leave Act
03/09	Family Medical Leave Act
03/13	Clarke Mosquito Workshop
03/20	Family Medical Leave Act
03/26	Family Medical Leave Act
04/06	CPR & AED
04/09	CPR & AED
04/24	Hazardous Material Spill Response

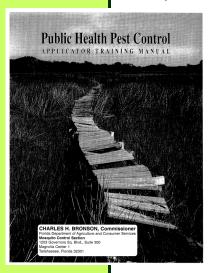
04/24 Hazardous Material Spill Response 04/27 Right-to-Know, Hazardous Communication

06/07-9 Level V Incident Commander

08/01 FRS

10/23 DC-3 Mass Casualty Drill

12/14 Right-to-Know, Hazardous Communication





Aerial Training

Every employee of the District, from the receptionist to the Director, must obtain and maintain a license in General Standards and Public Health Pest Control through the State of Florida, Department of Agriculture and Consumer Services (FDACS). This insures every District employee has a basic knowledge of pesticides and the biology of mosquitoes. The Director and pilots have additional licensing requirements. To maintain a Public Health Pest Control license each employee must renew their license by earning 16 continuing educational units through classes approved by FDACS within a 4-year period. There are additional mandated training requirements outside of the licensing for pesticide application, such as Right-to-Know and Hazardous Communication. The District strives to have knowledgeable employees that utilize the best management practices for the mosquito control industry.



Media Interviews & Publications



Wink TV Mosquito Update

The Education and Communication Department strives to be an available resource for the general public and media.

- 04/03 Wink—How heat effects mosquitoes
- 04/23 News Press—
- 04/24 NBC-2, Joe Rhodes
- 04/26 Fox News
- 05/22 Today Show
- 05/23 Today Show
- 05/23 Wink
- 05/29 Naples Daily News
- 06/01 Shell Point Village Media, Fly Boys
- 06/06 NBC-2
- 06/06 News Press
- 06/07 Wink
- 07/01 CBS Sunday Morning, Waging a loosing war against mosquitoes
- 07/13 Boca Beacon: Liza Stroud, With rain comes mosquitoes
- 07/18 Gasparilla Gazette: Terry O'Conner, Rain and mosquitoes
- 07/26 Gasparilla Gazetter: Terry O'Conner, The mosquitoes are back
- 08/13 Wink: Lois Thome, West Nile Virus
- 08/14 NBC-2: Josh Segal: West Nile Virus
- 08/20 Naples Daily News: Liza Freeman, West Nile Virus
- 08/22 USA Today: Elizabeth Weise, US Health officials brace for spike in West Nile Virus Cases
- 08/24 News Press: Kevin Lollar, Mosquito control fighting bloodsuckers
- 08/24 News Press: Kevin Lollar, West Nile Virus
- 08/27 News Press: Kevin Lollar, Mosquito borne disease surveillance
- 09/03 NBC-2: Mosquito borne disease monitoring in Lee County
- 09/04 NBC-2, Influence of Hurricane Issac on mosquitoes
- 09/17 Pine Island Eagle: Announcement of Pine Island Garden Club meeting with MC speaker and overview of mosquito operations
- 09/17 News Press: Frank Gluck, West Nile Virus
- 09/26 Wink, How MC determines where to spray
- 11/02 News Press: Kevin Lollar, SWFL fighting mosquitoes thanks to rainy October
- 11/05 Naples Daily News: Tim Aten—Why do we elect mosquito commissioners
- 11/05 News Press: Kevin Lollar, Recent rains have produced mosquitoes
- 12/04 News Press: Kevin Lollar, Mosquito update



Filming Today Show Segment





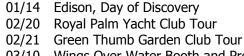


NBC-2 West Nile Story

Tours & Presentations

The District provided over 43 tours and or presentations during 2012, with many individual tours not listed.





03/10 Wings Over Water Booth and Presentation

03/12 British Visitors Tour

03/15 McGregor Baptist Church Tour 03/16 McGregor Baptist Church Tour

03/23 EPA Regulatory Tour

03/28 Arbovirus Surveillance and Mosquito Control Workshop

03/31 STEMtastic Showcase

04/11 USFWS

04/13 Lehigh Sr. High School Student Tour

04/16 White House Summit on Environmental Education

04/17 Fort Myers Downtown Rotary Club

04/25 ECHO Presentation and Training

05/04 Caloosa Rare Fruit Exchange

05/05 League of Women Voters 05/10 Representative Aubuchon

05/15 Department of Environmental Protection

06/08 Florida Beekeepers Association Annual Meeting

06/25 Lee County Health Department

08/19-24 Navy Entomologists

08/21 Middle School Science Teachers

08/22 Subcomittee on Managed Marshes

08/28 CDC

09/14 Community Helper Day

09/17 Church of God Youth Group

09/17 FGCU 50th Celebration of Rachel Carson's Book Silent Spring

09/20 Pine Island Garden Club

10/01 National Active & Retired Federal Employee's Assc.

10/02 Representative Cauldwell

10/14 Ding Darling Days

10/25 Leadership Cape Coral

10/26 River Hall Elementary

10/26 Hector Cafferata Elementary

11/02 South West Christian Academy

11/03 Aviation Days

11/03 3rd Annual Super Science Saturday

11/06 Sanibel/Captiva Kiwanis

11/29 Lee County School Board Science Coaches

11/30 FGCU Foundations Community Engagement Project Showcase

12/06 Great Outdoor Adventure Day at Lover's

Key State Park



Royal Palm Yacht Club



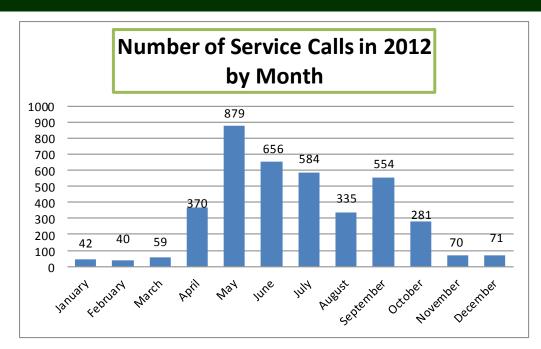
Great Outdoor Adventure Day



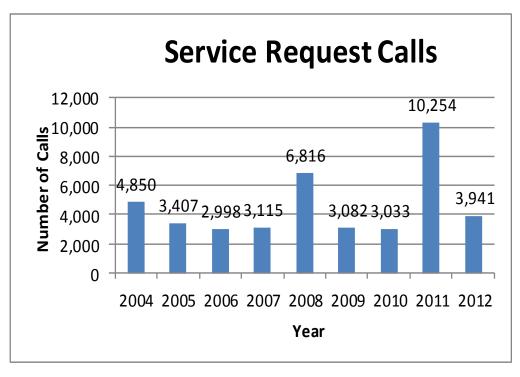


Service Requests





The central life line for the District is communications. All calls are answered by a live person. If a service request comes in outside of regular working hours, an answering service will take the request. When residents call to report a mosquito problem, the receptionist logs the caller's name, phone number, whether the individual has a dog on the property and address. Once the call is logged, the request will be sent to an inspector to evaluate the severity of the problem. Service requests can also be logged any day and any time using the District website: www.lcmcd.org and clicking on Make a Service Request. The individual using this site to report a mosquito problem is prompted to give an email address, name, address, phone number, whether the individual has a dog on the property and any details the requester would like to report. Information on dog ownership is asked in order to protect our staff responding to the service request.





Environmental Resource Teachers



Aquatic Systems/Mosquito Education

Aquatic Systems Mosquito Education Program

Aquatic Systems/Mosquito Education

Eric Jackson

Brian Murphy

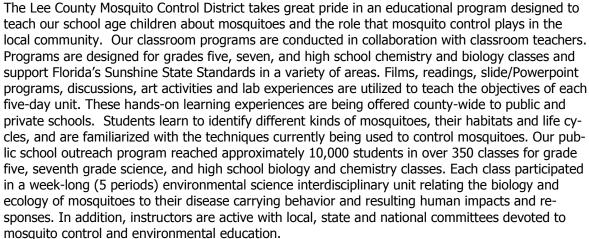
Mission Statement

To enhance the scientific and environmental literacy of the younger citizens of Lee County to augment their lifetime understanding of the science related to mosquito control.



Florida Gulf Coast University Instructor

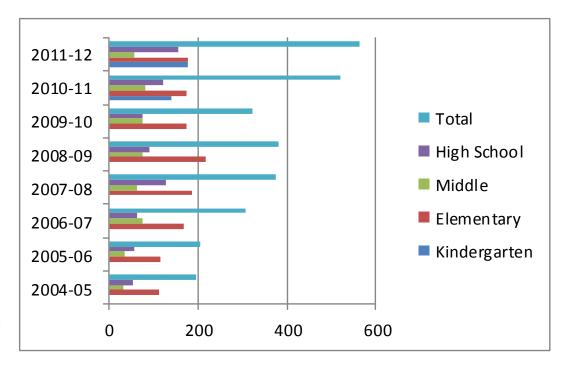
Neil Wilkinson







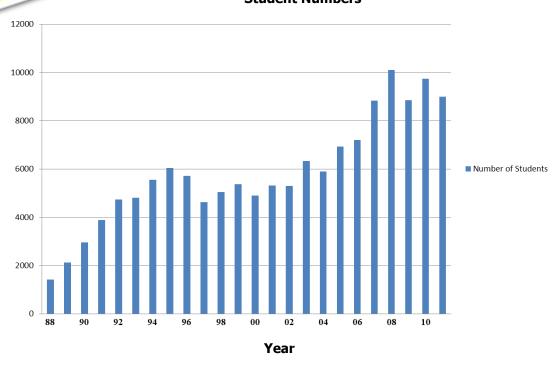
Number of Classes Taught







Student Numbers





Welcome to Aquatic Systems Mosquito Education!

Our classroom programs are conducted in collaboration with classroom teachers. Programs are designed for grades five, seven, and high school chemistry and biology classes and support Florida's Sunshine State Standards in a variety of areas. Films, readings, slide programs, discussions, art activities and lab experiences are utilized to teach the objectives of each five-day unit. In addition, instructors are active with local, state and national committees devoted to mosquito control and environmental educations.



Check out the new Aquatic Systems Mosquito Education site! Thanks to the creativity of <u>Think Tank Solutions</u>, we have a fresh new look on the web! Read More



The AS/ME Website: www.mosquitoed.org

Florida Gulf Coast University Intern Program

Aquatic Systems/Mosquito Education



The Kindergarten Mosquito Program was presented to 15 elementary schools with 94 classrooms participating (roughly 1,700 students). The program survey results continue to come in and the feedback has been very positive.

The Aquatic Systems/Mosquito Education (AS/ ME) intern program was initiated at FGCU in 2008. The District has continued to support this valuable program. Students are able to earn Service Learning hours needed for FGCU graduation. The interns assist with classroom teaching, maintaining equipment, collecting specimens for lab work, production of materials for student use and public outreach. Interns play a critical role in the Kindergarten curriculum offered. This year, the program sponsored 2 graduate assistants, 2 undergraduate interns, 8 mosquito education interns, 2 mosquito lead education interns, and 25 Kindergarten mosquito program interns. This has provided over 1200 intern hours working toward mosquito education in Lee County.



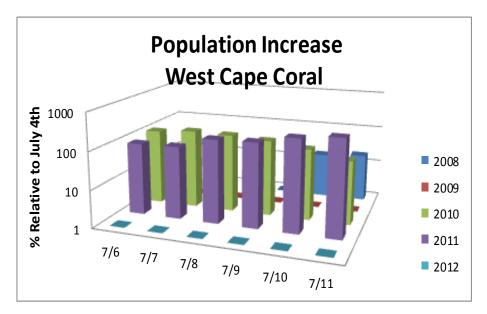


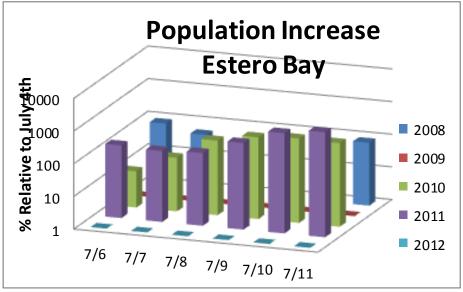


Tropical Storm Debby

Tropical Storm Debby provided an opportunity to treat State owned land for adult mosquitoes. It also allowed the District to evaluate the effect of adult mosquito control of State land to reduce adult mosquito re-infestation of bordering private property. Using truck trap collections from West Cape Coral and the Estero Bay areas, the District looked at 4 years of data around July 4th. Each year except 2009, the District had treated West Cape Coral and the areas surrounding Estero Bay to knock down the adult mosquito population for July 4th. The graphs below how quickly the areas were re-infested by mosquitoes from State land. In 2012, one treatment of State lands was successful and did not require additional treatments of surrounding property for a much longer period of time.

The District hopes to convince the Florida Department of Environmental Protection that by allowing a minimum number of adulticide treatments to State lands, overall adulticide treatments can be reduced.







Milestones

Milestones

Five Years of Service



John Mullins, Carmen McKinney, Pat Ferrara, Keith Lowe, Judy Thomas and Deborah Newton



Tom Peters, Lenore Bishop, Jim McKeever, and Jake Sluski

Ten Years of Service



Milestones

Milestones

Fifteen Years of Service



Richard Daugherty, Gary Bonnough, Bill Colon and Commissioner Mann

Twenty Years of Service



Robert Hedrick



Milestones

Milestones

Twenty
Five
Years
of
Service



Fred Schudel and Neil Wilkinson

Thirty Years of Service



Mike Nichols and John White



New Employees

Milestones



Mike Vigus was hired March 12 as a pilot.



Angel Monges, Jr. was hired March 19 as a Supply Coordinator.



Edward Balletta was hired July 11 as a Transport Operator.



Retired Employees

Milestones

Milestones



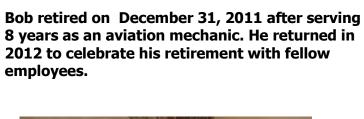
Robert A. Harper

"Hoop" retired on Jan 20, 2012 after serving over 31 years as an aviation mechanic.





Bob and Bob



Robert L. Harper







Changes on the Board of Commissioners

Milestones

Milestones



Newly elected Commissioner Melissa Dortch participated in her first meeting as the District One representative at the December Board meeting. District One encompasses the areas of Lehigh Acres and Alva. Commissioner Dortch is eager to start learning more about mosquito and aquatic weed control and to get involved in representing her District. We welcome Commissioner Dortch to the Board.

Commissioner Sarah Larsen resigned from her position as District Two representative on the Board of Lee County Mosquito and Hyacinth Control Districts on December 14th in order to take a full-time position with State Representative Matt Hudson in Naples. The remaining two years of her term will be filled by an appointee of the Governor. We wish Sarah all the best in her new endeavor.





Noteworthy Events



Joan and Gary Heggemeier and Kelly Gaylord generously donated their time and talents to create an exceptional work of art in the form of a wall mural for the Education/Training Center for Lee County Mosquito and Hyacinth Control Districts. The many hours of time and effort used to plan and complete such a significantly large and highly valuable mural were given selflessly for the benefit of the Districts.

The mural dramatically captures the natural flora and fauna found in Lee County, Florida and provides a vivid reminder of the ecological richness of southwest Florida to all who enter the facility. The mural will be used as a tool to provide public education for students and other visitors to the Districts about the natural ecology of Lee County, and the missions of the Districts in controlling mosquitoes and aquatic weeds.

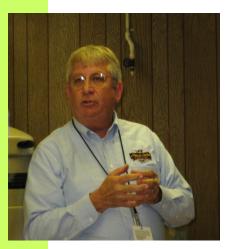
The Districts' Board of Commissioners presented a resolution to the artists thanking them for their generosity, immeasurable talent and diligence in providing this amazing gift. In the photo from left to right are Commissioner Pat Mann, Board Chair Sarah Larsen, Joan Heggemeier, Gary Heggemeier, Commissioner Mike Ellis, Kelly Gaylord, and Commissioner Larry Murphy.



Noteworthy Events



The first White House Summit on Environmental Education took place on April 16th. One hundred environmental education leaders and practitioners were invited for a series of panel discussions and workshops. Lisa Jackson, Administrator for the EPA and Arne Duncan, Secretary for the U.S. Dept. of Education welcomed quests. Participants had the opportunity to promote their successes and promote ideas. LCMCD & FGCU was represented by Neil Wilkinson, Environmental Education Instructor. Wilkinson took the opportunity to highlight FGCU's Environmental Mission and commitment to graduating ecologically literate students, their focus on Service and Civic Engagement and the many partnerships with local organizations and agencies that support FGCU's commitment to environmental stewardship.



At the 2011 Florida Mosquito Control Association (FMCA) Annual Meeting, Neil Wilkinson was elected to the Vice-President position on the Executive Board. At the 2012 FMCA Annual Meeting, Neil moved to the President -Elect position. James Burgess was elected to serve as the Southwest Regional Representative on the FMCA Board of Directors and Shelly Redovan was awarded a Presidential Citation in recognition of continued support of programs benefitting the whole mosquito control community.











District employees wanted to give back to the community and earn a mosquito t-shirt from the Blood Center. On August 2, employees got to give blood without having to travel or take off work. The Blood Mobile set up in the Quadrangle at the District.

Noteworthy Events

Removing old Guard Shack



The District upgraded the old Guard Shack to a Security Center for two key reasons. First, the Security Center is ADA compliant and secondly, the new building accommodates the increased security systems of the compound.



Aviation Updates





In August, the District bought a used 1978 Beechcraft King Air C90 twin turboprop from Hillsborough County Mosquito Control.