

# BUZZWORDS



[www.floridamosquito.org](http://www.floridamosquito.org)

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**Deadlines for submissions to be  
included in the newsletter:**

<b>Jan/Feb</b>	<b>Feb 1</b>
<b>Mar/Apr</b>	<b>Apr 1</b>
<b>May/Jun</b>	<b>Jun 1</b>
<b>Jul/Aug</b>	<b>Aug 1</b>
<b>Sep/Oct</b>	<b>Oct 1</b>
<b>Nov/Dec</b>	<b>Dec 1</b>

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**The mission of the FMCA is to promote  
*effective* and *environmentally* sound control of  
disease-transmitting and pestiferous  
mosquitoes and other arthropods of public  
health importance, develop and enhance public  
interest, awareness, and support for the  
control of mosquitoes, and provide for the  
scientific advancement of members through  
our meetings, training and education.**

**Volume 10. Number 5. Sept/Oct 2010**

## Upcoming Events

Florida Mosquito Control Association  
82<sup>nd</sup> Annual Meeting  
November 14 – 17, 2010  
Duck Key, FL  
[www.floridamosquito.org](http://www.floridamosquito.org)

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Florida Mosquito Control Association  
Aerial Short Course – Fly-In  
January 10 – 13, 2011  
Buckingham Army Airfield  
Fort Myers, FL

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Florida Mosquito Control Association  
Dodd Short Courses  
January 24 – 28, 2011  
Ocala Hilton, Ocala, FL

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American Mosquito Control Association  
77<sup>th</sup> Annual Meeting  
March 20 – 24, 2011  
Anaheim, CA  
[www.mosquito.org](http://www.mosquito.org)

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8<sup>th</sup> Annual Arbovirus Surveillance and  
Mosquito Control Workshop  
March 28 – 31, 2011  
Anastasia Mosquito Control District  
St. Augustine, FL

*"If all mankind were to disappear, the world would regenerate back to the rich state of equilibrium that existed ten thousand years ago. If insects were to vanish, the environment would collapse into chaos."*

---Edward O. Wilson

## From the Editor

In recent years, the Florida Department of Agriculture and Consumer Services has answered the call for budget cuts by allowing only the state-aid to mosquito control funds to be cut while leaving other programs intact. In the coming year, the Florida Mosquito Control Association will work hard in Tallahassee to try to correct this problem with a Legislative fix – a change in the law. This will take a great deal of work by the FMCA's Legislative Committee, and all of you as stakeholders. We need your help in two very important ways: sustaining dues and answering the call to action work with Legislative Committee.

FMCA Sustaining Member dues are extremely important for maintaining legislative efforts. The FMCA supports legislative efforts through our lobbyists and by sponsoring Tallahassee Days each Spring which provides a platform for FMCA members to visit with representatives to explain issues of importance to mosquito control. All mosquito control agencies in Florida benefit from the legislative efforts of the Association, whether or not they contribute as sustaining members. Please continue to support the FMCA by maintaining your status as Sustaining Members, and start planning now to attend and participate in Tallahassee Days during the Spring of 2011.

*Roxanne Connelly*

## From the FMCA

### *FMCA Fall Meeting Registration*

Registration for the FMCA Fall Meeting in Duck Key, November 14 – 17, 2010, is online only this year and the web link for the meeting information is:

<http://floridamosquito.org/Events/Meeting.aspx>

The registration form is WORKING! If any of you have had trouble finding or registering for the meeting – now is your chance! This is our first year for online only registration and yes, it is a little late, but it offers several advantages – including an auto-reply acknowledgement confirming that you are registered for the meeting. We all appreciate you bearing with us while we work out the kinks in the new online features. These improvements and upgrades will help FMCA serve you – our members - better! If you have any problems or questions with registration – please call the FMCA cell phone (352.275.8143).

If you have not already made your hotel reservations please make them ASAP! The hotel is full on Saturday night, but there are Villa rooms available! There are PLENTY of rooms available in the hotel for Sunday-Thursday nights! Please check with the hotel for the dates that you need. They are very willing to work with our group – so just let them know what you need. Hawks Cay also generously offered to continue offering the group rate beyond the cutoff date, so please take advantage of this great deal!

### *Silent Auction at the Fall FMCA Meeting*

As you begin to do your Fall cleaning and go through your closets and garage, please consider the FMCA Silent Auction: Do you have any items associated with mosquitoes? Do you have a knack for making mosquito-related crafts or photos? Do you have an autograph from Walter Reed or Carlos Finlay? Do you have a gift from someone that you just couldn't find a use for? Do you have prints, books, or jewelry you are willing to donate to the FMCA's Silent Auction to help raise money for student scholarships?

Dennis Moore, FMCA's Immediate Past President, is in charge of this year's Silent Auction. He would like you to start thinking of items to consider donating for the auction at FMCA's Annual Fall Meeting in Duck Key, FL. All proceeds from the

auction go to the Florida Mosquito Control Foundation fund for educational scholarships. Please consider donating an item to this worthwhile cause. All donations are appreciated and don't hesitate in being creative. If you have any questions email Dennis at [dmoore@pascomosquito.org](mailto:dmoore@pascomosquito.org) or call him at (727) 376-4568. Please consider bringing an item or two to the meeting and drop them off at the FMCA registration table.

### *Volusia County Mosquito Control: Position Opening: Helicopter Pilot*

Volusia County Mosquito Control is in urgent need to fill an Airborne Operations/Inspection Supervisor vacancy. This position is primarily a pilot for MD500E helicopters for inspection and larviciding of salt marshes and night vision flying over congested residential areas. Incumbent also supervises a helicopter mechanic and works closely with ground inspection, larviciding and adulticiding work groups. Pay based on experience is \$40,886-\$64,396. To apply, complete the electronic job application at [Volusia.org/personnel](http://Volusia.org/personnel). For more information contact Jonas Stewart or Bob Brown at 386-424-2920.

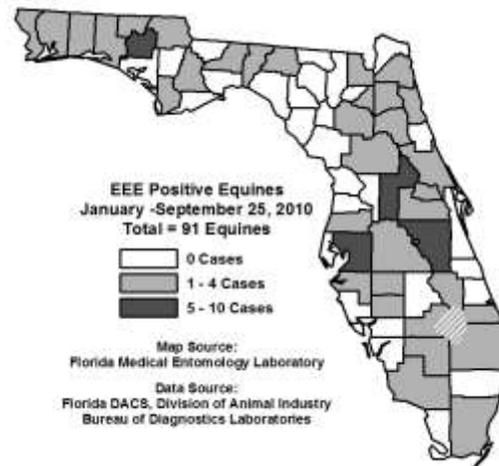
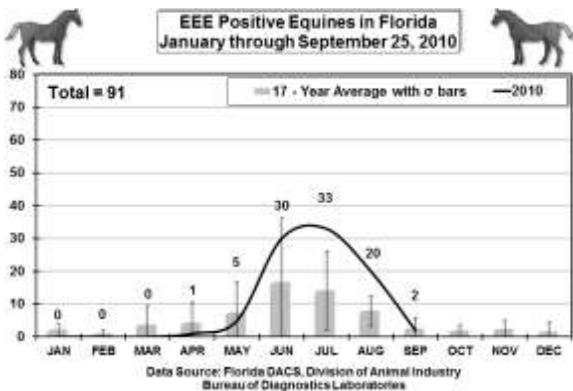
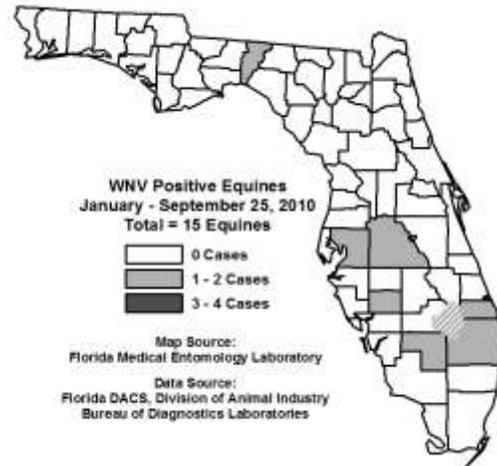
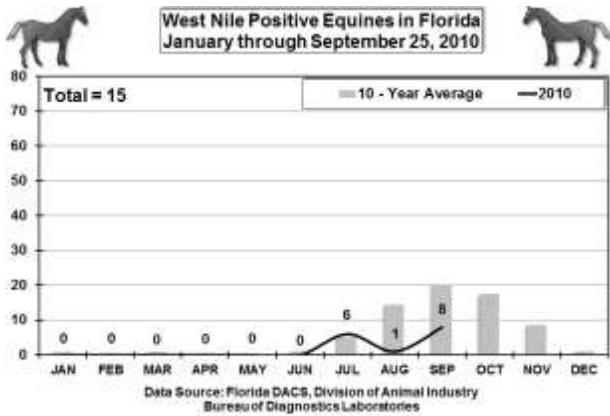
### *In Sympathy*



**Dr. Carlisle Rathburn** passed away October 13, 2010 at Mt. Royal Towers in Birmingham, Alabama. Dr. Rathburn was born in 1924 in Fulton, New York to Dr. Carlisle Baxter Rathburn and Margaret Mellen Rathburn. Dr. Rathburn was a retired medical entomologist for the State of Florida. He served in World War II from 1942 – 1945. Dr. Rathburn earned a Bachelor of Science degree in Zoology and

Chemistry at Syracuse University and a Bachelor and Master's degree in entomology from the University of Florida. His PhD in entomology was awarded from Cornell University. In 1957, he was employed by the Entomological Research Center for the Florida State Board of Health in Vero Beach and then moved to Panama City in 1964 to the West Florida Arthropod Research Laboratory of the Florida Department of Health. He authored over 100 scientific papers on the biology and control of

medically important insects. Funeral services were held at the Forest Park Methodist Church in Panama City, Florida. Donations can be made to the building fund at the Forest Park United Methodist Church in memory of Dr. Rathburn. Expressions of sympathy may be viewed and submitted at <http://www.kentforestlawn.com/obituaries/Carlisle-B-Rathburn2431435412/>



# 2011 FMCA Aerial Short Course

January 10 - 13, 2011

Lee County Mosquito Control District

Buckingham Army Airfield - Fort Myers, Florida

[Note for Pilots: Radio Frequency 122.9 & Coordinates N26-38.6 & W081-42.6]

**Information:** The Florida Mosquito Control Association (FMCA) will once again sponsor an aerial short course at the old Buckingham Army Air Field, which is home to the Lee County Mosquito Control District, 15191 Homestead Road, Lehigh Acres, FL 33971 (telephone number 239-694-2174). A map is available on the web at [WWW.LCMCD.ORG](http://WWW.LCMCD.ORG). Attendees will be assisted with transportation to and from the selected hotel to the District, if prior arrangements are made with the Chairperson.

Registration is now open for the Aerial Short Courses sponsored by the Florida Mosquito Control Association Aerial Training Committee. Mr. Mark Latham, Director of Manatee County Mosquito Control District, is chairman of this Committee and will be the moderator for the short course. Contact Mark at: 941-722-3720 or [manateemcd@aol.com](mailto:manateemcd@aol.com). Arrangements for your aircraft should be handled through Mr. Latham's office.

Soon, a copy of the registration form and agenda can be obtained by going to the following web sites: [www.floridamosquito.org](http://www.floridamosquito.org). If you need to have an agenda or registration form faxed to you, please contact Shelly Redovan, Lee County Mosquito Control District at 239-694-2174. The registration form should be completed and faxed to Kellie Etherson at 352-393-8286 (ASAP), so that space might be reserved for you. Hotel reservations can be made @ the Crowne Plaza of Fort Myers. Room reservations should be arranged for yourself and others, since this is the winter season and rooms go very quickly. Please mention you are part the Lee County/Florida Mosquito Control group for the \$99/night rate. This will include a hot breakfast buffet at the hotel. The website for aerial room reservations is: <https://resweb.passkey.com/go/LeeCoMosquitoControl> or you can call 1-800-465-4329.

The registration fee of \$150 per attendee, or 10 registrations for \$1000 (saving \$50 per registration) should be paid in advance by credit card, or by check at the door. This class will be a follow up of previous classes and will include new issues of concern for our industry. If participating in the Helicopter egress training (Jan. 10), there will be an addition registration fee of \$110 per person.

**PLEASE COMPLETE THIS FORM FOR EACH PARTICIPANT AND FAX IT TO 352-393-8286**

Name: \_\_\_\_\_

Organization: \_\_\_\_\_

Address : \_\_\_\_\_ City: \_\_\_\_\_

State: \_\_\_\_\_ Zip: \_\_\_\_\_ Email: \_\_\_\_\_

Phone Number: (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_ Fax #: (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_

Monday January 10  
Helicopter egress training  
(9 AM- 4:00PM)  
Tuesday January 11  
(1:00 PM - 5:00 pm)  
Wednesday January 12  
(07:00 AM - 5:00 pm)  
Thursday January 13  
(08:00 AM - 12:00 noon)

### Credit Card Information

Card Number: \_\_\_\_\_

Name on Card: \_\_\_\_\_

Expiration Date: \_\_\_\_\_

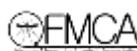
Billing Street Address: \_\_\_\_\_

Billing Zip Code: \_\_\_\_\_

Card Type:  Visa  M/C  Discover  Am Ex

Signature: \_\_\_\_\_

*Do not send any funds with this registration unless you are paying with a credit card. Please bring a check with you on the first day of class on January 10 or 11, 2011. The check should be made out to the FLORIDA MOSQUITO CONTROL ASSOCIATION. The registration fee is \$150 for the Short Course (or any portion thereof). Since the purpose of the short course is to share information among professionals, all participants are requested to pay the registration fee, unless the CHAIR has agreed to waive it. Any organization sending 10 students will pay a flat \$1,000. Helicopter egress training will be an additional fee of \$110 per student. The Crowne Plaza, 13051 Bell Tower Dr., Fort Myers, FL, 33907, P: 1-800-465-4329 is the selected hotel for this meeting. The room rate is \$99/King or Double. The room block is good from 1/09/11 until 1/13/11 just in case anyone wanted to come early. The room block will be held until 12/27/10. Reservations will be accepted on a space rate availability basis only after this date – so please make your reservations as soon as you can. Individual cancellations must be made 24 hours prior to arrival. All after hour functions will be held at this hotel.*



## *Dengue in Key West: The Perfect Storm*

Sadly, despite the efforts of the Florida Keys Mosquito Control District (FKMCD), dengue transmission continued throughout the summer of 2010 in Key West. As of September 27, 2010 there were 44 reported dengue cases in Key West, 35 of which were in Key West residents. Previously I used results from a CDC serosurvey that estimated 5% of Key West's residents had been infected with DENV in 2009 to project that approximately 2000 people have now been infected with DENV in Key West (Tabachnick, WJ. 2010. Dengue in Key West? Florida's dirty little secret? *BuzzWords*, Newsletter of the Florida Mosquito Control Association 10(3):15-18). The incidence of dengue cases in Old Town Key West was 35/6000 or 5.8/1000 as of Sept 27, 2010 with a weekly case number during the summer of about 2-4 resulting in a weekly incidence of 0.33-0.66/1000.

How has Key West fared compared to other regions of the world reporting dengue transmission in 2010? Puerto Rico reported record levels of dengue transmission during 2010 in a population of about 4.4 million. Puerto Rico declared a public health emergency due to dengue on September 8, 2010. As of September 10, 2010 Puerto Rico had a total 12,000 suspected cases with 6139 laboratory confirmed cases. The incidence of confirmed cases in Puerto Rico was 1.4/1000 and the weekly incidence during the summer was approximately 0.09/1000. The risk for dengue was 4 to 5 times higher in Key West than in Puerto Rico! The residents of Puerto Rico were under a declared public health emergency due to dengue! With 1 in 10 Key West residents infected with DENV-1, there is now a very real potential for more severe dengue infection and dengue-related fatalities (dengue hemorrhagic fever and dengue shock syndrome) in Key West if a second dengue virus serotype becomes established on the island.

We must determine why dengue transmission could not be stopped during two successive years of transmission in a small section of an 8 square mile island that has one of the best mosquito control districts in the world. The FKMCD launched an aggressive anti-*Aedes aegypti* campaign by adulticiding, larviciding, the use of lethal ovitraps, periodic door-to-door sweeps throughout Key West,

the distribution of brochures, contacting and educating local homeowners and businesses, and visiting schools and community organizations. Why has dengue transmission continued in Key West? Can a city, state, or a nation effectively control *Aedes aegypti* and stop dengue transmission in a town? Part of a town? A block or two? A few square miles?

I submit that the Key West dengue epidemic could have been stopped in 2010 with the active participation of the public in control efforts. The FKMCD clearly responded appropriately and aggressively, providing the best possible mosquito control efforts, including the most recent new mosquito control strategies. Prior to the 2009/2010 epidemic, if one asked me what region of the U.S. had the best resources to mitigate an *Aedes aegypti*-borne dengue epidemic, Key West would have been at the top of anyone's list. The FKMCD is a top flight mosquito control organization, well trained, experienced personnel, good resources, and experienced in *Aedes aegypti* control. However I would not have taken into account other considerations that I now know trumps the FKMCD's capabilities and the capabilities of any mosquito control organization.

The reason for the continued dengue transmission in Key West, despite FKMCD, is that the Key West environment has so far provided "the perfect storm" for dengue transmission. The components of this storm are outlined below and each individual component would be an impediment to effective dengue control anywhere in the world. However, when combined, this perfect storm makes effective mosquito control for dengue intervention impossible.

What are the components of Key West's perfect storm resulting in continued dengue transmission?

1. A mosquito control organization beset by accusations that dengue is being used to support budgetary requests.
2. A media where editorials and articles appear that chastised mosquito control for inefficiency while at the same time conveying dengue is purely mosquito control's responsibility.

3. A business community that did not participate in the anti-*Aedes aegypti* campaign, did not change any practices to reduce *Aedes aegypti*, and did nothing to enlist the public in the fight against dengue and *Aedes aegypti*.

FKMCD is caught in a catch-22, after the Joseph Heller book of this name. Recall that the main character Yossarian wants to be released from flying bombing missions during WWII. The famous classic exchange with Doc Daneeka from the movie Catch-22 was:

Yossarian: "Ok, let me see if I've got this straight. In order to be grounded, I've got to be crazy. And I must be crazy to keep flying. But if I ask to be grounded, that means I'm not crazy anymore, and I have to keep flying."

Doc Daneeka: "You got it, that's Catch-22."

Yossarian: "Whoo... That's some catch, that Catch-22."

Doc Daneeka: It's the best there is."

FKMCD urges community participation to control dengue in Key West. However, in doing so FKMCD is subjected to accusations that there is little danger and they are only doing this to influence the mosquito control budget. Then they are being accused of not being effective in controlling the epidemic. "Whoo...That's some catch, that Catch-22."

What has been the result of this perfect storm? The Key West community as a whole has done little to actively reduce *Aedes aegypti* numbers during the epidemic. Rather than urging public participation in eliminating *Aedes aegypti* larval sites, many in the community continued to ignore the seriousness of the outbreak, criticized mosquito control efforts and motives, yet relied solely on FKMCD to eliminate *Aedes aegypti* and dengue from the island. The community has largely ignored assisting mosquito control. Several people who have independently visited Key West this past summer commented to me that it was very apparent that businesses in Old Town were in a "don't ask and don't talk" about dengue mode.

Certainly one should ask hard questions about this situation. What is the reason for the Key West

attitude that has resulted in many in the community trying to play down the dengue epidemic? Who has contributed to this environment? What efforts that may have enlisted public mosquito control participation were not taken? Why? Why have the Key West papers, editorials, letters, and media been so silent on public participation? Has the local Health Department enlisted public participation and provided leadership? Does a single individual have the right to produce large numbers of dangerous *Aedes aegypti* on their private property? Why can individuals knowingly contribute to dengue transmission by continuing to produce the mosquito vector in their backyard? Why has there been no action? Why has there been no public peer pressure to reduce *Aedes aegypti* breeding sites throughout the island, especially in Old Town? Lacking



homeowner and community assistance in backyard cleanup and container removal to complement effective, efficient, and environmentally sound mosquito control, there is

little hope of interrupting dengue transmission. The only way to control *Aedes aegypti* in a setting like Key West is through aggressive and continued community involvement.

These are important questions that address why dengue transmission has continued in Key West for the past two years. Florida mosquito control districts now have the additional challenge of avoiding "the perfect storm" for a variety of vector-borne diseases in their own communities. I urge all Florida mosquito control districts to reflect on these questions and ask how they might overcome or avoid a "perfect storm."



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**BuzzWords. Volume 10. Issue 5. Sept/Oct 2010.**

