

# Buzz Words



The Newsletter of the Florida Mosquito Control Association  
Jan/Feb 2007

Volume 7, Issue Number 1



**2007 Annual American Mosquito Control Association Conference  
Hosted by the Florida Mosquito Control Association in Orlando, FL**

**March 31 – April 5, 2007**

**The Peabody Orlando**

**[www.mosquito.org](http://www.mosquito.org)**



**2007 FMCA Spring Conference**

**April 1, 2007**

**The Peabody Hotel, Orlando**

**9:00 a.m. – noon; Room: To be announced**

**Will be held in conjunction with the AMCA Annual Meeting**

**The conference will consist of a Board Meeting ONLY, no organized program**



**Florida Coordinating Council on Mosquito Control Meetings:**

**June 19, 2007 – Alachua, FL**

**October 22-23, 2007 – Vero Beach, hosted by FMEL**

**Doug Carlson to coordinate a Managed Marshes field trip**

## FMCA News

### *Changes in the FMCA Board of Directors*

Member-at-Large (replaces Dennis Moore)  
James Clauson, FLDACS  
1203 Governors Sq. Blvd, Suite 300  
Tallahassee, FL 32302  
[clausoj@doacs.state.fl.us](mailto:clausoj@doacs.state.fl.us)

SW Region (replaces Wayne Gale)  
Johnny Hunter, Director  
Charlotte County DES  
25550 Harbor View RD  
Port Charlotte, FL 33980  
[Johnny.hunter@charlottefl.com](mailto:Johnny.hunter@charlottefl.com)

Commissioner's Section (replace Larry Murphy)  
John Magee, South Walton County MCD  
Same address as Gary D'Andrea  
[Jmagee212@yahoo.com](mailto:Jmagee212@yahoo.com)

### *2007 FMCA Fall Meeting*

The 2007 FMCA Annual Fall Meeting will be November 11 – 14, 2007 at the Crowne Plaza Hotel, 1201 Riverplace Blvd., Jacksonville, FL 32207, 904.398.8800, ext. 500. Rooms: \$119.00 S/D before 10/11/07. More information coming soon - watch for mail-out in September.

### *2008 Dodd Plenary Short Courses*

2008 Dodd Plenary Short Courses will be January 28 – February 1, 2008, at the Ocala Hilton, 3600 SW 36<sup>th</sup> Avenue, Ocala, FL, 352.854.1400  
Rooms: \$109.00 S/D before 12/7/07. On-Line reservation code will be available soon at [www.floridamosquito.org](http://www.floridamosquito.org)

### *Congratulations to Doug Carlson!!*

Doug was elected to serve as Vice-President of the AMCA. His term in office will begin at the end of the 2007 AMCA Annual Meeting in Orlando, FL.

### **News from PHEREC**

The 2006 annual report of the John A. Mulrennan, Sr., Public Health Entomology Research and Education Center (PHEREC) is available online. The URL is

<http://www.pherec.org/2006annualreport.pdf>

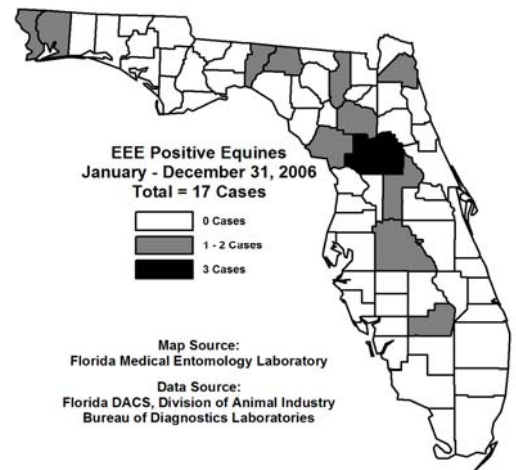
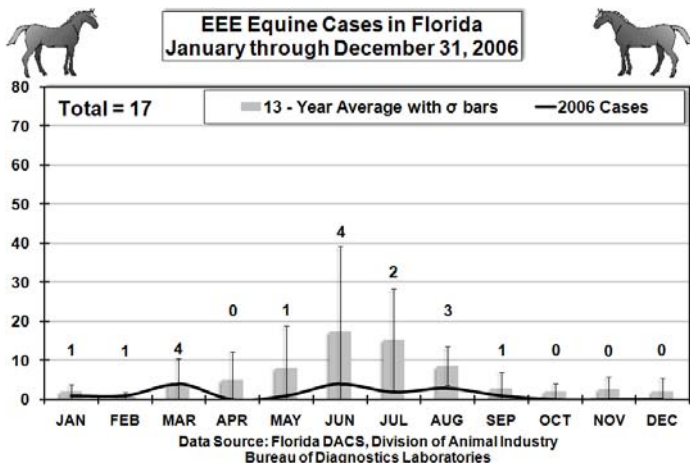
A brochure describing PHEREC and its mission is also available online at

<http://www.pherec.org/brochure/pherecbrochure2006.pdf>

The quarterly PHEREC newsletter can be accessed electronically at

<http://www.pherec.org/PHERECNews/Vol7No4/index.html>

For further information please contact Dr. Jack Petersen, Extension Medical Entomologist at [drjack3@hotmail.com](mailto:drjack3@hotmail.com)



**There were no reported cases of West Nile in Florida horses in 2006.**

## Summary of the 2007 Dodd Plenary Short Courses and a Tentative Look Ahead to 2008

The 2007 Dodd Plenary Short Courses offered over 30 different courses during the week of January 28<sup>th</sup> – 31<sup>st</sup>. More than 420 students registered for 891 places in the courses. Students came from as far away as Guam, North and South Dakota, Iowa, Maine, Nebraska, Missouri, and Louisiana. The Introduction to Mosquito Control Classes had 90 new students registered – again! This year saw the highest attendance in over 10 years. All ten meeting rooms at the hotel were filled the entire week! The high attendance is a tribute to the quality training offered at Dodd. There were over 50 instructors teaching the courses this year. The excellence of instruction at Dodd is unsurpassed. No other state offers anything even close to what FMCA offers at Dodd. As a last note - ten people registered for courses *just because a certain person was teaching a specific course!*

The revenue from the Dodd Short Courses funds many FMCA projects – most of them educational - including the Florida State Fair, the Exchange Program, and Dodd equipment. Dodd funds two FMCA members to attend AMCA's Washington DC Legislative Days. The week long Dodd Plenary Short Courses is a highly remarkable event that would not be possible without the help of wonderful volunteer instructors and staff and the support of all of the districts who send their personnel to be trained and kept up-to-date on all of the latest information. Kudos to all who participated and a huge thank you to all involved for making this one of the best Dodd's ever!

The 2008 FMCA Dodd Plenary Short Courses will be held January 28<sup>th</sup> – February 1<sup>st</sup> 2008 at the Ocala Hilton in Ocala, FL. The tentative list of just a few of the new classes being offered in 2008 includes Hazardous Materials Level III, Management for Directors, Africanized Bees, Advanced Education, Advanced Mosquito Control (1 day of calibration, ½ day of source reduction, 1 day of mosquito habitats, ½ day of education, and a ½ day of domestic inspection/customer service), Maximizing Your Potential, Lunch Series: Uli Bernier – "Attractants: Why Me & Not Someone Else?" and Joe Conlon – "Anti-Pesticide Activists", Advanced Trapping, and Advanced Media Training.

If there is a course that you would like to see offered at Dodd, please contact any of the Dodd Committee members. Check out the FMCA website for future details and a list of committee members ([www.floridamosquito.org](http://www.floridamosquito.org)).



### Excerpts from the AMCA Position Statement on Mosquito Misting Systems [www.mosquito.org](http://www.mosquito.org)

The American Mosquito Control Association (AMCA) has a number of concerns with the sale of outdoor time-released insecticide misting systems to homeowners and businesses as a means to control mosquitoes. The number of websites advertising the sale and installation of these systems appears to be growing. Some developments are even advertising home sites pre-plumbed for these systems.

The position of the AMCA is that the practice of dispensing pesticides at predetermined intervals without surveillance data guiding the treatment is not consistent with the sound Integrated Mosquito Management practices that underlie our valued partnership with the Environmental Protection Agency in the Pesticide Environmental Stewardship Program. We are concerned that application of pesticides through these misting systems will have several undesirable effects including: Unnecessary insecticide use, non-target impacts, promotion of insecticide resistance, and risk of pesticide exposure.

Many of these problems are currently being addressed by a formal consortium of stakeholders, regulators and mosquito control experts. Best management practices and advertising guidelines are being developed that will bring these systems more in conformance with acceptable mosquito control methods. Nonetheless, until misting systems are reconfigured so that surveillance drives the application, efficacy is demonstrated and drift is minimized, AMCA believes they are not consistent with sound practices to promote public and environmental health and should be discouraged.



The 2007 Annual American Mosquito Control Association Conference will be hosted by the Florida Mosquito Control Association in Orlando, FL  
March 31 – April 5, 2007  
The Peabody Orlando  
[www.mosquito.org](http://www.mosquito.org)

- **On-line registration** and details about the 2007 Annual American Mosquito Control Association Conference at the Peabody Hotel in Orlando, Florida, can be accessed at [www.mosquito.org](http://www.mosquito.org)
- Saturday, March 31, 2007, there will be a **motorcycle ride** – for more details, contact Jeff Stivers at Collier Mosquito Control District [jstivers@cmcd.org](mailto:jstivers@cmcd.org)
- The **Trustees/Commissioners Day** includes a field trip to the Merritt Island National Wildlife Refuge in Titusville, and the Kennedy Space Center.
- ADAPCO, Inc. will be sponsoring **shuttle service** from Orlando International Airport to the Peabody Hotel on April 1 between 11:00 AM - 5:00 PM. Upon arrival at the airport, please pick up your luggage at baggage claim and then locate the Mears Transportation staff on Transportation Level 1 (A Side - Departure Slot 19, B Side - Departure Slot 16) Staff will be in a Purple shirt holding an "ADAPCO" sign. There will be 1 shuttle every half hour. ADAPCO will also be sponsoring shuttles back to the airport on April 5 between 9:00 AM - 4:00 PM.
- The **AMCA Silent Auction** will be held on Tuesday evening, April 3, 2007. You are encouraged to start thinking about items you might donate to this exciting event. Items provided in the past have ranged in value from \$10 to several hundred dollars. Popular items in the past have included books, clothing, jewelry, photos, regional items, paintings, anything mosquito- or insect-related. Proceeds go to the host association and the AMCA Student Competition Fund. Please remind everyone to contribute to this exciting event. We broke the record in 2006 for AMCA's Silent Auction proceeds.

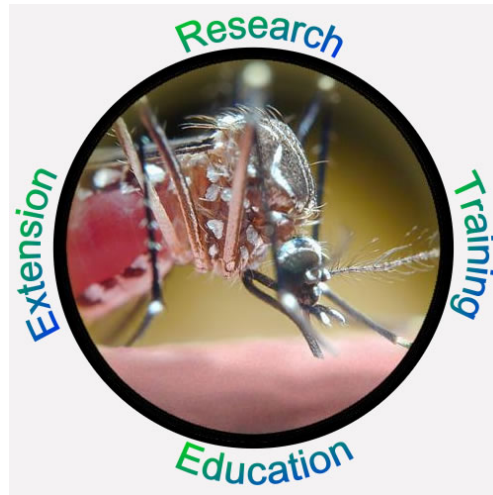
Items can be brought to the AMCA registration desk when you arrive at the meeting. If you would like to ship an item early, you are welcome to send it to:

Pat Hallahan, Silent Auction Committee Chair  
Clarke Mosquito Control  
3036 Michigan Avenue  
Kissimmee, FL 34744

If you have any question, please contact Pat Hallahan at (630)-671-3120 or [pathallahan@clarkemosquito.com](mailto:pathallahan@clarkemosquito.com).

# The Mosquito Information Page

<http://mosquito.ifas.ufl.edu>



The Mosquito Information Website is all about mosquitoes in Florida. From mosquito biology to the current status of West Nile Virus in Florida, this is the one-stop source for mosquito information including research, training, extension and education. What kind of information can you find here?

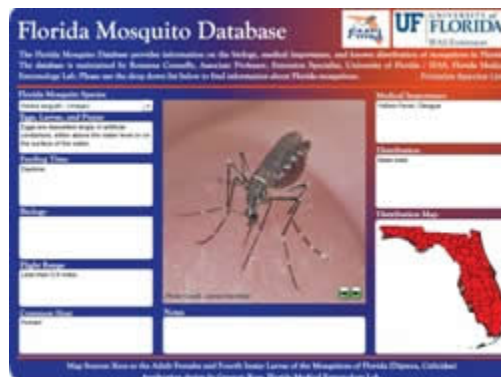
Mosquito Life • Mosquitoes of Florida • Mosquito-borne Diseases • Mosquito Management

Mosquito Resources: Library with UF/IFAS Fact Sheets, FMC White Paper, FMEL Publications (searchable), *BuzzWords*, and other mosquito links

Mosquito-related training and events • Fun with mosquitoes • Mosquito-related news and jobs • Mosquito Myths

Collaborations • Arboviral Surveillance: Sentinel Maps, Sentinel Movies, MWTB Risk Analysis • FL Mosquito Database

## The Florida Mosquito Database:



An on-line database that is continually being updated with photos of the various life stages of the mosquito species that occur in Florida, their medical importance, distribution, habitats, and more.

## ***Chikungunya and Dengue: Challenges for Florida Mosquito Control***

Just when you thought it was safe out there, along comes Chikungunya! [see Tabachnick, W. J. 2006. *BuzzWords*. 6(3): 8-9]. In that earlier article, I introduced the readership to the potential danger to Florida from the mosquito-borne Chikungunya virus (CHIKV). Recall that CHIKV caused an enormous outbreak in the Indian Ocean area in 2006 with millions of cases distributed through the region on several Indian Ocean Islands, reaching as far as India.

The symptoms of Chikungunya are unpleasant and include painful inflammation of the joints that result in a stooped posture, fever ( $>104^{\circ}\text{F}$ ), headache, vomiting, nausea and a skin rash. The symptoms can easily be confused with Dengue. Although symptoms subside within 3-5 days, joint pain can persist for many months or even years after the other symptoms have subsided.

The FMCA should take some delight that my statement in the earlier column "The vectors unfortunately, and this should send a chill through U. S. mosquito control and public health workers, are *Aedes aegypti* and *Aedes albopictus*" was picked up and quoted in several newspapers, including the Chicago Tribune. So yes, the FMCA Newsletter indeed is being widely read.



Figure 1. *Aedes aegypti* female  
Photo by: James M Newman (FMEL)



Figure 2. *Aedes albopictus* female  
Photo by: Sean McCann (FMEL)

The challenge for Florida mosquito control is to prepare now for a potential *Ae. aegypti* (Fig. 1) or *Ae. albopictus* (Fig. 2) borne outbreak, whether it be from CHIKV or just as likely Florida's old nemesis, Dengue virus (DENV). At the recent FMCA Dodd Short Course, Florida mosquito control district Directors discussed the challenges to mitigating an *Ae. aegypti* or *Ae. albopictus* borne outbreak using their current mosquito control operations and with current staff levels.

Florida and the rest of the U. S. have made great strides predicting West Nile through surveillance and then mitigating potential outbreaks in advance through mosquito control and public education. Pinellas County Mosquito Control's response to West Nile in 2005 is a perfect example (Tabachnick, W. J. and Day, J.F. 2005. West Nile surveillance and Florida Mosquito Control: Acting on surveillance information. *BuzzWords*, Newsletter of the FMCA. 6(5): 6-8). Much of our knowledge about West Nile in Florida stems from Florida's prior experiences with St. Louis Encephalitis virus (SLEV). Recall that both of these viruses circulate in mosquito to bird cycles permitting opportunities for surveillance and for mitigation to reduce the number of infective vector mosquitoes and, in so doing, reduce the risk of virus transmission to humans. Not so for DENV and CHIKV. These are largely human to mosquito amplification and transmission cycles. The vectors *Ae. albopictus* and *Ae. aegypti* can utilize the smallest containers to complete larval development. *Aedes albopictus* in particular is able to utilize an array of both natural and artificial containers. There are enormous challenges for controlling these mosquitoes. Just look at the difficulties in controlling *Ae. aegypti* in places like San Juan, Puerto Rico.

The important point for CHIKV and DENV is that our current SLEV and WNV paradigms for surveillance and for control will not work. This is the time for Florida Mosquito Control to begin to prepare for the potential arrival and subsequent transmission of either DENV or CHIKV. What information should mosquito control collect now to assess potential risk from a reported human case due to either of these viruses? Certainly a start would be to have information on *Ae. aegypti* and/or *Ae. albopictus* populations, where they are produced and hot spots with large populations that could be easily targeted for control. What can or should a mosquito control district do to control these populations? There is a great deal of information and experience clearly demonstrating that effective *Ae. aegypti* and *Ae. albopictus* control must involve public support and public participation to effectively reduce larval habitats. It would be wise to have plans already in place on how to utilize citizens for these important surveillance and control efforts.

Thankfully we do have some information on Florida *Ae. aegypti* and *Ae. albopictus* populations largely due to the long term efforts of FMEL scientists like Phil Lounibos and George O'Meara. They have been studying the interactions between the *Ae. aegypti* and *Ae. albopictus* in Florida, and they have collected information on their vector ability for DENV. We have some information on the Florida distributions of these important mosquito species in a broad sense, as well as information on their likely habitat preferences. Certainly, we need to expand and refine this information, particularly habitat preferences, to include more of Florida. Dr. Chris Mores is obtaining information on Florida's *Ae. aegypti* and *Ae. albopictus* vector ability for CHIKV. We need to move forward with this work so we can target control strategies, including source reduction, to maximize where it will be most effective.

I urge Florida's mosquito control and public health professionals to begin making plans for an expected case of dengue or Chikungunya in their District or jurisdiction. The questions that we will be asked by the public and media will be the same questions we were asked about WNV in 2001 and 2002. Is there a risk of more cases? Is there a risk of a large outbreak? What will/can mosquito control do to mitigate the risk of a major epidemic? What public health statements need to be issued?

We will begin addressing these issues just as we did for West Nile virus. The UF, IFAS, FMEL will be posting information on dengue and Chikungunya on its website to assist in formulating plans. Dr. Ken Linthicum, Director of the USDA, ARS, Center for Medical and Veterinary Entomology (CMAVE) and I will host a symposium for the FMCA Fall meeting to explore these issues. The FMEL will plan for a workshop on DENV and CHIKV for mosquito control and public health professionals after soliciting interest in such a workshop from Florida mosquito control Directors.

Stay tuned to *BuzzWords* for further information. We have to continue to work together to meet these new challenges.

**Walter J. Tabachnick, Ph.D.**  
**Director and Professor, Florida Medical Entomology Laboratory**  
**Department of Entomology and Nematology, University of Florida/IFAS**  
**Vero Beach, Florida**

### Chikungunya

**Family: Togoviridae**  
**Genus: *Alphavirus***  
**Species: *Chikungunya virus***

The word chikungunya is derived from the Makonde root verb kungunyala, meaning to dry up or become contorted. In India, the disease is known as Aakyda, meaning "stiff man" and Maakyda meaning "monkey-like". These words refer to the arthritic condition that occurs in some patients which causes a stooped posture.

The deadline for submissions to be included in the  
Mar/Apr 2007 issue of  
*BuzzWords* is April 13, 2007.

Please send change of address or newsletter submissions to:  
Roxanne Connelly, Editor, 200 9<sup>th</sup> Street SE, Vero Beach, FL 32962  
or [buzzwords@ifas.ufl.edu](mailto:buzzwords@ifas.ufl.edu)

---