

# Buzz Words



The Newsletter of the Florida Mosquito Control Association  
July/Aug 2005

Volume 5, Issue Number 4

FMCA Fall Meeting  
Nov 13 – 16, 2005  
Hawks Cay Resort, Duck Key, FL

Second Call for Papers and Meeting Registration  
Form inside this Issue of *Buzz Words*



SOVE 4<sup>th</sup> International Congress  
Oct. 2-7, 2005, Reno, Nevada

<http://www.sove.org/4th%20Congress/CONGRESS.html>



\*\*\*\*\*2006 FMCA Dodd Short Courses\*\*\*\*\*  
January 23 – 27, 2006  
Important Notice about the 2006 Courses  
inside this Issue of *Buzz Words*

## FMCA News

### ***Aircraft for Sale***

Broward County Mosquito Control is selling one 1951 Beechcraft C45H N850BC. The aircraft is equipped and ready for spraying. If you are interested in placing a bid, you can view and download the bid documents via the Purchasing website at

[www.broward.org/purchasing/bids](http://www.broward.org/purchasing/bids)

Further information can be obtained from Joseph Marhefka at 954-765-4062 ext 222 or Ray Schuetz at 954-765-4062 ext 228.

### ***Dodd Short Courses – 2006***

The 2006 Dodd Short Courses will be held at the Ocala Hilton, January 23 – 27, 2006. This is a different location from the last few years; it is also a little bit earlier than usual. Make your reservations early! **The Ocala Hilton room rate for attendees of the Dodd Short Courses is \$89.00 per night; however, they will honor this rate only through November 30, 2005. Room rates for reservations made after this date will be \$109.00 per night.** The week of the short courses is the beginning of foal season, a time when the hotel fills to maximum occupancy, so make your reservations as soon as possible.

### **From the Editors of *Wing Beats***

*Wing Beats* is looking for interesting field-related or technical articles about mosquitoes, mosquito control, and related topics. The articles are usually 1 – 4 pages in length (including graphics and figures). A considerable amount of applied research, equipment modifications, and application technique changes being conducted at mosquito control programs, universities, and

military installations throughout the world would be of interest to the *Wing Beats* audience. We encourage you to consider publishing in *Wing Beats*. Please send articles to: Marin Brouillard, Editor-in-Chief, Collier Mosquito Control District, 600 North Road, Naples, FL 34104 or [Marin@collier-mosquito.org](mailto:Marin@collier-mosquito.org)



## News from FMEL

### ***2006 Advanced Mosquito ID Course***

The 2006 Advanced Mosquito Identification and Certification workshop will be conducted March 13-24, 2006. Details about the course are posted at <http://mosquito.ifas.ufl.edu> and on-line registration will open on September 7, 2005. All registrations will be handled through the website. Once 20 students have been accepted, registration will close. **No exceptions!**

### ***Errata Sheet for Darsie and Ward, 2005, Mosquitoes of North America.***

The errata sheet for "Identification and Geographical Distribution of the Mosquitoes of North America, north of Mexico" by R. F. Darsie, Jr., and R. A. Ward (2005) is posted on the FMEL website under "DOWNLOADS" on the opening FMEL page at <http://fmel.ifas.ufl.edu/errata.htm>



## News from PHEREC

### *New PHEREC Publications*

Cilek, J.E. and C.F. Hallmon. 2005. The Effectiveness of the Mosquito Magnet® Trap for Reducing Biting Midge (Diptera: Ceratopogonidae) Populations in Coastal Residential Backyards. *J. Amer. Mosq. Control Assoc.* 21(2): 218-221.

Petersen, J.L. 2005. An Extension Perspective on Insecticide Resistance Testing. *J. of Extension.* Vol. 43 Number 4: (In press)

Corena, M.P., P. Vanden Hurk, H. Zhong, C. Brock, R. Mowery, J. V. Johnson, P.J. Linser. 2005. Degradation and effects of the potential mosquito larvicides methazolamide and aceazolomide in sheepshead minnow (*Cyprinodon variegatus*) *Ecotoxicology and Environmental Safety* (In press).

### *The Aftermath of Hurricane Dennis*

The ravages of Hurricane Dennis [a tempest in a teapot, really] as captured by digital photography on the PHEREC campus can be seen at <http://www.pherec.org/Dennis> A more complete story of hurricane season 2005 is available at "PHEREC News" Online <http://www.pherec.org/PHERECNews/Vol6No2/>

**Jack Petersen, PhD**  
**Extension Medical Entomologist**



**Deadline for submissions to be included in the September/October 2005 issue of *Buzz Words* is September 30, 2005. Please send articles and change of address information to:**

**Dr. Roxanne Rutledge, Editor,  
FMEL  
200 9<sup>th</sup> Street S.E., Vero Beach,  
FL 32962 or  
[buzzwords@ifas.ufl.edu](mailto:buzzwords@ifas.ufl.edu)**



### *Research Highlights*

Coffee, L. L., and S. C. Weaver. 2005. Susceptibility of *Ochlerotatus taeniorhynchus* and *Culex nigripalpus* for Everglades Virus. *Am. J. Trop. Med. Hyg.*, 73: 11-16.

#### **Abstract**

Everglades virus (EVEV), an alphavirus in the Venezuelan equine encephalitis (VEE) complex, is a mosquito-borne human pathogen endemic to South Florida. Field isolations of EVEV from *Culex (Melanoconion) cedecei* and laboratory susceptibility experiments established this species as its primary vector. However, isolates of EVEV from *Ochlerotatus taeniorhynchus* and *Culex nigripalpus*, more abundant and widespread species in South Florida, suggested that they also transmit EVEV and could infect many people. We performed susceptibility experiments with F<sub>1</sub> generation *Oc. taeniorhynchus* and *Cx. nigripalpus* to evaluate their permissiveness to EVEV infection. In contrast to the high degree of susceptibility of *Cx. (Mel.) cedecei*, *Oc. taeniorhynchus* and *Cx. nigripalpus* were relatively refractory to oral EVEV infection, indicating that they are probably not important vectors. Identification of vectors involved in enzootic EVEV transmission will assist in understanding potential changes in vector use that could accompany the emergence of epizootic or epidemic EVEV.

**Florida Mosquito Control Handbook Owners  
2<sup>nd</sup> Notice**

The 3<sup>rd</sup> Edition of the Florida Mosquito Control Handbook was released in December 2004. For those who own previous editions of the Handbook, the updated chapters will be provided to you. The FMCA Board of Directors made the decision to discontinue providing updates of chapters once we have completed the current task. In the future, to receive new and updated chapters, it will require the purchase of a complete new edition.

The updates for the 3<sup>rd</sup> Edition will be ready for distribution at the Fall Meeting, 2005. You must complete the attached form to receive the updates at the Fall Meeting. Those who are not coming to the meeting may request theirs by mail, so please provide your correct mailing address.

The updates may be requested by one person representing an agency, or by individuals. Please discuss this decision with all Handbook owners to prevent duplicate requests. Fill out the form here and fax to:

C. R. Rutledge, Managing Editor  
Florida Mosquito Control Handbook  
772-778-7205

Name \_\_\_\_\_

Are you representing several Handbook owners in your agency, or is this an individual request? \_\_\_\_\_

Agency \_\_\_\_\_

How many sets of Handbook Updates do you need? \_\_\_\_\_

What edition do you own?    1<sup>st</sup>                      2<sup>nd</sup>

Do you prefer paper copies or a CD? \_\_\_\_\_

Will you be picking up your updates at the Fall FMCA meeting? \_\_\_\_\_

If not, what is the mailing address for shipping the updates?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Florida Mosquito Control Association, Inc.  
**SECOND CALL FOR PAPERS FOR 2005 ANNUAL FALL MEETING**  
Hawk's Cay Resort  
61 Hawk's Cay Boulevard, Duck Key, FL 33050  
305.743.7000  
November 13 – 16, 2005

You are invited to submit a title for a paper to be presented at the 2005 Annual Fall Meeting of the Florida Mosquito Control Association, Inc. to be held at Hawk's Cay Resort on Duck Key in the Florida Keys, November 13 – 16, 2005. Type the title, author(s), organization(s), and address (es) exactly the way they are to appear on the program. If more than one author is listed, place an asterisk after the name of the author who is to present the paper. **Send this form to Ed Fussell, Florida Keys Mosquito Control District, 5224 College Road, Key West, FL, 33040, E-mail: [efussell@keysmosquito.org](mailto:efussell@keysmosquito.org), Telephone: 305.292.7190; FAX: 305.292.7199.** Please submit as soon as possible so there is time to plan and organize the program.

**TITLE:** \_\_\_\_\_  
\_\_\_\_\_

**AUTHOR:** (INCLUDE E-MAIL, TELEPHONE AND FAX NUMBERS OF PRESENTER)

1. \_\_\_\_\_  
\_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

**ORGANIZATION:**

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

**MAILING ADDRESS:**

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

**REQUESTED DURATION OF PRESENTATION:** \_\_\_ 10 min \_\_\_ 15 min \_\_\_ Symposium \_\_\_ Other

**AUDIO/VISUAL EQUIPMENT REQUIRED:** \_\_\_ Slide \_\_\_ LCD \_\_\_ Overhead \_\_\_ Other (please specify)

**PAPER CATEGORY:** \_\_\_ Research \_\_\_ Operations \_\_\_ Regulatory \_\_\_ Other (please specify)

**Florida Mosquito Control Association  
Federal ID # 59-1819301  
PO Box 358630, Gainesville, FL 32635-8630  
77<sup>th</sup> Annual Fall Meeting  
Registration Form**

The 2005 Fall Meeting will begin at 1:00 p.m. on Sunday, November 13<sup>th</sup> with the FMCA Board of Director's Meeting. The general program will begin at 8:00 a.m. on Monday, November 14<sup>th</sup> and conclude at 12:00 p.m. on Wednesday, November 16<sup>th</sup>. The conference will be held at Hawk's Cay Resort, Duck Key, FL.

Registration form must be faxed (352.334.2286) or mailed by **November 1, 2005**, for advance registration fees. There will be no refunds given after **November 7, 2005**. If you have any questions, please call Kellie Etherson at 352.281.3020 or email her at [ethersonk@cityofgainesville.org](mailto:ethersonk@cityofgainesville.org). Please type or legibly print the following information:

Name: \_\_\_\_\_  
 Agency: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Fax: \_\_\_\_\_ Email: \_\_\_\_\_

**Advance Registration**

**On-Site Registration**

Director	\$250 _____	\$350 _____
Commissioner	\$250 _____	\$350 _____
General Member	\$225 _____	\$315 _____
Student	\$125 _____	\$175 _____
Companion	\$125 _____	
	Name _____	
Non-Member Director	\$350 _____	\$490 _____
Non-Member Commissioner	\$350 _____	\$490 _____
Non-Member General	\$315 _____	\$440 _____
Extra Banquet Ticket	\$ 65 _____	

TOTAL ENCLOSED: \_\_\_\_\_

Hawk's Cay Resort, 61 Hawk's Cay Blvd., Duck Key, FL 33050  
For room reservations call: 1-888-443-6393

<http://www.hawkscay.com/hcr.asp>

Regular Room Rate: **\$165/night**

Villa Room Rate: **\$300/night**

Hawk's Cay is taking room reservations now. These rates are subject to state and local tax. Please identify yourself as attending the Florida Mosquito Control Association meeting. You will not be considered tax-exempt unless you pay using a tax-exempt agency check or credit card with the agency name on it. You must have a copy of your tax exemption certificate. The cut-off date for our group rate is **October 14, 2005.**

If you plan to use Hawk's Cay facilities, make your reservations now! They have a wonderful array of activities from spa and marina to fishing excursions and diving. All of these activities require reservations. Hawk's Cay has a comprehensive web-site and FMCA has a link to their home page on our home page.

***Remember – Everything Requires a Reservation (well....almost everything!)***



Hawk's Cay maintains a dolphin training facility and there are several hands-on programs. All of the dolphin programs require a reservation. These need to be made well in advance. Check out their website for a list of the different programs.



Dock rates for boats: \$2.50/foot/day



A 20% gratuity is added to everything, whether you want it there or not. (Small print says that you can take it off)

Sunday's early registration will be in the library which will be directly to your right as you come through the front doors to check in. Some additions are being made to the meeting due to the distance from Hawk's Cay (Duck Key) to either Islamorada or Marathon. Watch for those additions – you won't be disappointed! To get to Duck Key, watch for Mile Marker 61 (just remember Roger Maris hitting 61



homers in '61), and turn east onto   (Duck Key).



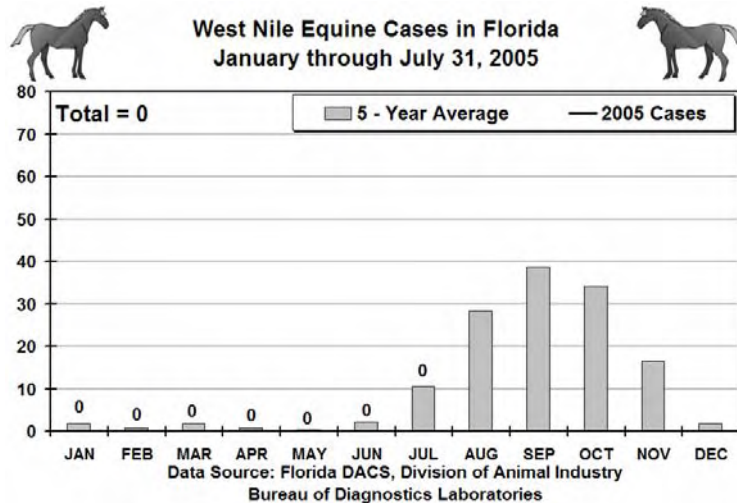
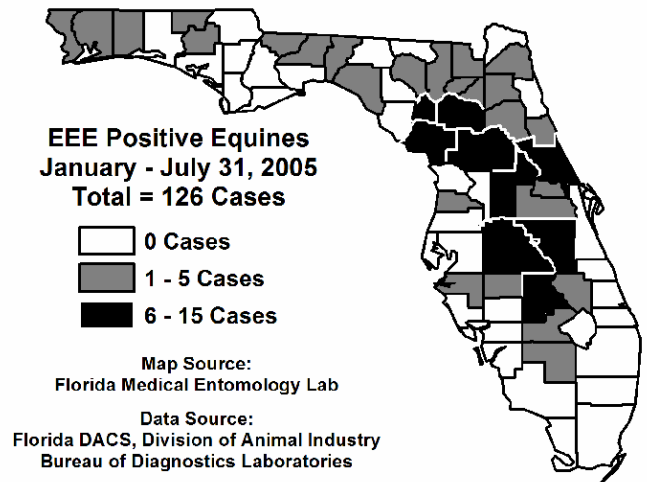
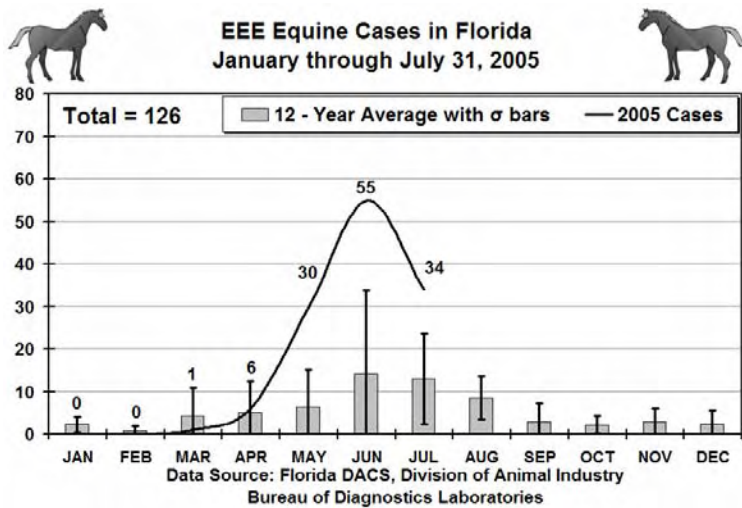
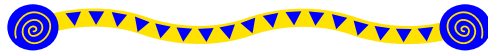
If you reach the Seven Mile Bridge, you have gone too far.

# Job Openings

EAST FLAGLER MOSQUITO CONTROL DISTRICT  
 24 Utility Drive  
 Palm Coast, FL 32137  
 Tel: 904.445.4135 Fax: 904.446.5104

## Helicopter Pilot

The East Flagler Mosquito Control District is accepting applications for a full time helicopter pilot. The district aircraft is a Bell 206B3 used for mosquito inspection, larviciding and adulticiding. Interested applicants should email complete pilot history and references to Joe Cash ([joecash@bellsouth.net](mailto:joecash@bellsouth.net)) no later than September 30, 2005. Alternatively, applicants may submit by fax to 386.446.5104. Salary is negotiable.





## ***Evaluating Scientific Papers: Details are Important***

In a previous *Buzz Words* column I advised readers to evaluate the conclusions and assertions in scientific papers carefully. For example, there are scientific publications asserting that dead bird reporting is a good indicator of human risk for West Nile transmission. Recall, for reasons stated in previous *Buzz Words* articles, "it ain't necessarily so." If there is one consistent theme in reading scientific papers critically it is "pay attention to the details." After more careful consideration of the details, critical readers may find that many papers lead the reader to conclusions that are not as clear cut as the authors believe.

A recent publication by Tonry et al. (2005. West Nile Virus detection in urine. *Emerging Infectious Diseases* 11: 1294-1296) can be read at:

<http://www.cdc.gov/ncidod/eid/vol11no08/05-0238.htm>

In this interesting paper, the authors detected WNV RNA by RT-PCR in human urine from a patient 8 days after the onset of symptoms. Live WNV was not isolated from the urine with standard virus isolation techniques. Although the authors state that the implications of their findings are unclear, the authors believe this finding may lead to a rapid diagnostic technique for WNV in humans. They are conducting further studies on how long WNV can be found in human urine samples from patients with clinical and subclinical WNV infections. Based on their findings, work with other flaviviruses, and findings of actual WNV in hamster urine, the authors conclude that WNV is shed in human urine as well. It is straightforward, and certainly important, that WNV RNA can be detected in human urine.

Why are the details important? Richard Lewontin (in his book *It Ain't Necessarily So: The Dream of the Human Genome and Other Illusions*. 2000. New York Review of Books) relates the story of the wonder-rabbi of Chelm. This wonder-maker had a vision where he saw the fiery destruction of a school in the city of Lublin more than 50 miles away. His vision solidified and enhanced his stature as the Chelm wonder-rabbi. Several days later, a visitor to Chelm arrived from Lublin. Everyone offered sympathies at the tragic loss of the school. The visitor told everyone that there was no fire, the school is just fine, and he asked "what kind of wonder-rabbi is that?" The reply from one of the rabbi's disciples was, "Well, well, burned or not burned, it's only a detail. The wonder is he could see so far."

Now back to scientific publications, details, and critical reading. The paper detecting WNV RNA in human urine is interesting and raises many issues for readers to consider. Consider the details.

- WNV RNA is not necessarily live WNV and may in fact be RNA fragments of WN virions.
- A sample size of 1 raises the concern that the circumstances of this single individual may not be generally applicable to humans.
- What procedures were used to attempt to isolate live virus? How much urine was subjected to PCR testing, how many tests, what volumes were used to attempt virus isolations?

- Why was WNV RNA not found in any of the other (how many?) daily samples? One needs details of how many samples were processed on each day, the volumes tested and an assessment of the probability of detecting specific quantities or levels of RNA in specific sample volumes. Details. Details.

The finding of WNV RNA in this single patient's urine is interesting and indeed does show the presence of WNV RNA in this individual. Therefore PCR testing of urine from individuals infected with WNV may lead to a new diagnostic test for West Nile virus, and certainly more work is warranted. This preliminary observation will need to be validated through more sampling and more attention to details in order to accurately assess the importance of this preliminary first report.

Remember, "It's only a detail. The wonder is he could see so far."

Pay careful attention to details.

Walter J. Tabachnick, Director  
Florida Medical Entomology Laboratory  
University of Florida – IFAS