

Buzz Words



The Newsletter of the Florida Mosquito Control Association
Nov/Dec 2005

Volume 5, Issue Number 6

2006 FMCA Annual Fly-In
January 17 – 19, 2006
Ft. Myers, FL

<http://www.floridamosquito.org/FlyIn2006/indexflyin06.html>

2006 FMCA Dodd Short Courses
January 23 – 27, 2006
Ocala Hilton, Ocala, Florida
www.floridamosquito.org

Public Health Workshop
Florida Medical Entomology Laboratory
February 16, 2006
Vero Beach, FL
<http://mosquito.ifas.ufl.edu>

2006 Southeast Regional Public Health Pest and
Vector Management Conference
PHEREC
February 21 – 23, 2006
Panama City Beach, FL
<http://www.pherec.org/SEConference>

FMCA News

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 room rate is \$109.00 per night.

2006 FMCA Spring Meeting

The AMCA has scheduled their annual Washington Legislative Days for the same dates that FMCA had scheduled the Spring Conference in Pinellas County. The hotel with which FMCA has a contract (TradeWinds Island Resorts on St. Pete Beach) has been wonderful and tried to accommodate FMCA as best they could. **The new dates of the Spring Meeting will be May 17-18, 2006.** Please note that this is a Wednesday/Thursday meeting and not the typical Tuesday/Wednesday meeting. In addition, there are 2 room rates for this meeting - the room rate for 5/16/06 will be \$145 and the room rate for 5/17/06 will be \$125. This is due to the lack of room availability on those days (they were already booked solid). The FMCA was very fortunate to be able to keep the meeting at this hotel. Please make a note on your calendars of the new dates.

Pinellas County Mosquito Control will be celebrating their 75th Anniversary - watch the FMCA web site for further updates and district activities.

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.

News from FMEL

The 50th Anniversary of the Florida Medical Entomology Laboratory will be celebrated on February 17, 2006, in Vero Beach, FL. Invitations to attend the celebration have been mailed.

***Public Health Concerns in Florida:
EEE, Culex mosquitoes,
and recluse spiders***

**FL Medical Entomology Laboratory
Boathouse, 200 9th Street SE, Vero Beach, FL
32962. 16 February 2006; 1:00 p.m. – 5:00
p.m. 3 CEU's in Public Health for attendance
of entire workshop. *No partial credits.***

**No cost to attend. Pre-registration required.
Register on-line at
<http://mosquito.ifas.ufl.edu>**

News from PHEREC

The 10th annual meeting of the Southeast Regional Public Health Pest and Vector Management Conference is scheduled for February 21-23, 2006. Drs. Cilek and Petersen are organizing a special program recognizing the tenth year of PHEREC's annual training conference. Details have been posted to the PHEREC Web site. The venue will be the Howard Johnson's at the Boardwalk Beach Resort in Panama City Beach [same as last year]. Very favorable room rates have been secured for this year's event! Workshop descriptions and schedules will be Web-posted during late December, 2005. Please register early to insure a place in the workshops. Industry representatives are encouraged to participate in a plenary workshop focusing on recent technological developments. The complete program brochure is available online at <http://www.pherec.org/SEConference> For additional information, please email Dr. Petersen at drjack3@hotmail.com.

Mosquito Control District News

Unmanned Helicopter Demonstration & Aerial Application Seminar

Conch Island, St. Augustine, FL, Jan. 17, 2006 – 9 a.m. - noon. No cost to attend. Registration: (904-471-3107 ext 206, or ginaamcd@bellsouth.net).

3rd Arbovirus Surveillance and Mosquito Control Workshop

AMCD 500 Old Beach Road, St. Augustine, FL, March 22-24, 2006. \$50 for one day session including lunch, \$150 for all 3 day sessions including 1 dinner. CEU's credits (15) will be provided. Holiday Inn, 860 A1A Beach Blvd. St. Augustine Beach, FL 32080, \$79-\$89 per night. 1-800-626-7263 (Celeste

Kuhar). 904-471-3107 (Alex or Gina), ginaamcd@bellsouth.net Details at: www.anastasiacmcd.org.

Job Opportunity

Seasonal Entomologist - 6 mo position needed to conduct evaluation of pesticides & equipment under the guidance & direction of the District Director. Ph.D. in Entomology or equivalent is required. Min. 1 year experience in pesticides & equipment evaluation. Salary Range: \$3,520-\$4,000/month. Start date: April 1, 2006. Deadline: Jan. 31, 2006. Submit resumes: AMCD, 500 Old Beach Rd, St. Augustine, FL 32080, Tel. 904-471-3107, Fax. 904-471-3189, e-mail: xueamcd@bellsouth.net

Relationships between host viremia and vector susceptibility for arboviruses

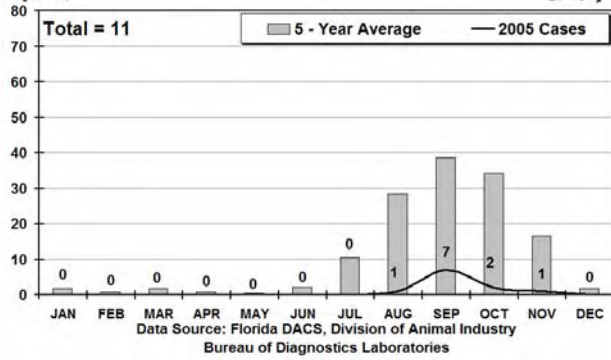
Several papers have appeared in the literature in recent years that use the levels of viremia in different vertebrate host species to determine which hosts are important in arboviral transmission. For example, birds with low viremias, below some threshold needed to infect mosquitoes, have been considered as not being very important in West Nile transmission compared to American crows which have high viremias. This is not necessarily so and the relationship between host viremia and vector susceptibility may be quite complex. In a paper, that will appear in the Journal of Medical Entomology, we provide a model that explores the relationships between host viremia and vector susceptibility for arboviruses.

A categorical threshold model, where a minimum level of host viremia is necessary to infect a vector, impacts the determination of the relative importance of different host species in the transmission and spread of these pathogens. This threshold model shows that the intensity and duration of the viremia above the threshold level is critical in determining the potential numbers of infected mosquitoes. Other models may provide more accurate descriptions of the relationship between host viremia and vector infection. In particular, in comparison to the simple threshold model for vector infection, a probabilistic approach to vector infection may be more appropriate and realistic. A probabilistic model relating host viremia to the probability distribution of virions in the mosquito blood meal shows that the threshold model will underestimate the significance of hosts with low viremias. A probabilistic model that includes avian mortality shows that the maximum number of mosquitoes are infected by feeding on hosts whose viremia peaks just below the lethal level. The relationship between host viremia and vector infection is complex, and there is little experimental information to determine the most accurate model for different arthropod vector-host systems. Until there is more information, the ability to distinguish the relative importance of different hosts in infecting vectors will remain problematic.

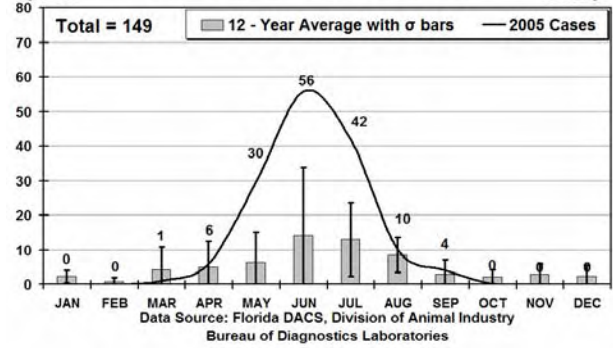
Cynthia C. Lord, Associate Professor
C. Roxanne Rutledge, Assistant Professor
Walter J. Tabachnick, Professor
Florida Medical Entomology Laboratory, University of Florida, Vero Beach



West Nile Equine Cases in Florida
January through December 17, 2005



EEE Equine Cases in Florida
January through December 17, 2005



Deadline for submissions to be included in the January/February 2006 issue of *Buzz Words* is January 31, 2006. Please send articles and change of address information to:

**Dr. Roxanne Rutledge, Editor, FMEL
200 9th Street S.E., Vero Beach, FL 32962 or buzzwords@ifas.ufl.edu**