

Buzz Words



The Newsletter of the Florida Mosquito Control Association
Jan/Feb 2005

Volume 5, Issue Number 1



2005 FMCA Spring Meeting - May 3-4, 2005 Registration Form Inside this Issue of *Buzz Words*

Program Organizers: Mr. Bill Reynolds: breyolds@e-adapco.com
Dr. Walter Tabachnick: wjt@ifas.ufl.edu

The 2005 FMCA Spring Conference will address hurricane preparedness and will be the first ever workshop to provide an opportunity to specifically assess and improve Florida mosquito control's responses during a hurricane emergency situation as was experienced in 2004, using the collective expertise of the workshop participants. The focus of this workshop will be on mosquito control issues and mosquito control strategies.

The workshop will utilize groups working together in various breakout sessions. The objective of the workshop will be to provide a document containing guidelines for mosquito control agencies that will assist them in providing essential services and control operations after a hurricane in their jurisdiction. The information resulting from the breakout group discussions will be collated and published as a FMCA Technical Bulletin that will be provided to each FMCA member. Some of the issues that will be addressed are: coordination with other agencies; identifying priorities; impediments to mosquito control during hurricane emergencies; and methods for obtaining external resources

A detailed agenda with a list of speakers and participants will be posted in the next *Buzz Words* and on-line at www.floridamosquito.org. Meeting hotel is: The Hilton Naples & Towers Hotel, 5111 Tamiami Trail North, Naples, FL 34103; Phone: 239-430-4900; Fax: 239-430-4901; Room rate is \$79.00 per night. **The room block will be released April 18, 2005.** <http://www.hiltonnaples.com/>



Deadline for submissions to be included in the March/April 2005 issue of *Buzz Words* is March 30, 2005. 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

FMCA NEWS

FMCA New Mailing Address, Phone, and Fax

Kellie Etherson
Florida Mosquito Control Association
Post Office Box 358630
Gainesville, FL 32635-8630
Phone: 352-281-3020
Fax: 352-334-2286
email: ethersonk@cityofgainesville.org

FMCA Webpage Information

Be on the lookout for a new CEU site on the FMCA website with information from FDACS about Continuing Education opportunities throughout the state. If you sponsor a training program with CEU opportunities, let FMCA place the information on this link.

AMCA NEWS

AMCA Webpage Information

The AMCA web page has expanded again to include a new members-only COURTYARD. The existing members-only area is more of a "store-front" where members can purchase items, pay dues, order subscriptions, register for events, or search the member directory. The new COURTYARD offers informational materials dealing with public relations (e.g., Joe Conlon's PR Tool Kit), and coming soon is member access to a real-time forum to discuss professional topics of interest. In the future the COURTYARD will offer an electronic version of the Journal of the American Mosquito Control Association, as well as other resources. A separate username and password will be required for the COURTYARD. Visit the AMCA web page (www.mosquito.org) to get yours!

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

2nd Arbovirus Surveillance and Mosquito Control Workshop

The 2nd Arbovirus Surveillance and Mosquito Control Workshop will be held at Anastasia Mosquito Control District, St. Augustine, Florida, March 22-24, 2005. There are 3 day sessions including arbovirus surveillance (day 1), mosquito population surveillance (day 2), and mosquito control techniques (day 3). Cost is \$40 for a 1 day session. Contact information:

Ms. Alex Santoro or Dr. Rui-De Xue
904-471-3107 ext. 206; 904-471-3189 (fax)
e-mail: santoroamcd@bellsouth.net
xueamcd@bellsouth.net

NEWS FROM PHEREC

Recent Publications

Floore, T.G., J.L. Petersen and K.R. Shaffer. 2004. Efficacy studies of VECTOBAC®12AS and TEKNAR®HP-D larvicides against 3rd-instar *Ochlerotatus taeniorhynchus* and *Culex quinquefasciatus* in small plot field studies. *J Am Mosq Control Assoc.* 20(4):429-433.

Southeast Regional Conference

The 9th Annual Meeting of the Southeast Regional Public Health Pest and Vector Management Conference will take place Tuesday - Thursday, February 22-24, 2005 in Panama City Beach, FL. For more information, call Jack Petersen: 850-872-4184 ext. 36 <http://pherec.org/SEconference>



Mosquito Identifiers! Look here!

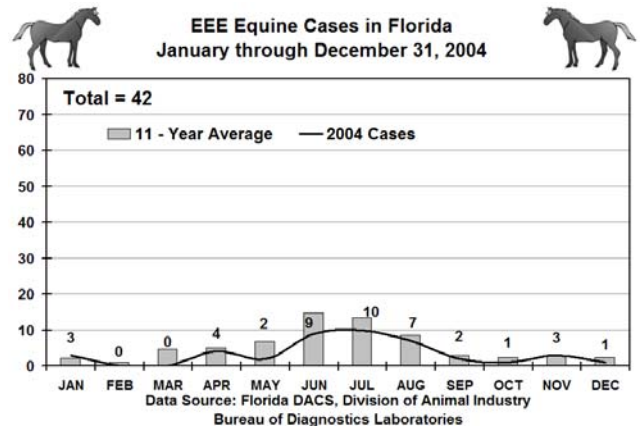
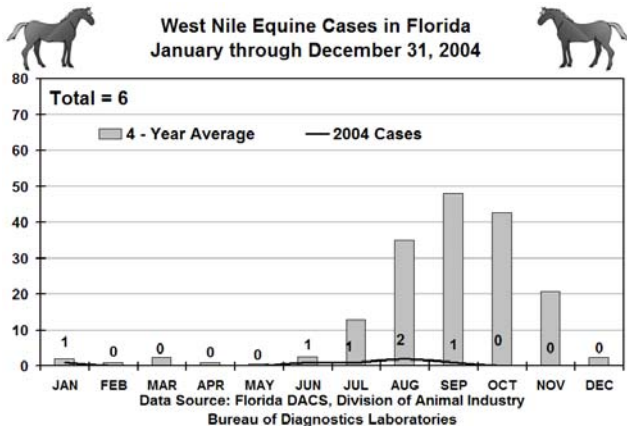
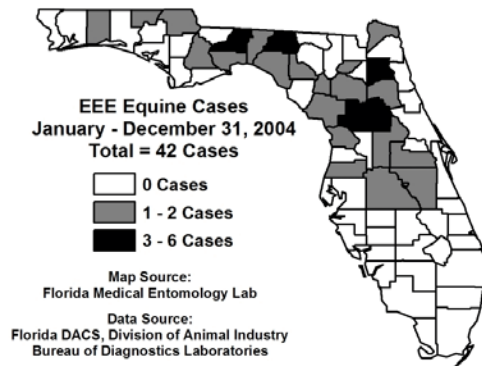
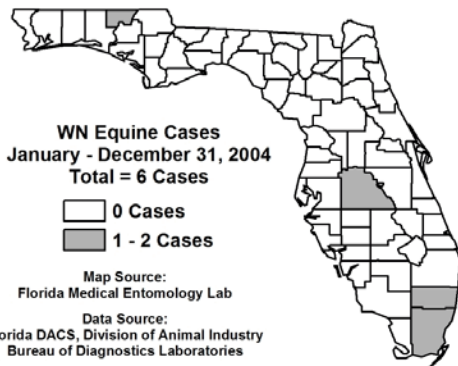
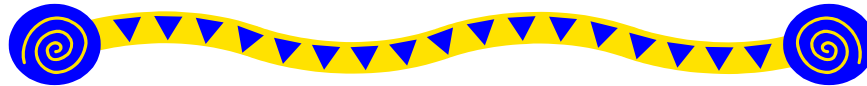
Changes in Names of Florida Mosquitoes

In a recent paper, "Phylogeny and classification of Aedini (Diptera: Culicidae) based on morphological characters of all life stages" (by J. F. Reinert, R. E. Harbach, and I. J. Kitching, 2004, *Zoological Journal of the Linnean Society*, 142:289-368), *Howardina* Theobald was elevated from subgeneric to generic rank and *Stegomyia* Theobald was restored to generic status.

The following Florida mosquitoes are affected by these changes: *Howardina bahamensis* (Berlin), *Stegomyia aegypti* (Linnaeus), and *Stegomyia albopicta* (Skuse). In accordance with the *International Code of Zoological Nomenclature* (International Commission

of Zoological Nomenclature, 1999, 306 pp.) the termination of the latter species changes (*us* to *a*) because it must correspond in gender with genus *Stegomyia* which is feminine. The other aedine species of Florida remain in their current generic combinations, i.e., *Aedes* Meigen (2 species), *Ochlerotatus* Lynch Arribalzaga (16 species), and *Psorophora* Robineau-Desvoidy (10 species) (see list in R. F. Darsie, Jr. and C. D. Morris, 2000, *Keys to the adult females and fourth-instar larvae of the mosquitoes of Florida (Diptera, Culicidae)*, Technical Bulletin of the Florida Mosquito Control Association, Volume 1, 159 pp.).

John F. Reinert, Ph.D.
Research Entomologist
Center for Medical, Agricultural and Veterinary Entomology, USDA, ARS,
1600/1700 S.W. 23rd Drive,
Gainesville, FL



Florida Mosquito Control Association, Inc.

(Federal ID# 59-1819301)
2005 SPRING CONFERENCE, May 3 – 4, 2005
The Hilton Naples & Towers Hotel
Naples, Florida

The 2005 Spring Conference will start at 10:00 a.m. on Tuesday, May 3, 2005 with the FMCA Board of Director's Meeting. The general program will begin at 1:00 p.m. on May 3, and conclude at 12:00 p.m. on Wednesday, May 4. The conference will be held in Collier County, Naples, FL, at The Hilton Naples & Towers Hotel.

Registration must be faxed or mailed by April 15 2005, for advanced registration fees. There will be no refunds given after April 27, 2005. If you have any questions, please call Kellie Etherson at 352.281.3020 or email her at ethersonk@cityofgainesville.org

Name: _____

Phone: _____

Agency: _____

Address: _____

Fax: _____

E-mail: _____

Advance Registration

Member \$75 _____

Non-Member \$90 _____

Student \$25 _____

Companion \$25 _____

On-Site Registration

\$80 _____

\$95 _____

Companion's Name _____

PLEASE NOTE THAT THE FMCA HAS A NEW MAILING ADDRESS, FAX, AND PHONE. NEW CONTACT INFORMATION IS PROVIDED HERE:

Please fax this form to 352.334.2286 or mail to:

Florida Mosquito Control Association

Post Office Box 358630, Gainesville, Florida 32635-8630

A Florida Mosquito Control Arbovirus Response Plan

Florida mosquito control has a responsibility to mitigate the impact of mosquito-borne disease on human health and well-being through the efficient, effective and environmentally proper use of mosquito control methods. The arrival of West Nile in Florida has brought pressures on mosquito control to develop appropriate responses commensurate with the threat from West Nile transmission. It would be helpful to have guidelines for mosquito control organizations to assist them in interpreting mosquito-borne disease information that may be available to their local jurisdictions. The Florida Medical Entomology Laboratory does report assessments on a statewide level on its Encephalitis Information System (EIS) <http://eis.ifas.ufl.edu/> Guidelines, however, are needed that provide a framework for mosquito control agencies to use locally available arthropod-borne pathogen and disease information to apply mosquito control efforts commensurate with the extent of arthropod-borne disease and/or the risk of disease to their human clientele.

A Florida Mosquito Control Arbovirus Response Plan (FMCARP) must take into account the great diversity in mosquito control organizations in Florida and the diversity of the issues each faces due to the variety of ecologies in different regions, and the variety of available resources for mosquito control in the state. An FMCARP should integrate its guidelines for mosquito control agencies in Florida with the companion Florida Department of Health Mosquito Illness Response Plan. Florida mosquito control agencies require a FMCARP containing specific guidelines for mosquito control efforts commensurate with public health risks from mosquitoes. The Department of Health Illness Response Plan is not meant to provide such guidelines. The FMCARP should consider several factors to assess the status of mosquito-borne disease and the impact on a mosquito control program's response.

A. Population Size. The absolute size of the human population in a jurisdiction is a critical factor in determining the problem from an arthropod-borne disease. It must be understood that precisely the same risk of mosquito-borne human disease in districts or counties with a larger numbers of humans will have a larger number of human cases compared to smaller counties. For example, Indian River County and Miami Dade County have the same disease incidence for West Nile, i.e., an incidence of 10 cases per 100,000 people in each county. There is no difference in risk in the two counties. However, there are 12.5 cases in Indian River, population size 120,000, but 230 in Miami Dade, population size 2,300,000. This is an important consideration.

B. Time of the Year. Guidelines consider the time of the year that the information is collected. The same information collected in the early Florida transmission season (May-August) may demand a more aggressive response than the same information collected in the later transmission season (September-December) in Florida.

C. Risk of Disease vs. Actual Occurrence of Disease. Guidance should be provided for the "risk" for human disease when the numbers of human cases are not known, or have not occurred yet, but is projected on the basis of other information. In addition, guidance is needed based on the actual "occurrence" of human cases. Other information to determine "risk" may be any, some, or all of the following: surveillance information (mosquitoes, wild birds, sentinel chickens, equines) in the local jurisdiction or in the absence of surveillance information, information obtained from a geographically associated county that has such surveillance information. Once human cases are occurring, then responses are needed that are commensurate with both incidence and absolute numbers of cases.

D. Reporting Interval. Guidelines should account for specific reporting periods. For example, surveillance information is appropriate for the specific time period in which the information is collected. Surveillance information used should be based on the shortest surveillance time period being implemented, i.e., usually a weekly reporting period.

E. Surveillance Information. There is wide diversity in the available surveillance information throughout Florida. Some localities have well developed surveillance information that can be used prior to and during the occurrence of human West Nile cases to assess risk and apply appropriate mosquito and disease control strategies. Each of the different surveillance tools may provide different information which will need to be assessed and evaluated by knowledgeable mosquito and mosquito-borne disease epidemiologists relative to the tool being used, location of the information, and time of year. Certainly the timeliness of having surveillance information is critical.

F. Surveillance, Human Population Size and Estimating Risk. It is possible to obtain crude estimates of the risk of human West Nile cases using sentinel chicken seroconversions rates to estimate the frequency of mosquito transmission in a specific area. This can be used to gauge the magnitude of overall risk. Such risk estimates are more accurate if the estimate is confined to the smallest local human population that is near the sentinel chicken flocks. Also, information on the mosquito attack rates will greatly improve the estimates. Finally, information on the mosquito attack rates on humans will also improve the estimate.

There is still much to be done to improve mosquito control's ability to respond and mitigate a Florida West Nile virus epidemic. Guidelines to assess human risk and guidelines for appropriate mosquito control responses commensurate with human risk are important steps. Future development of an FMCARP should be based on discussions and input from Florida Mosquito Control Districts and the members of the Florida Mosquito Control Association.

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