

Buzz Words



The Newsletter of the Florida Mosquito Control Association
Jan/Feb 2006

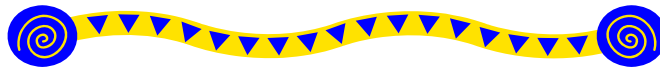
Volume 6, Issue Number 1

FMCA Spring Conference

May 17 – 18, 2006

St. Petersburg Beach, FL

Details and Registration Form inside this issue of *BuzzWords*



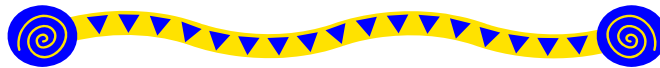
American Mosquito Control Association

72nd Annual Meeting

February 26 – March 2, 2006

Detroit, Michigan

www.mosquito.org

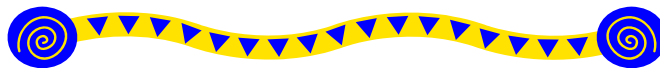


American Mosquito Control Association

8th Annual Spring Washington Conference

May 1 – 3, 2006

www.mosquito.org



Are you ready for AMCA in 2007???

FMCA News

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.



Brevard County Mosquito Control Director Position Position announcement from January 23-March 8, 2006

Mosquito Control Director: Brevard Mosquito Control District

The Board of Commissioners of the Brevard Mosquito Control District is seeking a qualified professional to serve as the Mosquito Control Department Director. The applicant must possess a minimum of a Bachelor's Degree from a four (4) year college or university with a degree in the basic sciences or engineering and two (2) years work experience in mosquito control, PLUS a minimum of five (5) years of progressively responsible public sector management experience.

The position requires the applicant to possess a current valid Florida driver's license, and possess or be able to obtain a current Florida Department of Agriculture and Consumer Services (FDACS) Mosquito Control Director's III Certification within six (6) months of employment in accordance with Chapter 5E-13.032 Florida Administrative Code.

Salary range \$67,081 - \$87,205 annually. Actual salary negotiable based on experience and qualifications.

Download application at:
<http://brevardcounty.us/humanres/>. Send application/resume and copies of applicable licenses to Office of Human Resources, Brevard County Commissioners, Bldg. B, 2725 Judge Fran Jamieson Way, Viera, FL 32940.
LAST DAY TO APPLY: 3/8/06
EOE

Florida Mosquito Control Association

2006 SPRING CONFERENCE

1st Call for Papers

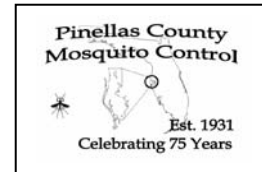
TradeWinds Sandpiper Hotels & Suites

6000 Gulf Boulevard

St. Petersburg Beach, FL 33706

800.360.4016/727.360.5551

May 17-18, 2006



You are invited to submit a title for a paper to be presented at the 2006 Spring Conference of the Florida Mosquito Control Association, Inc. to be held at the TradeWinds Sandpiper Hotels & Suites, May 17-18, 2006. 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 Dr. Frank Van Essen, FMCA Vice-President and Program Chair, Collier Mosquito Control District, 600 North Road, Naples, FL 34104-3464. E-mail: cmcd@collier-mosquito.com. Telephone: 239.436.1000; Fax: 239.436.1005.** 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. _____

MAIL ADDRESS:

1. _____
2. _____
3. _____

REQUESTED DURATION OF PRESENTATION: ___ 10 min ___ 15 min ___ Symposium ___ Other

AUDIO/VISUAL EQUIPMENT REQUIRED: ___ Slide ___ LCD/laptop ___ Overhead ___ Other (specify)

PAPER CATEGORY: ___ Research ___ Operations ___ Regulatory ___ Other (specify)

Florida Mosquito Control Association
PO Box 358630, Gainesville, FL 32635-8630
Federal ID # 59-1819301

Celebrating Pinellas County Mosquito Control's 75th Anniversary
2006 Spring Conference Registration Form

The 2006 FMCA Spring Conference will begin at 10:00 a.m. on Wednesday, May 17, 2006 with the FMCA Board of Director's Meeting. The general program will begin at 1:00 p.m. on May 17th and will conclude at 12:00 p.m. on Thursday, May 18th. The program will be followed by a tour of Pinellas County Mosquito Control's new facilities. The conference will be held at the TradeWinds Sandpiper Hotels & Suits which is part of the TradeWinds Island Resorts on St. Petersburg Beach.

Registration form must be faxed (352.334.2286) or mailed by **April 30, 2006** for advance registration fees. There will be no refunds given after **May 10, 2006**. If you have any questions, please call Kellie Etherson at 352.281.3020 or email her at floridamosquito@earthlink.net or ethersonk@cityofgainesville.org. Please type or **legibly print** the following information:

Name: _____

Agency: _____

Address: _____

Office Phone: _____ Cell Phone (optional): _____

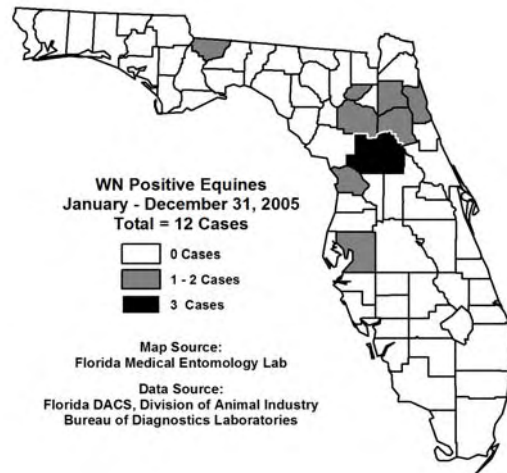
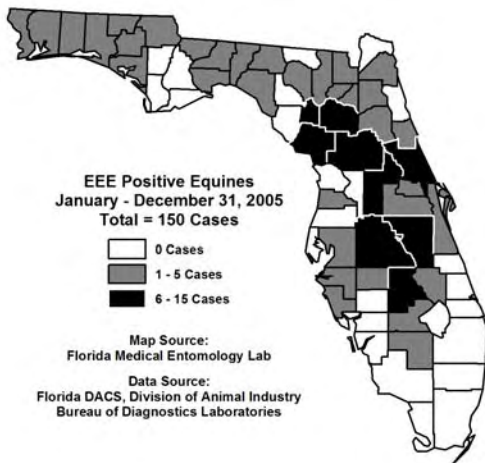
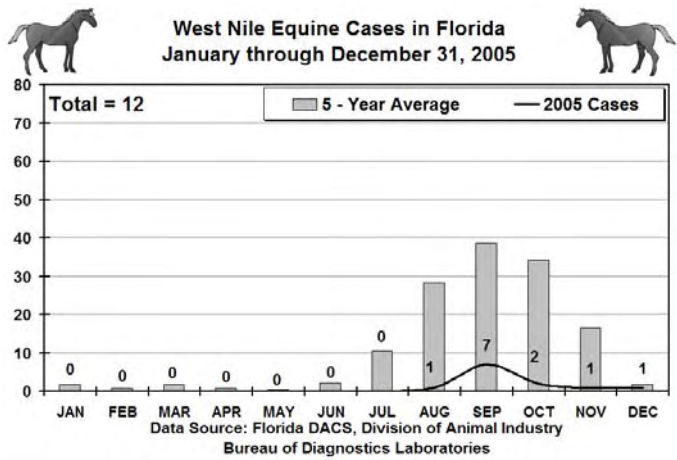
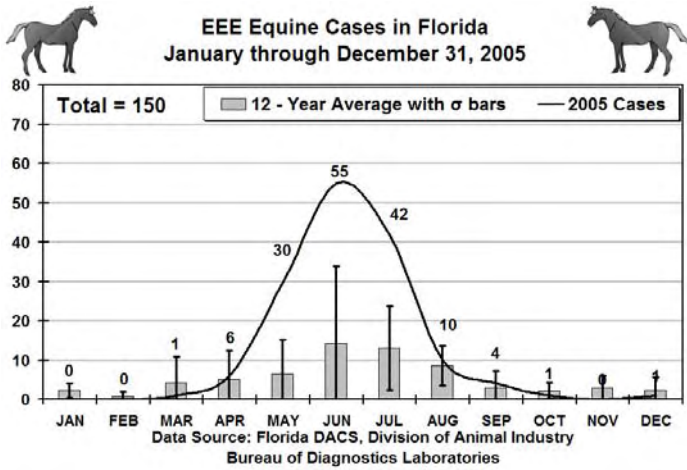
Fax: _____ Email: _____

	<i>Advance Registration</i>	<i>On-Site Registration</i>
Member	\$75 _____	\$80 _____
Non-Member	\$90 _____	\$95 _____
Local	\$25 _____	\$30 _____
Student	\$25 _____	
Companion	\$25 _____	Name _____

TOTAL ENCLOSED: _____

For room reservations call:
TradeWinds/Sandpiper Hotels and Suites
6000 Gulf Boulevard, St. Pete Beach, FL 33706
800.360.4016 or 727.360.5551 www.tradewindsresort.com
Room Rate: **\$140/night S/D**

These rates are subject to state and local tax and resort fees. 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 **May 1, 2006**



Support for Mosquito and Mosquito-borne Disease Research

Mosquitoes and mosquito-borne diseases continue to plague mankind throughout the world. The world has made tremendous progress in combating mosquitoes since arthropods were first recognized as vectors of human and animal pathogens more than 100 years ago. The first reports showing pathogen transmission by arthropods were milestone achievements in public health and medicine with discoveries of tick transmission of Texas cattle fever by Theobald Smith and Frederick Kilbourne in 1893, mosquito transmission of malaria by Ronald Ross in 1897, and mosquito transmission of yellow fever virus by Walter Reed, Aristedes Agramonte, James Carroll, and Jesse Lazear in 1901.

Since these pioneering studies there has been enormous progress that continues to the present day. However, what has been the extent of the overall effort? Why is there still a need for more research? Why have we yet to put mosquito pests and mosquito-borne disease to rest as a plague on humans? Obviously the issues are very complex.

If you think that scientists and researchers have expended a large amount of resources and effort studying vector borne disease, you are right. But, then again, it is sobering to look at this effort in comparison to efforts on other zoological research topics for perspective.

In order to gauge the research effort on mosquitoes and mosquito-borne disease I did a search of published papers by keyword topics using the scientific publication search engine PubMed. You too can access PubMed at <http://www.ncbi.nlm.nih.gov/entrez/query.fcgi>. PubMed is the library catalogue of the U. S. National Library of Medicine. It contains several million citations with abstracts of medically published work going back to 1949. It is considered one of the most extensive sources for scientific publications throughout the world. I used PubMed as a rough approximation to gauge the research efforts on various topics realizing that even PubMed will miss peer-reviewed scientific publications.

The accompanying table provides the results from my search listed by publication topic with the respective number of scientific publications from PubMed since 1949. For comparison I also did a search on the published research during the same period on the common fruit fly, genus *Drosophila*. Note *Drosophila*, particularly the species *Drosophila melanogaster*, has been a primary laboratory animal for genetics research ever since T. H. Morgan began genetic studies on this species at Columbia University in the early part of the 20th century.

The results are sobering. By far more publications have appeared on *Drosophila* than all of the major mosquito genera combined! There are almost as many publications on *Drosophila sex* as all *Culex* papers combined. The number of publications on *Drosophila sex* exceeds the numbers on *Aedes albopictus*, or *Aedes aegypti*, or *Anopheles gambiae*. A single well studied *Drosophila* gene, alcohol dehydrogenase, has over 700 publications. This is approximately as many publications as on St. Louis encephalitis, or Venezuelan equine encephalitis and compares to the number of

Key Words	No. Publications	Key Words	No. Publications
Aedes albopictus	1304	Dengue	4992
Aedes aegypti	3574	Malaria	40560
Aedes taeniorhynchus	168	St. Louis encephalitis	646
Anopheles gambiae	1512	Venezuelan equine encephalitis	1163
Culex pipiens	1338	Vesicular Stomatitis	6363
Culex quinquefasciatus	1143	West Nile encephalitis	2444
Culex nigripalpus	118	Yellow Fever	3026
Aedes	8127	Drosophila	54846
Anopheles	7953	Drosophila melanogaster	25466
Culex	5044	Drosophila genetics	39653
Culicoides	1145	Drosophila alcohol dehydrogenase	717
Psorophora	128	Drosophila sex	4026
Wyeomyia	51	Drosophila behavior	2956
Mosquito	24696	Silkworm	3584
Mosquito Insecticides	3234		

publications on *Culex quinquefasciatus*! Clearly the research enterprise and information base on *Drosophila* far exceeds that for mosquitoes

and mosquito-borne disease. This is the result of the general importance that *Drosophila* has provided to our fundamental knowledge about genetics in general. Note the 6,363 publications on vesicular stomatitis. The large number of publications listed for vesicular stomatitis is not because the resulting disease is more important than say West Nile, but because Vesicular stomatitis virus is a laboratory workhorse for many investigations in basic virology.

The Florida Medical Entomology Laboratory, celebrating its 50th anniversary in 2006, has produced more than 1,300 peer reviewed publications on mosquitoes and mosquito borne disease. The impact of the FMEL publications on Florida mosquito control has been substantial. A list of the FMEL publications can be viewed at the FMEL website <http://fmel.ifas.ufl.edu/index.htm>, by selecting "Publications," and then "Index." The majority of FMEL publications are on Florida's pest mosquitoes. The FMEL has published the large majority of the world's literature on *Culex nigripalpus*, and *Ochlerotatus taeniorynchus*, all because of their importance in Florida. However, it is readily apparent that there is much more to do to provide Florida mosquito control with more information about Florida's mosquitoes so that our efforts at mosquito control and mosquito borne disease prevention in Florida become ever more efficient, effective, and environmentally proper.

Each year mosquito control research in Florida is supported by \$250,000 with state funds administered by the Florida Department of Agriculture and Consumer Services. These funds are essential to support work addressing high priority issues that specifically confront Florida mosquito control. Unfortunately the research funding authorization for Florida mosquito control research has remained flat for more than a decade, and is 50% of the authorization in 1990. Each year, a group of expert reviewers are forced to make very difficult decisions to award the remaining meager funds to ca. 15-20% of the deserving projects that are submitted for funding. In this environment of reduced available funds, and one year projects, too often projects are planned that are scaled back to meet the available funding, or very important projects are never proposed because the funds are insufficient to meet the goals and/or needs. Florida mosquito control must face the fact that the small amount of available research funds is supporting less and less research each year directed to Florida's specific issues. Our investment in obtaining new information to improve Florida mosquito control has actually declined.

Scientists at Florida's two major State mosquito research laboratories have been successful in obtaining essential support funds from a variety of Federal, local government and industry sources. These funds have been critical to mosquito research in Florida to address Florida's mosquito control issues, as well as providing important information to mosquito control elsewhere in the U. S. and the world. The labs continue to add to the research literature. However, improving Florida mosquito and mosquito-borne disease control demands a greater research effort, not a declining effort. More projects need to be supported with Florida's mosquito control research funds, and more papers need to be published to add to the research literature and move Florida mosquito control forward. Florida must increase its research investment to meet new challenges and we need to find solutions for those challenges that are unique to Florida.

The Florida mosquito control research funds directly target Florida mosquito control issues. The importance of having such research funds to specifically target Florida's mosquito control issues cannot be overestimated.

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

Deadline for submissions to be included in the March/April 2006 issue of *Buzz Words* is March 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**