

Buzz Words



The Newsletter of the Florida Mosquito Control Association
Sept/Oct 2005

Volume 5, Issue Number 5

***** 2006 FMCA Dodd Short Courses *****

January 23 – 27, 2006

Important Notice about the 2006
Courses inside this Issue
of *Buzz Words*

The courses will NOT be in Gainesville.

**The course dates will NOT be the last
week of January!!!**

Please read the details inside!!!!

I hope I remember this after he scoops my brains out.....
The Dodd Courses will NOT be in Gainesville.

The Dodd Course dates will NOT be the last week of January!!!

The Dodd Course will NOT be in Gainesville.



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.



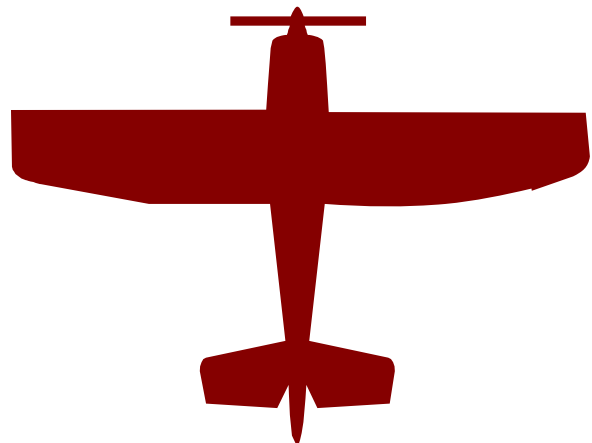
FMCA News

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

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



FMCA News

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 whom 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.

FMCA Web Page News

New features on the FMCA web site include updated FMCA Annual Fall 2005 Meeting information. A Preliminary Program is now available. If you are a presenter at the meeting, please read the guidelines for Power Point presentations at: <http://www.floridamosquito.org/FallMeeting2005/PPPpresentGuidelines.html>.

The 2006 Dodd Plenary Short Courses (January 23 – 27, 2006) information can be found at the following link - <http://www.floridamosquito.org/Dodd2006/indexdodd.html>. Remember the Dodd Short Courses are at the Ocala Hilton, Ocala, FL this year - <http://www.hiltonocala.com/> and reservations need to be made by November 30th.

Information on the 2006 FMCA Spring Meeting in Pinellas County is featured at <http://www.floridamosquito.org/Spring2006/index.html>

The FMCA in cooperation with FDACS now provides an area on the web site for notifying readers of Approved Courses for CEUs. This file is in PDF and will be updated regularly as new courses are added. The link is <http://www.floridamosquito.org/CEU-DACS/indexceu.html>.

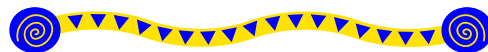
--- Tom Floore

T3webdesign@knology.net

FMCA Webmaster

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

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.*

Contact: Roxanne Connelly – crr@ufl.edu

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

News from PHEREC

New PHEREC Publications

The September 15th edition of PHEREC News contains an up-to-date summary of research projects at PHEREC. The quarterly newsletter can be read online at <http://www.pherec.org/PHERECNews/Vol6No3/index.html>

Dr. Jim Cilek was recently awarded a two-year USDA/CSREES 1890 Institutional Research Capacity Building grant for the "Synthesis and Biological Evaluation of Novel Analogs of 1-octen-3ol and Blends as Mosquito Attractants for Disease Surveillance and Control." This work will be conducted in collaboration with Dr. Christopher Ikediobi (co-PI) who is a FAMU faculty member from the Department of Chemistry. The USDA collaborator on this project is Dr. Ulrich Bernier at the Center for Medical, Agricultural, and Veterinary Entomology in Gainesville. Dr. Cilek has an assistantship available for a M.S. student on this project. Further information about the graduate assistantship including application instructions are available at the following URL <http://pherec.org/PHERECNews/Vol6No3/application.html>

**Jack Petersen, PhD
Extension Medical Entomologist**



Dr. Jack Rogers, a leader in Florida applied mosquito and biting fly research during the 50s-70s, passed away Wednesday, October 5, 2005. Dr. Rogers was born and raised in Florida. In 1941, he received his bachelor degree in agriculture and later his M.S. degree in entomology from the University of Florida. As a lieutenant in the U.S. Navy during World War II, he served in the Pacific Theatre including the Battle of Guadalcanal. He earned a Ph.D. degree in entomology from the University of Maryland, while conducting research on ticks

in Florida. His first job was with the U.S. Public Health Service as a medical entomologist from 1942-1944. He was an Associate Professor of Entomology at the University of Florida where he taught entomology from 1946 until 1956. In 1956, he was selected by Dr. John A. Mulrennan, Sr. to head the Control Research Section at the Florida Board of Health, Entomology Research Center (now University of Florida, IFAS, Florida Medical Entomology Laboratory) located in Vero Beach, Florida. In 1964, Dr. Rogers moved to Panama City to build the Florida Board of Health, West Florida Arthropod Research Laboratory (WFARL) (now Florida A&M University, CESTA, John A. Mulrennan Sr., Public Health Entomology Research & Education Center) and become its first director. During his time at WFARL, he was largely responsible for leading development of the State dog fly control program along with applied mosquito control research. He directed the Laboratory until 1976 when he was selected as Chief of the Office of Entomology, Florida Department of Health & Rehabilitative Services. He held that position until his retirement in 1978. Dr. Rogers was 89. Memorial contributions may be made to the Si Mathison Family Life Center in care of First United Methodist Church, 903 E. Fourth St., Panama City, FL 32401.

**John P. Smith, Ph.D., B.C.E.
Center Director
Professor of Entomology
Public Health Entomology Research &
Education Center
Florida A&M University**

Deadline for submissions to be included in the November/December 2005 issue of *Buzz Words* is December 5, 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**

Florida Mosquito Control Handbook Owners Last Notice

The 3rd 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 3rd 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 _____

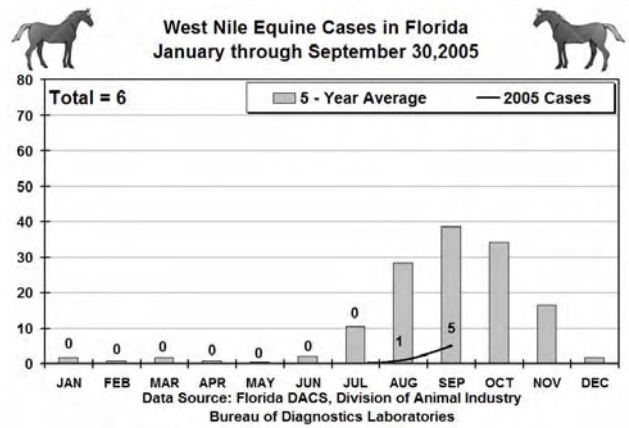
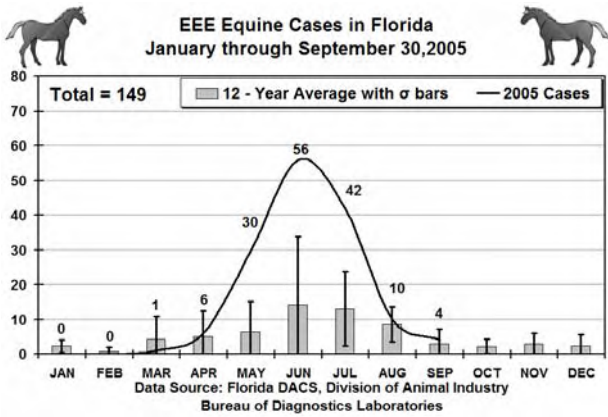
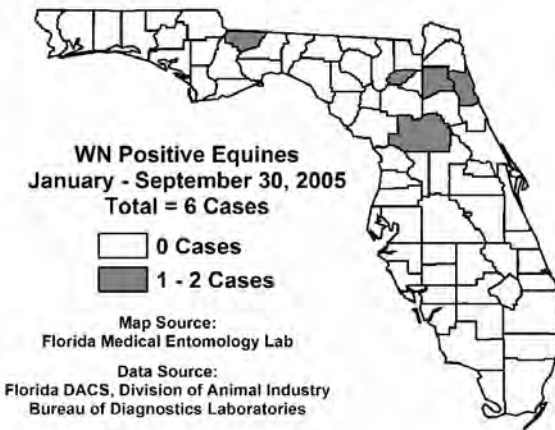
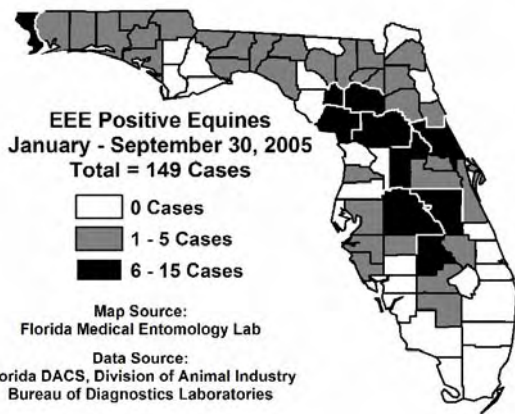
How many sets of Handbook Updates do you need? _____

What edition do you own? 1st 2nd

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?



West Nile Surveillance and Florida Mosquito Control: Acting on Surveillance Information

Since West Nile virus (WNV) arrived in the U.S. in 1999, the Florida mosquito control and public health community has stressed the importance of West Nile surveillance using, among other things, sentinel chickens. Through Buzzwords we have advised mosquito control and public health organizations to believe in their surveillance data and to take appropriate actions based on available surveillance information. There are some general guidelines for using surveillance information in the Florida Mosquito Control Arbovirus Response Plan – West Nile (FMCARP-WN) that can be downloaded by going to the FMEL home page at <http://fmel.ifas.ufl.edu/index.htm>, entering the site and clicking on the button to download a Word document of this plan. It is free, free, free.

Is Florida better at WNV surveillance today compared with where we were in 2001? Has our WNV surveillance effort been useful? Are we prepared for a significant WNV epidemic – the “big event?” Will mosquito control have enough advance warning of the big event to allow reduction of the impact of a major epidemic, when West Nile cases rise from 10-20 scattered around the state to 100s and perhaps 1000s?

Let's look at Florida County X in 2005. Here is a quick sketch of events:

1. July 11, 2005 – 7 sentinel chicken WN presumptive positives distributed at 3 different sites. An overall county-wide seroconversion rate of 15% and a seroconversion rate of approximately 30% at the 3 WN positive sites, well above any background previously recorded.
2. July 13, 2005 - County X believes in their surveillance data and issues a Medical Advisory, and aggressively launches mosquito control operations in the geographical areas identified by the 3 WN-positive sites.
3. July 29, 2005 – 12 more WN-positive sentinel chickens are reported at the same 3 sites, with the majority located at 2 of these sites. This is a county-wide seroconversion rate of approximately 30% and approximately 70% of the positive chickens were located at 2 sites. County X continues aggressive control efforts in the geographical areas identified by the WN-positive sentinel chickens.
4. August 1, 2005 the first human WNV case is reported in County X and the county is placed on Medical Alert. Mosquito control continues aggressive control operations in the areas defined by the 3 sentinel sites with positive chickens.

For those who have not already guessed – County X is Pinellas County!

Pinellas' handling of WNV in 2005 was absolutely right on target and is an illustration of the benefits provided by a well-run sentinel chicken surveillance program. Pinellas ramped up operations appropriately, and their surveillance activities and mosquito control responses were not based on the appearance of the first human case. Pinellas acted immediately and decisively on the surveillance data they had at hand. The surveillance information preceded not only the first human case by a week (frankly this is of little importance), it preceded by several weeks the appearance of a larger number of human cases that identified a clearly defined focus of WNV transmission that had already been identified by sentinel chicken surveillance.

Pinellas County Mosquito Control hit the ground running with the appearance of 7 seroconversions (a 15% overall seroconversion rate and a 30% seroconversion rate within the positive flocks) during a single week. This was well above the historical background transmission rate for Pinellas County. This control response was mounted in the absence of a single human case. The Pinellas County surveillance effort alone confirmed the appropriateness of the response. On July 29, 2005 they reported 12 more seroconversions in their sentinels (50-70% in the 3 sites if one subtracts the 7 original positives). There was no doubt that a clearly defined geographical region of Pinellas was at risk for WNV transmission. One could expect 2-60 actual human WNV cases per week based on a reported 15-70% county-wide sentinel chicken seroconversion rate (see the FMCARP-WN).

Pinellas County recognized that the sentinel seroconversions were not county-wide and were confined to a relatively small geographic area, bracketed by the 3 sentinel flocks, and clustered around the two most active sites. This is where control efforts were targeted. Pinellas County had identified a focal transmission zone of active WNV transmission in 2005, similar to what occurred in Coconut Grove, FL in 2004, where there were 9 cases among ca. 60,000 people for an incidence of 1 per 6700.

Pinellas County hit the ground running based on a well-designed and organized sentinel chicken surveillance program. The total number of WN human cases in Pinellas County during July and August was 18 among ca. 1,000,000 people in the county, with ca. 100,000+ people at high risk in the focal transmission area. Gauged by the Pinellas County arboviral surveillance program, WNV transmission never spread beyond the focal transmission zone, and actually declined in the transmission focus where 4 or fewer sentinel seroconversions per week were reported

throughout August and September. This was commensurate with a reduction in transmission risk for humans where the number of cases also declined in August and September. The total number of human WN cases did not approach the potential 2-20 per week indicated by the initial sentinel chicken seroconversion rates.

Kudos to the Pinellas County Mosquito Control program (Sue Bartlett, Nancy Page, Jeffrey Ball, and their entire staff) and to the Pinellas County Health Department for their excellent surveillance program and their quick and decisive response to the early surveillance data. Mosquito control and public health worked together providing videos, public announcements, and public meetings. Pinellas County Mosquito Control was aggressive and along with the County Health Department they got the message out about the risk of WNV transmission and mosquito avoidance.

The final score card: surveillance data showed early on that there was a risk of WNV transmission in Pinellas County that could have resulted in 100-200 human cases. Continued arboviral surveillance in Pinellas County confirmed the risk. Aggressive vector control and public health mediated the outbreak and 18 human WN cases were reported during July and August. Victory can be declared.

We hope that the rest of Florida does as well when it is our turn.

Walter J. Tabachnick
Director and Professor

Jonathan F. Day
Professor
Florida Medical Entomology Laboratory
University of Florida – IFAS