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Buzz Words



Florida Mosquito Control Association

www.floridamosquito.org

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Deadlines for submissions to be
included in the newsletter:

Jan/Feb	Jan 15
Mar/Apr	Mar 15
May/Jun	May 15
Jul/Aug	Jul 15
Sep/Oct	Sep 15
Nov/Dec	Nov 15

Send newsletter submissions to:

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The mission of the FMCA is to promote effective and environmentally sound control of disease-transmitting and pestiferous mosquitoes and other arthropods of public health importance, develop and enhance public interest, awareness, and support for the control of mosquitoes, and provide for the scientific advancement of members through our meetings, training and education.

Upcoming Events

*FDACS Rulemaking Workshop
Apopka, FL August 30, 2013*

*FMCA
85th Annual Fall Meeting
Westin Cape Coral Resort at
Marina Village
November 17 – 20, 2013*

*FMCA Fly-In
January 7 – 9, 2014*

*FMCA Dodd Short Courses
January 20 – 24, 2014*

*AMCA Annual Meeting
Feb 2 – 6, 2014
Seattle, WA*

*FMCA Advanced Mosquito
Identification and Certification
Course
Vero Beach
March 3 – 14, 2014*

Understanding How Dengue Can Be Introduced into Key West

Why should Florida mosquito control and public health professionals prepare for the potential introduction of dengue virus (DENV) into Key West? After all, there have been no more human cases or evidence for transmission of DENV in Key West since the epidemic of 2010 that resulted in 66 cases with the very high incidence of 330 for every 100,000 persons.

Figure 1 is a map from the U.S. Centers of Disease Control web site showing the locations where dengue has been transmitted in the Caribbean basin in 2013 as of July 10, 2013.



FIGURE 1. Municipalities reporting human cases of dengue Jan 1, 2013 – July 10, 2013. (From U.S. Centers for Disease Control, <http://www.healthmap.org/dengue/>)

The southern U. S., home to DENV vectors, *Aedes aegypti* and *Aedes albopictus*, is directly adjacent to this dengue infested region! The Key West dengue epidemics of 2009 and 2010 demonstrated Key West's susceptibility to DENV when it successfully invades. Further, Key West likely now has about 4,000 (that's 1 in 5) of its residents immune to dengue serotype 1, due to previous infection with DENV-1 during the previous epidemics. These people are at great risk for more severe dengue should they become infected with one of the other 3 DENV serotypes. A recent article reported that infection with one DENV serotype can provide some cross-protection against the other serotypes for as long as two years (Reich et al. 2013. Interactions between serotypes of dengue highlight epidemiological impact of cross-immunity. J. Royal Soc. Interface 10: 20130414. <http://dx.doi.org/10.1098/rsif.2013.0414>). Perhaps this has contributed to the absence of DENV in Key West since 2010. However, this cross-protection has likely waned and citizens of Key West are now surely at greater risk for severe dengue if other serotypes are introduced!

How was DENV introduced into Key West? Key West has a largely tourism-based economy with hundreds of thousands of visitors from throughout the world. The majority of visitors are from elsewhere in the U. S., Canada and Europe. The Key West Chamber of Commerce web site reports that visitors from Brazil have increased over the past several years. Brazil has had several dengue epidemics making it possible for an infected visitor from Brazil to introduce the virus.

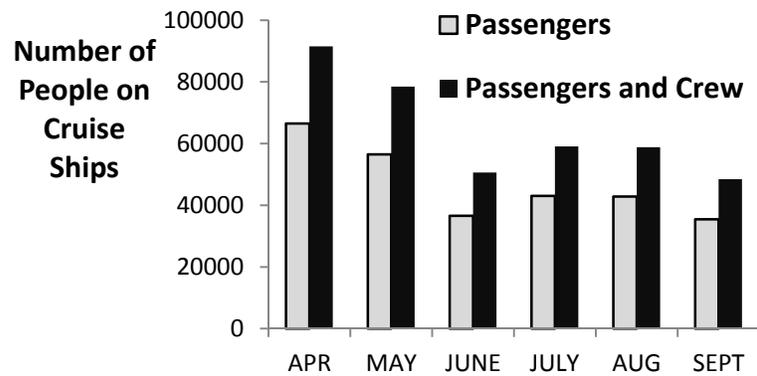
One might assume that the substantial traffic from cruise lines that arrive in Key West could be the source of infected visitors introducing DENV from the Caribbean Basin. The Key West Chamber of Commerce reported about 813,000 cruise line passengers debarking at Key West as part of their cruise in 2012. Figure 2 is a graph that shows cruise ship passengers and crew arriving between April - September of 2013. The large numbers of persons arriving on cruise ships is a major reason that many consider cruise ship traffic as a primary source for dengue introductions.

I was intrigued by the potential for cruise line passengers to introduce DENV and investigated which other ports of call served the ships that stop in Key West. To my surprise, it became clear that most of the other ports of call were not in major dengue endemic areas. For example, the Grand Caymans and the Bahamas are major ports of call for cruise lines that also stop in Key West. However, Key West is actually the first port of call in the majority of cruise line itineraries that stop in dengue endemic locations. Hence, it is impossible for a cruise passenger arriving in Key West from Miami, Ft. Lauderdale or New Orleans to have become infected in the Bahamas or Cayman Islands since they can only be exposed to DENV after they have already left Key West. I do not believe that cruise ship passengers are a major source for introducing DENV into Key West.

So what are some other possibilities? Of course, substantial numbers of travelers also arrive at the Key West International Airport. The Chamber of Commerce reported about 367,000 arrivals for 2012. However, the majority of visitors are likely from elsewhere in the U.S., Canada and Europe, all places without dengue. This does not rule out the possibility of a dengue-infected traveler arriving by plane, but it is a less likely source for the same reasons as cruise ship passengers.

Are there any other likely sources of DENV into Key West? Certainly arrivals by air from dengue endemic regions occur in other Florida airports and in other states. Any of these travelers that then travel to Key West pose a risk of introducing DENV. Though infected cruise ship passengers are unlikely to pose a major threat, the crews of these ships are another matter. I checked the numbers of the crew for several ships arriving in Key West. On average these ships have 1,000-1,200 crew members. From April – Sept 2012 Key West's tourism board listed 106 ships arriving in Key West, a total of about 106,000 – 127,000 crew members, using my estimates. Although Key West may be their first port of call, only a few days earlier at least some of the crew members were in ports in dengue endemic areas on a prior cruise. How unfortunate for Key West that these crew members would arrive in Key West several days after being infected with DENV, at a time when they are likely viremic and likely able to infect Key West *Ae. aegypti*. How many disembark in Key West? How many were recently in a dengue endemic location?

FIGURE 2. Cruise Line Passengers in Key West FL Apr.-Sept. 2013. (From Key West Chamber of Commerce)



What must Key West do to protect its citizens and visitors from a dengue outbreak? Vigilance, more research, and an action plan are essential.

- 1) Key West Health Department should have a list of the cruise ships with the ports of call in dengue endemic areas.
- 2) Advise all cruise lines with listed ships to monitor the health of crew members to detect crew with febrile symptoms with dengue.
- 3) Restrict crew members with febrile symptoms to the ship when in Key West.
- 4) Detect the first case of dengue in Key West.
- 5) Determine the serotype of DENV in the infected case quickly.
- 6) Advise the public immediately of the danger from DENV particularly from DENV 2, 3 or 4.
- 7) Implement a plan to effectively and efficiently reduce Key West *Ae. aegypti* populations:
 - a. Aggressive mosquito control.
 - b. Aggressive programs by the Department of Health to reduce human mosquito contact.
 - c. Aggressive local government policies to ensure the public acts to reduce *Ae. aegypti* habitats around homes and businesses.

Those who ignore the warning signs should look at Figure 1. The high prevalence of dengue in our southern neighbor countries is an imminent threat.



Walter J. Tabachnick, Ph.D.
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 Professor, Department of Entomology and Nematology
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 Vero Beach, FL

From your *FMCA President*, Robert Betts

In light of the heavy rains, violent storms and high mosquito production that many of the counties and districts in Florida are experiencing presently, this article will concentrate on one topic that's fast approaching for members of the Florida Mosquito Control Association (FMCA) - the rulemaking process that proceeds after the governor's signature on June 28, 2013, on House Bill (HB) 7807, thereby making this a new law.

A number of sections in Chapter 388, Florida Statutes (F.S.), will be addressed in rulemaking, as follow:

- 388.201 District budgets; hearing.
- 388.231 Restrictions on use, loan, or rental of equipment; charges.
- 388.271 Prerequisites to participation.
- 388.281 Use of state matching funds.
- 388.341 Reports of expenditures and accomplishments.
- 388.261 State aid to counties and districts for arthropod control; distribution priorities and limitations.

I will leave it to the readers to consult the final law on other chapter sections, but for this purpose, I would like to address my interpretations of this law as apply to Chapter 388.261, F.S. After many years and hours of combined efforts by FMCA's members and committees, those contributions finally secured the new law's passage in the 2013 legislative session. The FMCA's resources spent and members' participation offered in Tallahassee Days focused on state aid with distribution priorities provided by the FMCA and the Board of Directors' actions.

In the upcoming rulemaking process, the FMCA will participate as a partner and industry stakeholder in cooperation with the Florida Department of Agriculture and Consumer Services (FDACS), Division of Agricultural Environmental Services (AES), Bureau of Entomology and Pest Control and its management. The "Notice of Rule Development on Chapter 5E-13, Mosquito Control Program Administration" is working its way through an authorization processes at the highest state levels as I write.

In my July 22, 2013 phone call with Bureau Chief, Mike Page, I have learned that he envisions a "rulemaking workshop" to be held on or about the end of August 2013, in a statewide centrally located site and venue to assemble the mosquito control industry and to initiate the dialogue on how Rule Chapter 5E-13, Mosquito Program Administration, Florida Administrative Code (F.A.C.) may be changed to comply with the specifications and tenets of HB 7807 as new law.

Over the years, the recommendations from the FMCA's Legislative Committees' initiatives have yielded a common harvest seen in this new law, as specified by its legislative authors – specifically, that of those statewide eligible counties and districts in which the local funds for mosquito control budgets are less than \$1 million, these counties and districts shall receive a greater percentage of state aid distribution and that this preferential funding "shall be distributed as equally as possible within the category of counties pursuant to this section."

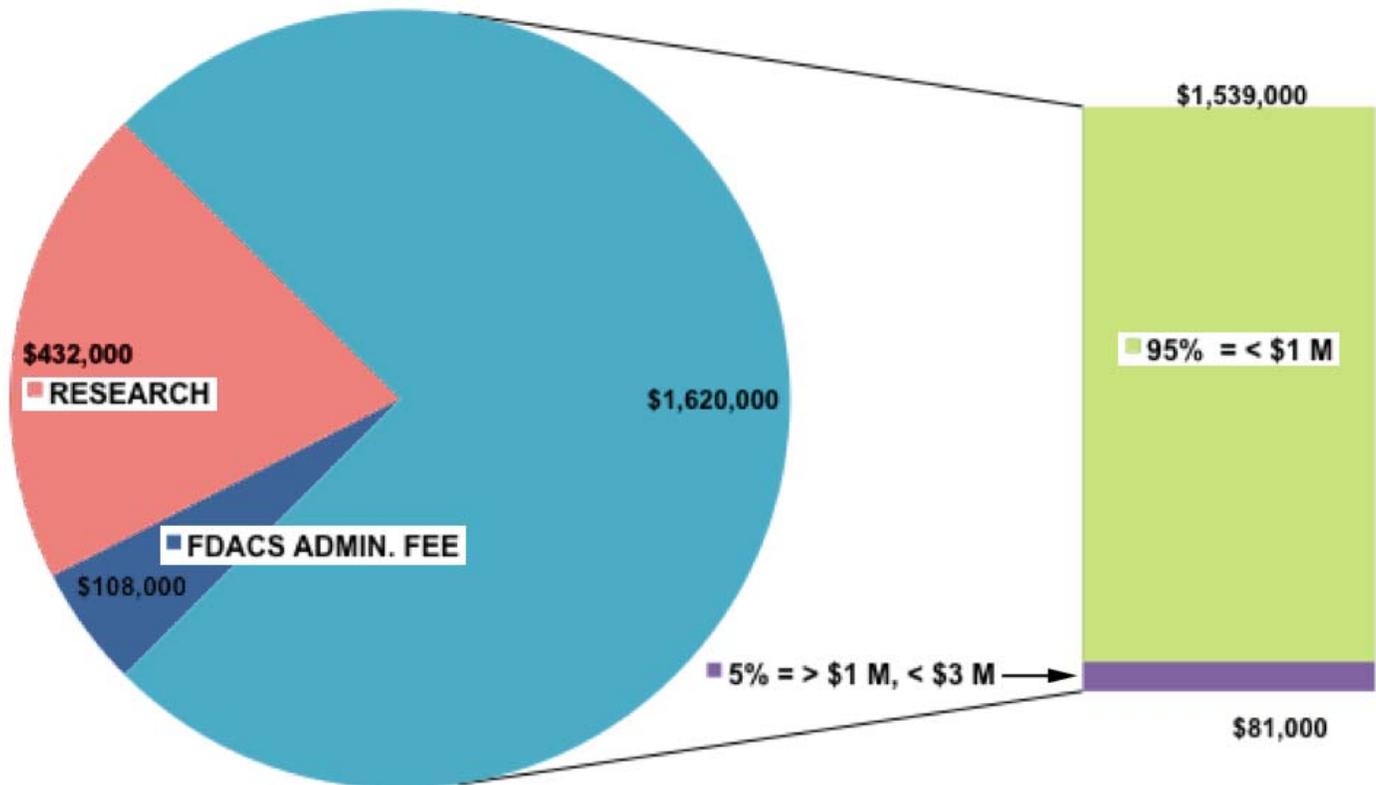
From Chapter 5E-13.030, F.A.C., “State Aid Basis and Availability”, draft provisions indicate that “tentative allocations and payments shall be made on the basis of local funds budgeted.” To my way of thinking, state aid to local governments, county mosquito control programs and mosquito control districts should provide an incentive to improve and to enhance the local efforts made for mosquito control programs’ better funding. Providing the means for the funding of the purchase of specialized mosquito control pesticide supplies and equipment, for advancing personnel educational opportunities and for other budgetary needs as fit the local programs’ needs is what state aid can supplement in counties and districts with budgets of less than one million dollars’ local funding.

From paragraph four (4) of Chapter 388.261, Florida Statutes, we read that “up to twenty (20) percent of the annual funds appropriated to local governments for arthropod control may be used for arthropod control research or demonstration projects as approved by the Department (FDACS).” As I examine the basis for prioritized distribution of these state aid funds, it is apparent to me that arthropod control research, specifically, needs to be addressed and included in rulemaking, combined into one formula of statewide distribution to suit Florida’s mosquito programs’ needs and missions.

I submit the following language for paragraph (6), Chapter 5E-13.030, Florida Administrative Code:

- From state funds legislatively authorized and released by the Executive Office of the Governor for arthropod control, seventy-five (75%) percent of these state funds shall be distributed to eligible counties and districts for arthropod control purposes.
- From this seventy-five percent portion, ninety-five (95%) percent of the funds shall be distributed to the eligible counties and districts with less than one million dollars of local funds budgeted for mosquito control.
 - Such funds shall be distributed as equally as possible among these eligible counties and districts with less than one million dollars of local funds budgeted in this category.
- From this seventy-five percent portion, five (5%) percent of the funds shall be distributed to the eligible counties and districts with greater than one million dollars and with less than three million dollars of local funds budgeted.
 - Such funds shall be distributed as equally as possible among these eligible counties and districts in this category.
- No funds shall be distributed among the eligible counties and districts with greater than three million dollars of local funds budgeted.
- From state funds legislatively authorized and released by the Executive Office of the Governor for arthropod control, twenty (20%) percent of the state funds shall be distributed by the Department (FDACS) for competitive grants as approved by the Department for applied and basic research into the prevention of mosquito-borne illnesses and other projects of public outreach.
 - (The purpose of this clause is to free FMCA’s legislative initiatives from dependence on securing legislative proviso language to fund such research each year.)
 - The research may be conducted by any public university or college in Florida.
- From state funds legislatively authorized and released by the Executive Office of the Governor for arthropod control, five (5%) percent of the state funds shall be used by the Department to offset its respective administrative expenses.

Proposed Distribution of State Aid



That's my interpretation of how state aid funds may be distributed under the new law, a hot topic that undeniably will charge the room of participants when and where the rulemaking workshop will be held.

The mechanics on how to distribute state aid to eligible counties and districts with less than one million dollars in local budgets and especially for those that do not meet certain minimum amounts of local budget funding, also will be discussed in rulemaking. From my assessments, these number about nine. Currently, there is one county, where no local funds are budgeted. How that county shall have state aid distributed, I will leave to the collective wisdom of the rulemaking workshop's participants and to the Department. Likewise, for those so-called "start-up" eligible counties and districts, there are Department rules for how many times state aid distributions may be made, for certain numbers of years specifically, and with other certain numbers of years that state aid distributions may be withheld by the Department.

In my opinion, it is not my responsibility to administer state aid distributions. While some readers may disagree, I believe this responsibility is that of FDACS and its management. Micromanagement is highly distasteful to me in any form; my policy is to let responsible parties do their jobs without my interference.

In summary, and by using figures from any “starting point” of “state funds legislatively authorized and released by the Executive Office of the Governor for arthropod control” in any given fiscal year in an amount of \$2,160,000, my interpretation of the new law’s statewide distribution plan may be represented as below:

- \$ 2,160,000 - Starting Point
- \$ 108,000 - 5% FDACS Administrative Fee Assessment
- \$ 432,000 - 20% Research Distribution
- \$ 1,620,000 - 75% Eligible Counties & Districts
 - \$ 1,539,000 (95% to < or = \$1,000,000 in local budgets)
 - \$ 81,000 (5% to > \$1,000,000 and < \$3,000,000 in local budgets)
 - \$ 0 (0% to > \$3,000,000 in local budgets)

Other topics as may be discussed in the rulemaking workshop involve the educational qualifications of directors as currently written in Florida Administrative Code, Chapter 5E-13.032, “Program Directors, Employment and Classification.” In paragraph (4) of the Rule, minimal director classifications are specified and are “based upon amount of local funds budgeted for the fiscal year in which they are initially employed and for which they assume responsibilities of administration.”

I will leave it to the readers to consider how, or if, they may recommend updated provisions to FDACS as may apply to the Rule. By my recollection, these qualifications have not been revisited since 2006. For more than a few districts’ and counties’ Boards of Commissioners who are recruiting new directors, it may be advisable to update and to revise these budget specifications to suit present day personnel selection needs. In like manner, as the FMCA and other industry stakeholders seek to categorize state aid distribution along current budgetary regimes of local funding, so may minimal qualifications of funding be applied to this Rule section.

As addressed in this article, one of the main purposes of the rulemaking workshops proposed by FDACS is to bring the Rule Chapter 5E-13.030, F.A.C., into compliance with the newly signed law as passed in this recent legislative session as HB 7807. I believe that what I have proposed here is worthwhile and of interest to the readers. I am under no illusion that what I have proposed will suit or be acceptable by all. Understanding that all opinions and plans that may be presented to the contrary, I respect those proponents of such opinions and plans. This is a free country with the freedoms of expression and of thought. I look forward to seeing you all as you express the gifts of exercising our freedoms at the upcoming rulemaking workshops later this summer.

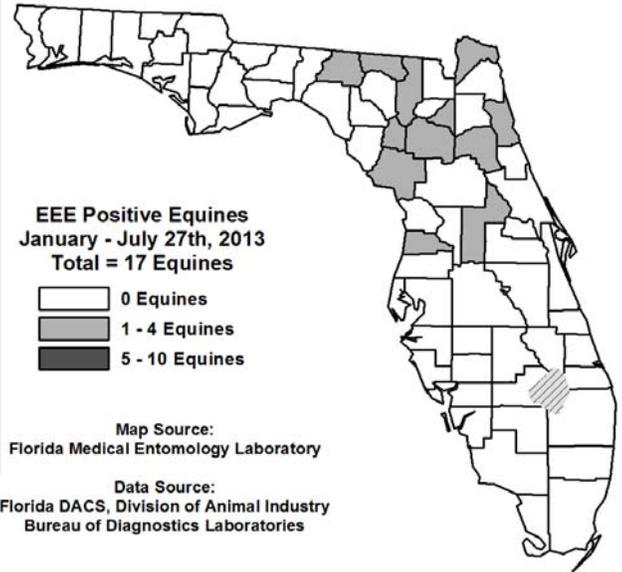
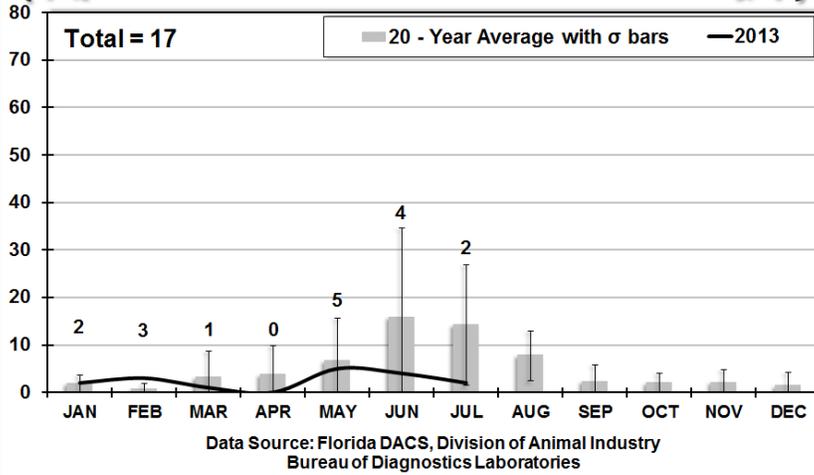
Respectfully submitted,
Bob Betts, FMCA President

Arbovirus surveillance, Florida 2013

EEE



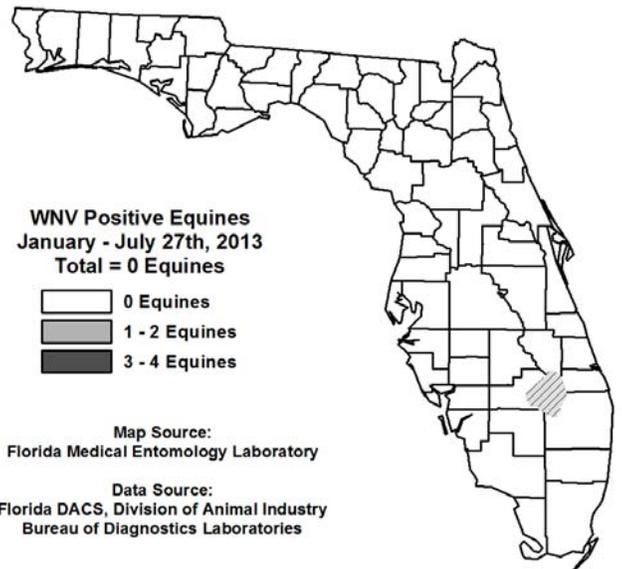
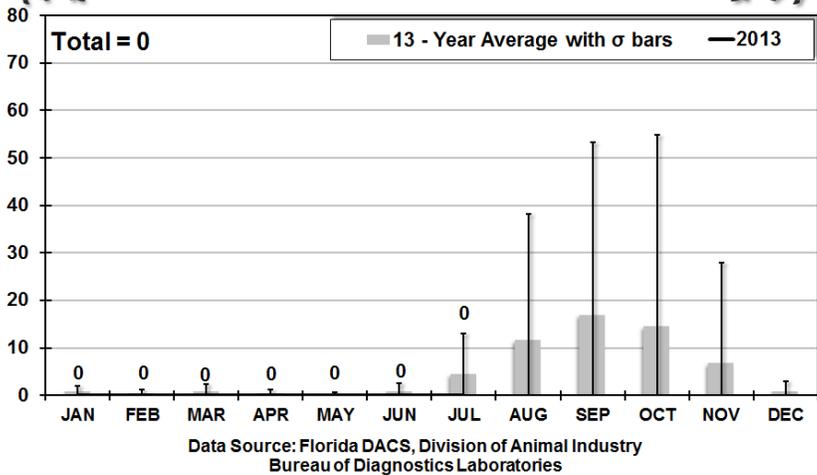
**EEE Positive Equines in Florida
January 1 through July 27, 2013**



West Nile



**West Nile Positive Equines in Florida
January 1 through July 27, 2013**



FMCA – Reports from your Regional Representatives

Northeast Region Report by Jim McNelly, Volusia County Mosquito Control

Anastasia Mosquito Control District (AMCD) - The District has experienced heightened Eastern Equine Encephalitis Virus (EEEV) activity in sentinel chicken flocks this year (12 as of 7/9/13). Greater activity is being experienced in the southern portion of St. Johns County this year.

A PhD student intern, Lin Zhu from the University of Miami, worked at the District the entire month of June with three other student interns, two University of Miami and one from Florida State University. The student intern group performed research on the body size, blood feeding, blood meal size and fecundity of the “mega mosquitoes”, *Psorophora howardii* and *Psorophora ciliata*. A great deal of interesting data was generated. A graduate student from Cornell University spent some time at AMCD in June and July to conduct surveys related to heartworm and mosquito vectors of the disease. These surveys and the study are benefitting the residents of St. Johns County.

Columbia County Mosquito Control - Increased rainfall (nearly daily rainfall) in Columbia County has led to an increase in standing water and larviciding efforts. Mosquito populations have been on the rise since Memorial Day. As a result, both larviciding and adulticiding applications were enhanced in the week leading up to July 4th.

Clay County Mosquito Control - Mosquito populations dropped just before July 4th, though the cycle of rains followed by drying have been driving production of *Ps. ciliata* and *Ps. ferox*, as identified in CO₂-baited CDC traps and landing rates. Problematic areas include residential areas adjacent to the wooded habitats engendered by Shadowlawn and Jennings Forest.

Pro-active larviciding with sustained release briquettes (Four Star and Altosid XR) have facilitated control efforts. Abandoned homes and the associated pools continue to be a problem, and nearly two dozen pools were placed on a six-month regimen of Four Star applications to mitigate production. Clay County MC receives between one and two calls per week related to abandoned pools.

Flagler County Mosquito Control - Early June rains led to mixed species production of fresh water/floodwater mosquitoes in mid-June. Both truck and aerial spray applications were used in response to elevated adult mosquito populations. These applications returned the populations to background threshold levels by the end of the month. In addition, the yellow fly population exploded, producing numerous service requests during the month. Salt marsh mosquito production and associated activity have been light most of the year. To date (7/17/13), confirmed sentinels for EEEV and Highlands J are three and two, respectively. On a positive note, the district has seen an increase of 0.3% in taxable values for 2013 following years of declining values.

Jacksonville Mosquito Control - Sentinel chicken activity has been minimal with one HJ seroconversion in July. One suspect positive for West Nile virus (as of 7/15/13) is pending confirmation. Tropical Storm Andrea brought 2” rain to Jacksonville on June 6. The rest of the month was seasonably warm but with less than normal rainfall, ending the month 1.8” below normal. Mosquito service requests surged early following Tropical Storm Andrea, but were not sustained as emergence of floodwater mosquitoes was sporadic. Adulticiding efforts combined with favorable weather helped squelch long-term infestations.

Mosquito monitoring with CDC traps and NJ light traps is on-going. There were not as many “giant mosquitoes” (*Psorophora ciliata*) in Jacksonville. Media interest on this topic was redirected to St. Johns County. FDACS conducted a regular pesticide use inspection and Inspector Steve Harrison recommended some updates to our PDMP, which were incorporated. Jacksonville Mayor Alvin Brown signed a Proclamation of support for National Mosquito Control Awareness Week. The proclamation was released to the media and served to raise awareness of the importance of mosquitoes to public health.

Our entomologist is coordinating with the IT Division to update the MCD web pages for ADA-compliant viewers with limited vision who have “readers” installed on their computers. The readers automatically communicate an alternate, text description of photo captions. Our aviation section is evolving into a leaner, more site-specific spray treatment program using light helicopters to augment ground operations.

Marion County - The number of mosquito service requests have generally been low. With the recent storms, we expect the calls to increase any time now. The biggest challenge is explaining to citizens of Marion County why we don't have a mosquito control district, and that to start one up a tax increase would be required to pay for the program. The last time we sprayed was back in August of 2011, following a case of dengue and Marion County Health Department's desire to prevent spread of this disease.

Nassau County - A lot of rain has fallen recently, nearly every day. During the course of animal control duties, traps used to trap feral cats and dogs are attracting large numbers of *Ae. albopictus*. Landing rates between 30-40 *Ae. albopictus* are not uncommon at these trap sites.

Volusia County Mosquito Control (VCMC) - Arbovirus transmission had not been detected in sentinel chicken flocks to date (as of 7/15/13). Salt marsh mosquito production has been minimal, which allowed the District to focus efforts on rain-produced *Aedes* and *Psorophora* species in the weeks prior to July 4th. At this time, container species (*Aedes aegypti* and *Aedes albopictus*) are in full bloom and are generating many service requests.

In addition to a press release which generated several newspaper articles, television and radio spots, VCMC set-up a “bed net” display in the rotunda of the County Office building for Mosquito Control Awareness Week. In addition, VCMC had an Open House of Friday June 28th. The Open House consisted of surveillance and control equipment displays, along with a variety of interactive displays in the laboratory and on VCMC grounds. Past Director Jonas Stewart was in attendance, as was Dr. Jack Petersen, of Rutgers University, who was finishing up bottle bioassay work with VCMC interns. Dr. Jorge Rey, of UF FMEL, was in town the wk of 7/8/13, to survey two sites he has been monitoring since 2011. Dr. Rey celebrated his birthday surveying and photographing some of our more scenic homes.

Southeast Region Report by Judy Avril, Indian River Mosquito Control District

St. Lucie County Mosquito Control District - St Lucie County recently went out to bid for construction of the Harbor Branch Mangrove Restoration Project. The purpose of the project is to restore and reconnect 178 acres of coastal mangrove wetlands and tidal flats. The project involves the installation of twenty 30-inch culverts through the existing berm, and placement of a quad pump and aerator stations. Over 12,000 cubic yards of material will be hydraulically dredged from the existing mosquito control ditch. The dredged material will be pumped into geotubes, supplemented with clean fill, and placed on the berm to stabilize the impoundment dike. These infrastructure improvements will restore connection of the wetland mangrove fringe with the adjacent Indian River. In addition, eight inspection boardwalks will be constructed for monitoring. A public fishing pier on the Indian River will be constructed also. This project was made possible through combined federal and state grants. Construction is expected to commence in October.

Indian River Mosquito Control District (IRMCD) - Two IRMCD employees retired since May 2013.

Terry Sullivan, who retired in June, was the District's longest serving "Chickenman" with 8 years in the position. His "girls" in the flocks will miss him greatly and our sentinel chicken program will never be the same. Terry also took care of the District's ground maintenance and spent many hours on the mower tending our 10 acres. Now, the only place Terry will be henpecked is at home!

Byron Reaves was first hired by the District in 1993 as an Entomological Inspector. Beginning in 1998 he served as the District's Larvicide Field Crew Chief, serving in that capacity for about 8 years at which time he became part of the Permanent Control Crew until his retirement in July. Byron served as the District's Chief Safety Officer for about a decade, chairing the District's Safety Committee, which developed and oversaw regular safety programs for the staff. This program qualifies the District for a workers compensation discount. In 2007, Byron also achieved Advanced Mosquito Control Inspector certification. During his time at the District, Byron received his Bachelor of Arts Degree. In the late 1990s, Byron was selected to serve on the U.S. Environmental Protection Agency's committee to re-write the CORE Manual. Byron provided operational mosquito control expertise in the process, attending EPA-sponsored meetings in Washington, D.C., New Orleans, San Diego & Quebec, Canada. In 2001, Byron was the recipient of the FMCA Sherry Yarberry Award, presented to mosquito control personnel for outstanding contributions to their program. In his 20 years with the District, Byron has been a dedicated and hard-working. IRMCD thanks him for his service and wishes him the best in his retirement.

Southwest Region Report by Jim Burgess, Lee County Mosquito Control District

Lee County Mosquito Control District (LCMCD) – Katie Heggemeier from LCMCD met with the United States Environmental Protection Agency (US) EPA during the American Mosquito Control Association (AMCA) Legislative Session in Washington D.C. to discuss the bad label language on mosquito control labels. There are many issues regarding agricultural language in the new labels which make the products difficult to use for mosquito control without violating the label. For instance, language that says "Do not allow drift" on a ultra low volume (ULV) adulticiding label or Worker Protection Standards (WPS) on a label that is supposed to be exempt from the standards. The EPA agreed that there are issues that needed mending and agreed to work with the AMCA on fixing these issues. Katie was asked by EPA to group label issues by active ingredient and to also get input from AMCA and the manufacturers before submission. The first round of label fixes have been compiled for permethrin and have been sent to AMCA (Joe Conlon and the Board) and the manufacturers for endorsement/comment and final forwarding to EPA. Once the process is completed for permethrin, the next active ingredient group will be sent.

A Larvicide Pretreatment Success Story: At LCMCD the spring tide and rainfall often kick off the year's mosquito breeding by flooding a significant portion of the Lee County's 56,000 acres of mangrove salt marsh. This challenge is usually met by vigorous aerial larviciding designed to combat the almost daily hatch of salt marsh mosquito eggs in areas of the mangroves flooded by the high tides. This year LCMCD took a different approach and pretreated 2,070 acres with granular 20-40 day extended release larvicide formulations just prior to the spring tide. This approach gambled that the spring tide would develop as predicted and flood the marsh. The gamble paid off. A very large tide arrived around day 20 post-treatment that completely flooded the marshes. During the larvicide extended release period LCMCD focused larviciding efforts on areas not pretreated while keeping a close eye on the pretreated areas. This strategy allowed the larvicide program to cover all larval breeding, preventing large adult emergence and the consequent egg deposit for the next brood.

Sarasota County Mosquito Management – FMCA sends a big welcome to the state's newest Mosquito Control Director. Sarasota County made it official in June 2013, hiring Matthew Smith who comes to Florida from Coachella Valley in California. Matthew studied entomology at Auburn University and got his feet wet with mosquito control at Mobile County Mosquito Control (Alabama).

Recognize the achievements of your mosquito control colleagues Nominations for the 2013 FMCA Awards are now open!

Any Florida Mosquito Control Association member in good standing may nominate a candidate for any of the 6 FMCA awards by submitting to the Awards Committee a short biographical sketch and an appraisal of the nominee's accomplishments deemed worthy of the award. There is no official nomination form. Endorsements and written support from other colleagues are encouraged, and all submissions will be acknowledged. Nominations must be received by August 31st, 2013.

The Maurice W. Provost Memorial Award, established as a memorial to the first Director of the Florida Medical Entomology Laboratory, honors persons who have made outstanding contributions to mosquito control and/or biting fly biology in Florida. Candidates must have been instrumental in each of the following areas: developing sound management and operational methods to reduce pesticide levels and to minimize habitat alteration while reducing mosquito populations; increasing our knowledge of mosquitoes and other biting insects and their habitats; and educating students and the general public about the importance of various environmental issues facing the citizens in protecting the fauna and flora in Florida. The candidate should be an FMCA member and have made significant contributions to the Association.

The Joseph Y. Porter Distinguished Achievement Award, which honors the first President of the Florida Anti-Mosquito Association and first State Health Officer of Florida, recognizes scientists who have made significant contributions to entomology, with special emphasis on the abatement of arthropods of public health importance. The candidate must have meritoriously contributed to the advancement of entomology research in the field of mosquito and/or other biting arthropod control in the State of Florida. The candidate should be an FMCA member and have made significant contributions to the Association.

The Fred Stutz Memorial Award, which honors the former director of the Dade County Mosquito Control office, recognizes an outstanding contribution to mosquito control by development of procedures that increase effectiveness in mosquito or other arthropod control, or the design and manufacture of equipment that helped revolutionize the control of mosquitoes and/or other arthropods of public health importance. The procedures developed have been adopted and employed throughout Florida as part of the standard operating procedure. The candidate should be an FMCA member and have made significant contributions to the Association.

The FMCA Merit Award recognizes outstanding individual contributions in promoting control of disease-transmitting and pestiferous mosquitoes or other arthropods of public health importance, for scientific advancement of the discipline, or for developing or extending the public interest in the control of such mosquitoes or other arthropods. The candidate should represent those characteristics generally associated with responsible leadership, good citizenship and personal integrity. The candidate should be an FMCA member and have made significant contributions to the Association.

The Sherrie Yarberry Award, named for a dedicated employee of the Jacksonville Mosquito Control office, recognizes continued outstanding contributions to operational program activities by veteran, non-administrative personnel of Florida mosquito control related agencies. The candidate must demonstrate exemplary performance resulting in enhanced unit efficiency or public recognition of excellence of the parent organization. The recipient of the Sherrie Yarberry Award will receive \$500 cash, a commemorative certificate, and funding to attend the FMCA Annual Fall Meeting.

The James W. Robinson Memorial Award was established as a memorial to Jim Robinson, Director of the Pasco County Mosquito Control District, who was renowned for his innovative development of new equipment and adoption of new technologies. This award recognizes innovation and ingenuity in optimizing the safe and efficient operations of Florida public health pest control programs. The candidate must have contributed an outstanding improvement to existing equipment or currently employed techniques used by a non-commercial mosquito control related agency. This advancement may not be proprietary in nature, and must be freely shared with the Association.

Please submit nominations and supporting documentation on-line at <http://www.floridamosquito.org/Products/Awards.aspx> or contact the FMCA Awards Committee Chair: Mark Latham of Manatee County Mosquito Control:
2317 2nd. Ave. West, Palmetto, FL 34221
Phone: 941-722-3720
Fax: 941-721-0452
e-mail: Awards@FloridaMosquito.org

Call for Papers
For the 85th
Annual Meeting of the Florida Mosquito Control Association

Meeting Information:

The FMCA's 85th Annual Fall Meeting will be held at the *Westin Cape Coral Resort at Marina Village* in November, 2013. The meeting will begin at 1:00 pm on Sunday, November 17th with the FMCA Board of Director's Meeting. The general session will begin at 8:00 am on Monday, November 18th and will conclude at 12:00 pm on Wednesday, November 20th.

The categories for presentations for 2013 are listed below:

- Arthropod-borne Diseases and Surveillance
- Biology of Arthropods
- Control of Larval Arthropods
- Control of Adult Arthropods
- Education, Outreach, Extension, and Training
- Regulation and Legislation
- Best Practices in Mosquito Control Operations
- Other

New this year is a category for best practices. This category offers District and Industry members the opportunity to showcase efforts that incorporate new or innovative strategies that promote efficiency related to research, institutional organization, operations, and environmental sustainability.

Presentations are limited to two time formats of either ten or fifteen minute presentations. Members and other interested participants may submit presentation proposals beginning July 15, 2013 on the FMCA website, www.floridamosquito.org

The Florida Mosquito Control Association's (FMCA) primary mission is to promote effective and environmentally sound control of disease-transmitting and pestiferous mosquitoes and other arthropods of public health importance, develop and enhance public interest, awareness, and support for the control of mosquitoes, and provide for the scientific advancement of members through our meetings, training and education.

The 2013 program chair is FMCA President-elect, Neil Wilkinson who may be reached at presidenelect@floridamosquito.org or (239) 590-7255.



T. Wainwright Miller, Jr.

FMCA Scholarship Application

The **T. Wainwright Miller, Jr. Florida Mosquito Control Association Scholarship** is managed and awarded by the Florida Mosquito Control Foundation. The purpose of the Scholarship is to encourage and assist students having a major in Biological, Ecological and/or Entomological studies who are seeking degrees relevant to arthropod control, with particular emphasis on Public Health fields. First place award is \$2000.

T. Wainwright Miller, Jr., a fourth generation Floridian, began his public service career at the age of 14, spending two years in Washington D.C. in the House of Representatives under the wing of Congressman Joe Hendricks. Born in Clearwater and raised in Kissimmee, he served in the U.S. Army during World War II before earning a bachelor's degree in Civil Engineering from Georgia Tech in Atlanta. In 1988, he was awarded an honorary doctorate of Business Administration by Carson-Newman College in Jefferson City, Tennessee. He is a Registered Professional Engineer in Florida, Louisiana, and Massachusetts. Mr. Miller moved to Ft. Myers in 1956, where he helped establish the Lee County Mosquito Control District and administered programs in Lee County for mosquito and aquatic weed control until his retirement in 1994. He served as President of the Florida Anti-Mosquito Association (Currently named the Florida Mosquito Control Association) and the Aquatic Plant Management Society and served as Secretary for both organizations for ten years. He also served as Secretary of the American Mosquito Control Association for seven years. He was named Engineer of the Year by the Calusa Chapter of the American Society of Civil engineers in 1989, and again by the Southwest Florida Chapter in 1993. Also in 1993 he was named to the Hall of Success at Georgia Tech and in 1997 was inducted into the Engineering Hall of Fame. Mr. Miller has served as Trustee, President and CEO of the John E. and Aliese Price Foundation since 1983.

PROCEDURE FOR SUBMITTING APPLICATION:

Four copies of application materials should be mailed to the FMC Foundation Scholarship Committee Chair, Dr. Roxanne Connelly, FMEL, 200 9th Street SE, Vero Beach, FL 32962 and postmarked on or before October 1, 2013.

The following criteria have been established to choose qualified applicants for the award:

The student shall be an undergraduate or graduate. Undergraduates will have completed at least two years of academic study with a minimum of 30 credit hours.

The student shall be a United States citizen residing in the state of Florida.

Undergraduates shall have maintained an overall grade point average of 3.0 (out of 4.0) during the last 2 years of academic study. Graduate students must have completed at least one full semester of graduate course work and shall have a grade point average of 3.0 or higher (out of 4.0) for all graduate course work completed by October 1, 2013.

The student shall be enrolled in an accredited College or University in the state of Florida.

The student shall be majoring in a field of study having relevance to arthropod control and/or public health.

The student shall submit three letters of recommendation, two of which are from professors affiliated with an accredited College or University in which the student is enrolled.

Students who have worked previously (or currently) with a local mosquito control district or related organization or agency will receive extra consideration during the selection process. If not, awardees shall be encouraged to seek summer employment with a local mosquito control district for at least one summer during the award period.

The scholarship recipient will be provided a gratis membership in FMCA during the period of the award. The recipient is expected to attend an annual Florida Mosquito Control Association meeting. Graduate student recipients will be required to present a paper on their research during an FMCA meeting.

A completed application must contain the following: 1. Name, address, telephone number of applicant, University or College where enrolled, major, overall grade point average, grade point average in major, and number of credit hours completed. 2. Statement from the student describing their interest in public health entomology, career goals, how this award will assist in financing their education and other factors pertinent to scholastic ability which illustrate qualifications for the scholarship (limited to two typewritten pages [single or double-spaced] on one side only). 3. Typewritten statements from three persons (two of which from professors from the person's academic institution) who are knowledgeable individuals attesting to entomological interests, character and aptitude. 4. An original copy of current official transcripts of college grades (this may be sent separately). Send only one set of original transcripts per application package. 5. Proof of current enrollment at a Florida College or University. 6. One photograph (black and white, passport size) per application package.

All applications that meet the established criteria will be considered, however only superior applications will move forward and from those a first place and second place recipient may be selected at the discretion of the Committee.

FMCA Annual Silent Auction

The Florida Mosquito Control Foundation (FMCf) and the Chairperson of our Annual Silent Auction, Immediate Past-President, Larry Hribar, would like to remind you to please start thinking about items to donate to our Silent Auction which is held at our Fall Annual Meeting in November. This year will be our 85th Annual Fall Meeting, and is being held at the Westin Cape Coral Resort and Marina Village November 17 – 20, 2013. The Silent Auction will be held prior to the Awards Banquet on Tuesday, November 19th. The proceeds from the auction fund the FMCf Scholarship grants which are awarded to an individual or individuals who meet our designated criteria and are chosen by our the FMCf Scholarship Review Committee. Please reply to Larry at his email: immediatepastpresident@FloridaMosquito.org

If you plan on donating an item for auction to the Foundation, please do not send your item to us at this time. We would prefer you bring your item to the Annual Meeting. If that is not an option, please contact the Executive Director to make other convenient arrangements. Thank you for your continued generous support of our Association and Foundation. Without our honored contributors and members each year, we could not have reached the distinction of our historic 85 years of mosquito control progress in the great State of Florida.

Debra Parker Smith, Executive Director of the FMCA, ExecutiveDirector@FloridaMosquito.org

FMCA News *BITES*



News from the Dodd Short Course Committee:

The Dodd Short Course Committee would like to share some good, but bittersweet news. Mrs. Ella Dodd, mother of Glennon Dodd, passed away on January 20, 2013. She remembered the Dodd Short Courses in her will, and in July, we received a check for \$10,000 from her estate to be used in support of the courses. Mrs. Dodd was an avid supporter of the Dodd Short Courses up until her death this year. She picked out the Dodd logo that we currently use, and she was always happy to receive the latest t-shirt that we designed annually to hand out to each student. Mrs. Dodd contacted one of the co-chairs of the Committee, Roxanne Connelly, back in 2011 to let her know of her wishes to provide a gift for the event that was named in honor of her son Glenn. It was her wish that the money be spent on something that would assist in the courses for many years to come. The Committee will be discussing ideas for how the money might be used to support the educational program that Dodd provides while keeping the family's desires foremost in our hearts. The 2014 courses will be the 30th anniversary of the training event. We will still be meeting at the Ocala Hilton and the course list will be circulated this Fall. The courses are a week earlier than they usually are, so please mark your calendars for January 20 – 24, 2014, and plan to attend and celebrate the occasion of the 30th offering of the Dodd Short Courses. The entire FMCA and all mosquito control professionals should thank the memory of this generous and gracious woman for her support to Florida mosquito control.



Mrs. Ella Dodd

News from the Florida Entomological Society:

Florida Entomological Society presented the 2013 annual achievement award for research to Dr. Rui-De Xue, Director of Anastasia Mosquito Control District at its 96th annual meeting, Naples, Florida, July 16, 2013. The award is to recognize his outstanding contributions in developing integrated pest management strategies for Florida container-breeding mosquitoes.

The FDACS' Rulemaking Workshop will be held on August 30, 2013, from 10:00am to 2:00pm, at the Mid-Florida Research and Education Center in Apopka, Florida, 2725 S. Binion Road, Apopka, FL 32703-8504, Tel: (407) 884-203. FMCA urges its members to attend.

Dr. Roxanne Connelly, Editor-in-Chief
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