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Buzz Words



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Deadlines for submissions to be
included in the newsletter:

Jan/Feb	Jan 15
Mar/Apr	Mar 15
May/June	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

FMCA Fall Meeting

Nov 9-13, 2014

Bonaventure Resort and Spa
Weston, FL (room rate \$125)

<http://floridamosquito.org/Events/Meeting.aspx>

FMCA Dodd Short Courses

Jan 26-30, 2015

Hilton, Altamonte Springs, FL

<http://dodd.floridamosquito.org/Dodd/>

12th Annual Arbovirus Surveillance and Mosquito Control Workshop

March 24-26, 2015

Anastasia Mosquito Control District
(AMCD) St. Augustine, FL

www.amcdsjc.org

AMCA Annual Meeting

March 29-April 2, 2015

Hilton New Orleans Riverside
New Orleans, LA

<http://www.mosquito.org/annual-meeting>

A Workshop on Florida Mosquito Control and Reducing Florida's Risk From Dengue and Chikungunya by Walter J. Tabachnick

The chikungunya and dengue cases continue to pile up during 2014 in many regions of the Americas. More than 100,000 Chikungunya cases have occurred in the Caribbean region between December, 2013 and June 1, 2014, and the cases continue to climb. Dengue cases continue to pile up in Central and South America: Brazil with 35,000 cases, Venezuela with 22,000 cases and in Cuba, 3,500 cases in the same period to name a few. The situation is alarming for any country in the Americas with populations of *Aedes aegypti* and *Aedes albopictus*. Florida and much of the southern US is no exception and remains at great risk. There have been focal epidemics of dengue in Florida in 2009, 2010 and 2013, demonstrating Florida's risk from mosquito-borne dengue virus (DENV). More than 25 imported dengue cases have been identified in Florida so far in 2014. Chikungunya virus (CHIKV) now also poses a great risk to Florida with more than 20 imported cases from the Caribbean region imported to Florida so far in 2014 and more imported cases being reported throughout Florida each week.

Those in Florida charged with protecting the public health from mosquito-borne diseases recognize the great danger facing Florida and the enormous challenges in reducing Florida's risk. In particular it is clear that reducing Florida's chance for a dengue or chikungunya epidemic will require effective, efficient and environmentally proper mosquito control to reduce the mosquito vector populations, as well as a strong partnership with government public health officials, mosquito control industry partners, and the academic university experts in mosquitoes and mosquito-borne disease.

Leaders representing Florida mosquito control, Florida county public health, and the mosquito control industry, and Florida university vector biologists from throughout Florida attended a Workshop entitled "Protecting Florida from Dengue and Chikungunya through Control of *Aedes aegypti* and *Aedes albopictus*" at the University of Florida's Indian River Research and Education Center in Ft. Pierce, Florida on June 3-4, 2014. The workshop was organized and hosted by the Florida Medical Entomology Laboratory (FMEL, University of Florida) in nearby Vero Beach.



The workshop consisted of two intense days where participants divided into working groups to address the challenges and obstacles facing Florida mosquito control and public health in combating dengue and chikungunya. Over 120 participants representing 35 of Florida's counties attended. The participants came from counties with 75% of Florida's total population, and these counties spend more than 90% of Florida's total budgets directed at mosquito control. About 50% of the participants worked in Florida mosquito control; another 25% represented various county health departments in Florida. Mosquito control participants came from as far away as California and the Cayman Islands. After a plenary session with information provided by several presentations that included papers by Walter Tabachnick of the FMEL, Phil Lounibos, also of the FMEL, Gary Clark, of the Center for Medical, Agricultural and Veterinary Entomology (CMAVE) Lab, USDA, ARS and Dan Kline, also from CMAVE, participants met in different working groups to address a different specific topic. The workgroup topics were 1) surveillance for dengue, chikungunya, *Ae. aegypti* and *Ae. albopictus*, 2) source reduction, 3) larviciding against *Ae. aegypti* and *Ae. albopictus*, 4) adulticiding against *Ae. aegypti* and *Ae. albopictus*, 5) strategies to engage the public in dengue, chikungunya, *Ae. aegypti* and *Ae. albopictus* control.

Each working group focused on the same 3 primary issues for their topic. 1) What are the specific available methods to be employed? 2) What are the challenges in making the available methods successful? 3) What strategies will overcome the challenges? The workgroups each also provided 3-5 high priority recommendations intended to improve Florida's capabilities for their specific topic. On the final day all 120+ participants met together to review the

major ideas developed by each of the workgroups, listen to the recommendations of each workgroup, add to the ideas and recommendations, and develop an overall consensus about Florida’s capabilities and how to improve those capabilities to protect Florida’s citizens and visitors.

Many different ideas, issues and ways to improve Florida’s capability to control dengue and chikungunya were discussed. Readers can view the summaries of the various workgroups as well as some of the background information provided at the workshop at <http://mosquito.ifas.ufl.edu/Workshop/>. A document providing details of the workshop and the resulting information and recommendations is being prepared for publication.

The concluding wrap-up session of the workshop was focused on several key critical assessments of Florida’s current situation. **The workshop participants, representing a substantial portion of Florida’s mosquito control and public health professionals unanimously agreed that break-bone fever or dengue, and contorted fever or chikungunya, represented an imminent danger to all of Florida.** There was also widespread agreement that Florida must more effectively use available local mosquito control and public health resources. The workshop recognized that it was essential for mosquito control and local county Departments of Health to work very closely, share information and develop joint strategies and efforts. In particular, it was deemed vital that county health notify mosquito control immediately of where there are even suspect dengue or chikungunya cases. Mosquito control must be so informed in order to immediately assess mosquito vector populations at the locations of such cases and to provide focal control to reduce those populations around suspect cases. Strategies to control the yellow fever and Asian tiger mosquito to reduce break bone and contorted fevers were reviewed and remain Florida’s first line of defense.



“It’s Black and White: No Water, No Worries”
From Jim McNelly, Volusia Mosquito Control District

Another vital recommendation of the workshop was the importance of engaging the public to change their behaviors including direct actions for source reduction to reduce the sites around their properties where *Ae. aegypti* and *Ae. albopictus* develop so that mosquito control has a greater chance at reducing mosquito vector populations. A host of strategies were recommended to elicit public concern and the active participation of all citizens in control efforts. These include better media coverage with messages geared to elicit changes in public behavior and greater reliance on ordinances including enforcement of F.S. 388 regulations identifying the illegality of a property owner allowing production of mosquitoes that

endanger the public health. John Beidler, who some have called our Dean of Florida Mosquito Control, posed that the names dengue and chikungunya do not convey to the public the nature of these diseases. Mr. Beidler quipped that some use the term CHIK fever and he thought he has had this since he was 11 years old. Hence to get the message to the public the workshop recommended that “breakbone fever” for dengue, and “contorted fever” or “twisted-up fever” for chikungunya were far more appropriate in messages to inform the public of their serious nature.

The workshop showed there is much that is needed for Florida to be better protected against dengue and chikungunya. The participation and hard work of the workshop participants will be the basis for Florida being better prepared. As professionals charged with this great responsibility, we must continue making improvements.



Walter J. Tabachnick
Director & Professor, Florida Medical Entomology Laboratory
Department of Entomology and Nematology, University of Florida/IFAS
Vero Beach, FL

Recognize the achievements of your mosquito control colleagues Nominations for the 2014 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, 2014.

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 must 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

T. Wainwright Miller, Jr.

FMCA Scholarship Application

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.

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.

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, 2014.

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.

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, 2014.

FMCA – Reports from your Regional Representatives

Northwest Region Report by Ben Brewer, South Walton County Mosquito Control

Beach Mosquito Control District (BMCD): James Clauson, Director, reported the retirement of field technician Jim Hull, after 8 years of service. In late April there was a major rain event and there is still standing water throughout the District weeks later. Two aerial larvicide missions were conducted which kept the spray requests down. All ULV spray trucks have been updated with a new program along with the District's mapping database so that data acquisition and GIS display are now tied together. The public is now able to enter their own service requests and to see past ULV spray missions. Yellow flies are present in large numbers. Five chickens have seroconverted for EEE.

Escambia County Mosquito Control (ECMC): Bob Betts, Director, reports that over the time span of April 28-30, 2014 Pensacola received up to 18" of rain. Roads were washed out; houses were pushed off their foundations; and extreme flooding effects were widespread in the county. Mosquito Control effectively focused on those areas where the damage was most severe. Ongoing mosquito control operations were continued and enhanced to meet growing challenges. No FEMA money was applied for since the post storm's levels of control did not warrant aerial applications of mosquito pesticides. Local mosquito control administration and operations achieved their mission without public assistance from those authorities. Current light trapping results show low numbers in the range of 100 females per trap night, but with a greater diversity of floodwater species apparent.

Franklin County Mosquito Control (FCMC): Dewitt Polous, Director, reported that they are spraying and conducting surveillance and that the numbers are typical for this time of year. Yellow fly complaints are outnumbering the complaints for mosquitoes.

Gulf County Mosquito Control (GCMC): Mark Cothran, Director, reported that the numbers of adult mosquitoes are dropping since the population explosion they experienced after the late April rain event. The rain has slowed down which is giving them time to catch up with their control efforts, which seem to be paying off. They have participated in two round table meetings with the local Department of Health and Emergency Management Team to discuss the very real threat of Chikungunya to our state with a focus on prevention/education campaign ideas. Mark strongly suggests that all mosquito control programs contact your local DOH office and develop a constant and good working relationship now, rather than later, in order to allow transfer of information to occur in a timely manner in the event of an outbreak here.

South Walton County Mosquito Control District (SWMCD): Ben Brewer, Director, reports that during the late April rain event all rain gauges within District were full at 11". The main office building was flooded with up to 15" of water. No other buildings were damaged. Presently the offices are located within a leased trailer. They are now working with FEMA and insurance companies to rebuild the offices. There were also substantial damages to the mosquito ditch system which will require months to repair. Due to intense efforts to larvicide the entire District on a street-by-street basis, widespread increases in adult populations were not observed. The bi-annual treatment of all district storm drains has been completed. Several chickens have seroconverted for EEE. The yellow flies are an extreme nuisance and the District is providing "black ball sticky trap kits" (inflated beach ball, cup of glue, pair of gloves, directions/label) to all residents. 60-100 kits are being picked up daily at SWCMCD headquarters.

Southwest Region Report by Jim Burgess, Lee County Mosquito Control

Citrus County Mosquito Control is participating in National Mosquito Awareness Week by setting up displays at the Crystal River Mall, Beverly Hills Library and at the Inverness Government Building on June 24th. Director Joel Jacobson also tells that Robert Waters, a mechanic with 28 years of service is retiring June 6th, 2014. William "Will" Atwell, a mosquito control technician with 10 years of service is also retiring this year. But before Will retires, he will be busy: overseeing mosquito displays at Mosquito Control Awareness week and a field test of efficacy and residual effects of 40 day / 4 brood *Bti*-crg (controlled release granule). Lee County Mosquito Control District (LCMCD) reports once again playing host the Spring Regulatory Tour. This tour is put together by the Florida Fruit & Vegetable Association. It brings both Federal and State Regulatory folks to the field to actually see how the rules they make work and or don't work. It also gives these folks a chance to see actual working operations of farms or in LCMCD's case, how mosquito control is done. This also gives the District working names and face to face contacts for the issues such as labels, etc. Lee County is also doing its annual hosting of 3 personnel from the Navy Entomology Center of Excellence. They will be at Lee County for a week of training. This brings personnel in for actual hands-on training of what is really happening in the field of mosquito control.

Meanwhile, Chris Lesser from Manatee County Mosquito Control District (MCMCD) states that they have hired a 3rd pilot, John Bautista. John hails from Minnesota and comes with extensive experience in mosquito control. MCMCD is once again partnering with UF/FMEL on a study evaluating the insect-community impacts of aerial naled spraying. This study evaluates

insect community structure, size, diversity and relative overall population in "treatment" vs. "control" areas. MCMCD is also continuing field research on developing BMP for control of *Ae. aegypti*/*Ae. albopictus* populations. Research is focused on adulticide applications although some larvicide work has also been completed.

Citrus County Mosquito District is still keeping sharp on being proactive for the possible appearance of dengue or chikungunya. They have had another meeting of neighboring counties. They have been covering more points on cross county line work, responsibilities, and the legal aspects of property access. They are planning on meeting again in June; if anyone is interested, please contact Joel Jacobson at Citrus County Mosquito District, (352) 527-9567.

Southeast Region Report by Eric Cotsenmoyer, Lake County Mosquito Control

Martin County Mosquito Control District along with the Martin County Health Department have been delivering brochures on domestic mosquitoes and giving presentations to citizens living in the area where infections of dengue virus developed last year. An inspector has been in the area inspecting for mosquitoes throughout the year reminding people the mosquito and disease it transmits can come back at any time unless due diligence is paid to emptying containers and anything holding water. Our efforts seem to be paying off as they are seeing less *Aedes aegypti* and fewer containers of water this year.

Broward County has three confirmed imported cases of chikungunya virus. The MCD has been working with the local Health Dept. on the locations of the infected cases. They are ground spraying and doing some domestic surveying of those areas. They have treated storm drains and hand fogged residences around these infected people to try and keep the *Ae. aegypti* populations down. Overall, it has been very dry around our county, but I am sure the rains will come soon enough.

Lake County Mosquito and Aquatic Plant Management Programs are experiencing a reduction in lake levels once again. This plays a major factor for the production of mosquitoes within Lake County. As major lakes levels recede, so do the associated marshes and wetlands, reducing the overall mosquito abundance in those areas. Staff has met with our County Health Department to discuss potential dengue and chikungunya virus arrival within Lake County. The County Health Department is willing to do all that is needed in working with MCD to help eliminate the spread of these diseases, such as coordinating Public Service Announcements (PSA's), disseminating informational brochures and updating our staff on critical infection locations within various neighborhoods.

Update on the progress of Lake County MCD surveillance system project involving the design and fabrication of the Isolate Dengue Surveillance System (IDSS): with location deployment as the first step to analyzing the two new system prototypes, low rainfall conditions have set the location deployment analysis process to a slower pace. Also, the development of the CO₂ producing system is not fully functional and is requiring further research for an increased CO₂ volume dispensing capability. The idea of the new IDSS is that it is self-contained, portable, fast, quantifiable, and easy to deploy with very little cost and time spent to operate. Lake County MCD is confident as conditions change developmental progress will increase.

Northeast Region Report by Jim McNelly, Volusia County Mosquito Control

Anastasia MCD (AMCD) indicates that former Education Specialist Jodi Scott has joined the Navy, and will continue her Ph.D. study on the impacts of Attractive Toxic Sugar Baits (ATSB) on non-target honey bees at AMCD for the next two years. Christopher Bibbs, recently graduated from the University of Arizona with an MS in Entomology, replaces Jodi in the role of Education Specialist. AMCD welcomes three (3) new Student Interns: Ms. Codi Anderson/University of North Carolina, Kelly Seeger/John Hopkins University and Derrick Conover/University of Florida. They all join the summer intern program for the next two-three months and will perform research on ATSB and evaluations of application equipment. Dr. Rui-De Xue has been invited to visit southeastern Turkey (Sanliufan area) to consult on ATSB and ULV for the control of sand flies and house flies from May 6 to May 12, 2014. Commissioner Jeanne Moeller attended AMCA's Washington DC legislation meeting from May 5 to 8, 2014.

Richard Smith reports that Duval-Jacksonville's Entomologist Marah Clark has initiated the seasonal arbovirus surveillance program. Thirty sentinel chickens are on duty at five surveillance sites in Duval County. Baseline blood samples and all serial samples were negative through the month of May. Light trap counts have remained low around the county with a few local exceptions. *Anopheles* and *Culex* are the most common genera collected in the traps. Sand gnats were problematic in early March, followed by yellow flies. As these pests diminish, they expect mosquitoes to begin their seasonal increase. In addition to the usual CDC trap collections, Marah is gathering data from a rotating trap that samples mosquitoes in two-hour increments overnight.

Staff will be field-testing the application of granular larvicides using a truck-mounted Buffalo Turbine applicator this summer. Inspectors are scouting for swamps and other potential test sites with vehicular access. In the aftermath of inundating rains, the unit may have immediate application for larviciding roadside ditches, swales and retention ponds.

Civic leaders frequently ask us for details about service within their specific districts. Researching these requests is complicated and time-consuming as the records are kept in various forms and locations. The Jacksonville IT department is exploring options to acquire a more comprehensive data management system for the Mosquito Control Division. The plan is to digitally integrate customer service records, field data, and shape files into formats that are useful for inquiry analysis. They hope to have a new system in place by this time next year.

Volusia County Mosquito Control (VCMC) has also incorporated a Buffalo Turbine into its IPM Program, and demonstrated a liquid application at a recent Subcommittee on Managed Marshes Meeting at the district's office. The intent was to begin to determine the value of the machine to larviciding "cryptic" containers; results were impressive and reading water sensitive cards was facilitated by a recently purchased Dropvision AG system. VCMC also welcomes three Student Interns to the district from Volusia County institutions: Ms. Zella Conyers/Stetson University, Mr. Patrick Wilson/Stetson University and Mr. Alonzo Wilson/Bethune-Cookman University. All three interns will be immersed in *Aedes aegypti* and *Aedes albopictus* related work as part of a Domestic Inspection Program initiated this spring. VCMC is still on the lookout for two interns with GIS experience – spread the word! VCMC was recognized by Rutgers University at the 21st Annual Celebration of Excellence in April. The event identified the USDA-ARS Cooperative Research Project coordinated through the Rutgers Center for Vector Biology – the "Asian Tiger Mosquito Project" – and celebrated associated achievements and participants via a Team Excellence Award. VCMC was fortunate to have participated in this project during the summer of 2012.

VCMC inspectors have been consistently larviciding since the first week of February, as well as attending to ditch maintenance, bleeding chickens, answering service requests, locating and mitigating container "super producers" ... and everything else they ask these folks to do. Hats off to: Kirsten Smith, Joanna Dillon, TJ Machardy, Jesse Julien, Ray Lucas, Eric Domingus and Jamie Pollaro. They do it all!

Vector-Borne Disease Conference Opportunities Abroad

The 5th International Forum for Sustainable Management of Disease Vectors will be held in Qingdao, Shandong, China, November 2-6, 2014. For more information, please visit the website at www.chinavbc.cn/forum/

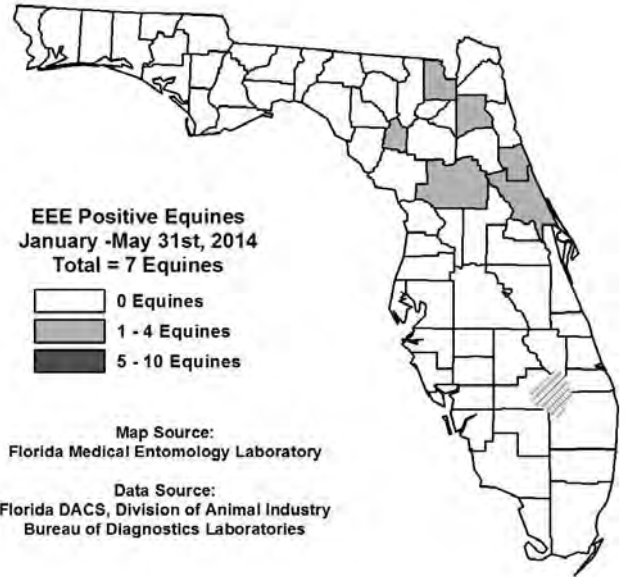
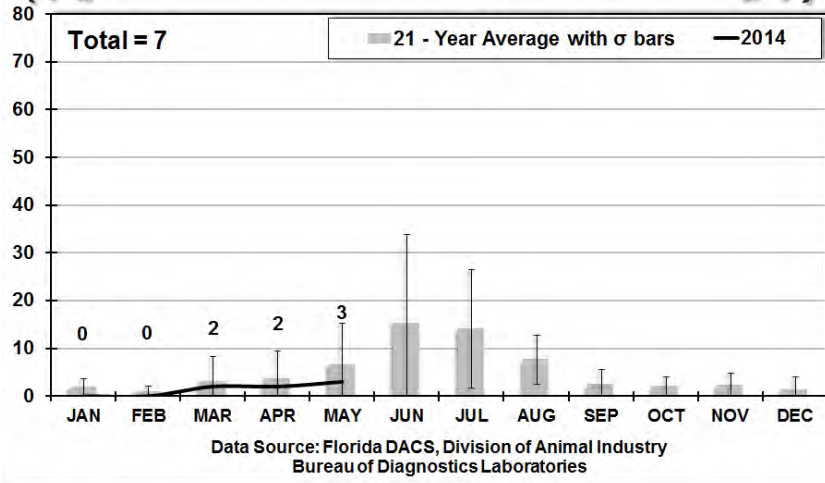
The 4th International Forum for Surveillance and Control of Mosquitoes and Mosquito-borne Diseases will be held in Guangzhou, Guangdong, China, May 25-29, 2015. For more information, please visit the websites at www.mosquitoforum.net or www.asiansvemc.org

Arbovirus surveillance, Florida Jan – Apr 2014

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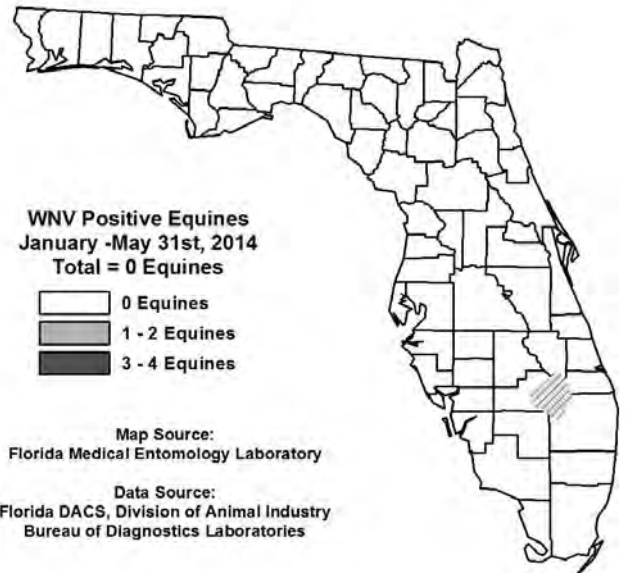
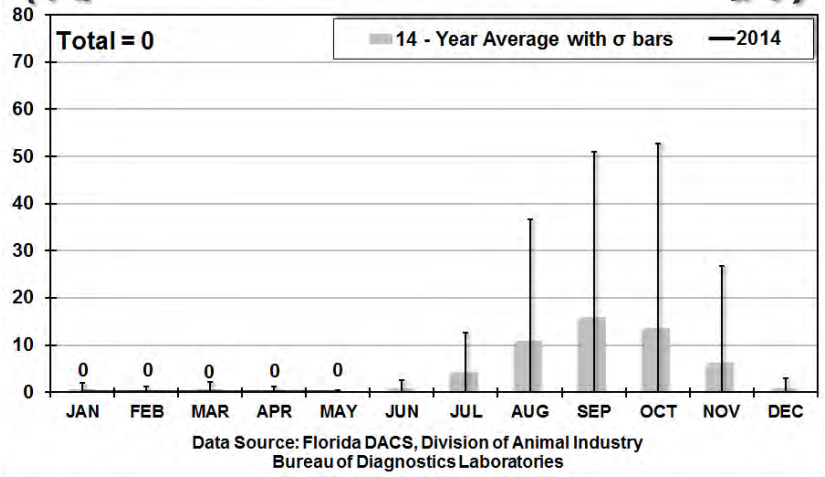
EEE Positive Equines in Florida
January 1 through May 31, 2014



West Nile



West Nile Positive Equines in Florida
January 1 through May 31, 2014



Passing

Hedvig Tetens Nielsen Evans 1930 - 2014



Hedvig Tetens Nielsen Evans died June 7, 2014, age 83, in Fort Pierce, Florida. Hedvig was born in Copenhagen, Denmark in 1930 to Erik Tetens Nielsen and Astrid Sehested Nielsen. After her mother died in 1953, Hedvig worked with her father in research into the biology and activity of insects, including the swarming of mosquitoes and butterfly migration.. These investigations took Hedvig and her father to Denmark, Greenland, Iraq, Morocco, Maine, and Florida. Although the majority of her research publications on mosquitoes concern Old World species, while employed at the ERC Hedwig's observations on *Mansonia (Coquillettidia) perturbans* and *Psorophora ferox* in nature south of Vero Beach led to a significant contribution on the swarming behavior of these two species (Behaviour 24: 67-89, 1964). From 1956 to 1960, Hedvig was employed at the Florida Entomology Research Center in Vero Beach, now the Florida Medical Entomology Laboratory. The family returned to Denmark and remained there from 1960 to 1966. From 1966 until 1977, she was again employed at Florida Medical Entomology Laboratory, Vero Beach. From 1978 until she retired in 1997, she was chief entomology inspector at the St. Lucie County Mosquito Control District. Hedvig's research led to her publication (1978) of a collection of Seminole Indian folk tales. Hedvig will forever be loved as a wife, mother, grandmother, and friend. She is survived by Frank D. Sherwood Evans, her husband of 46 years; stepchildren Denise (Jerry) Glass of Port St. Lucie; Douglas (Susan) Evans of Atlanta, Georgia; Diane Evans of Fort Pierce; Donald Evans of Port St. Lucie; step-grandchildren Christina Glass of Port St. Lucie, and Aaron (Bridget) Glass, of Jupiter; sister Kirsten Tetens Webb, brother-in-law Nigel R. Webb, and their family in England. After cremation, her remains will be interred with those of her parents at Crestlawn Cemetery in Vero Beach. Family and friends celebrated her life at 1 PM on Sunday, June 15, at the family home.

Thanks to Doug Carlson, Indian River Mosquito Control, and Phil Lounibos, Florida Medical Entomology Laboratory, for their contributions

Dr. Roxanne Connelly, Editor-in-Chief
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Florida Medical Entomology Lab



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