

# BuzzWords

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**Deadlines for submissions to be  
included in the newsletter:**

**Jan/Feb Feb 1**  
**Mar/Apr/Apr 1**  
**May/Jun/June 1**  
**Jul/Aug Aug 1**  
**Sep/Oct Oct 1**  
**Nov/Dec Dec 1**

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

*Society for Vector Ecology*  
*44<sup>th</sup> Annual Conference*  
*September 23 – 27, 2012*

*Renaissance World Golf Village Resort and  
Convention Center*  
*St. Augustine, FL*  
*Room Rates \$97; Registration \$310*

*Florida Mosquito Control Association*  
*84th Fall Annual Meeting*  
*November 11 – 14, 2012*  
*Sandestin Hilton*  
*Sandestin, FL*

*Florida Mosquito Control Association*  
*2013 Dodd Short Courses*  
*January 27 – February 1, 2013*  
*Ocala Hilton*

## From Your FMCA President

Greetings and Happy New Year to all. It has been a week since our return from FMCA Legislative Days in Tallahassee. I thank Legislative Committee Co-Chairs Doug Carlson and Dennis Moore for their hard work. I think our time was well spent. Some teams received a warmer reception than did others, but overall I believe the experience was a positive one. Just how the cordial interpersonal relations translate into action that will benefit Florida mosquito control remains to be seen.

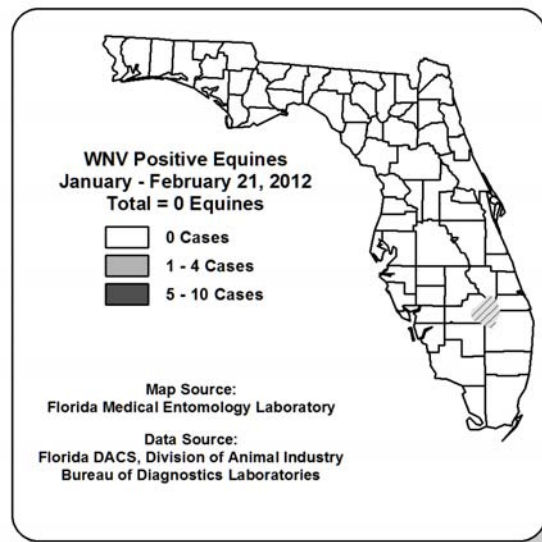
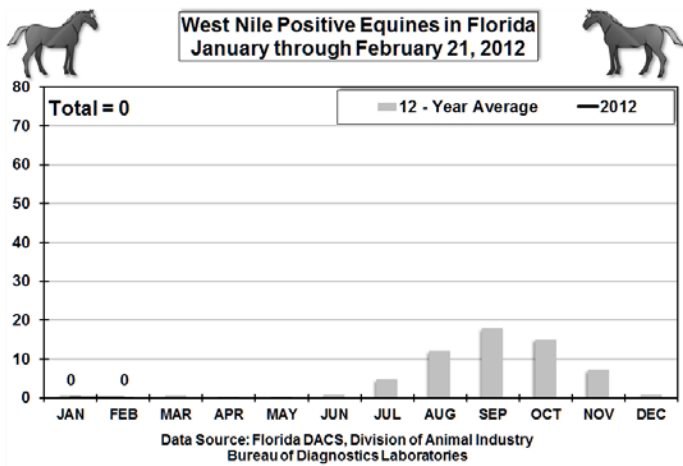
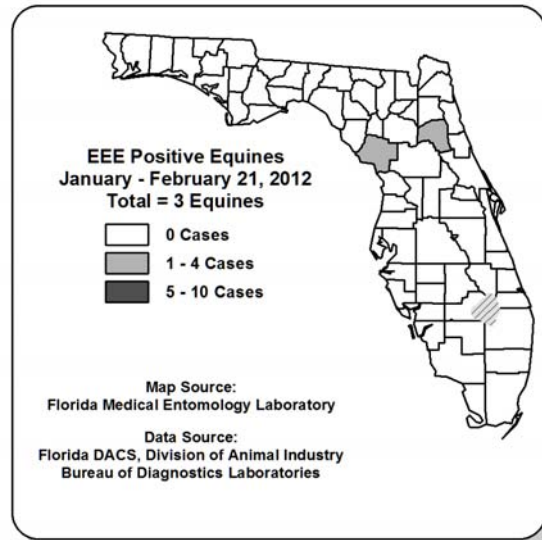
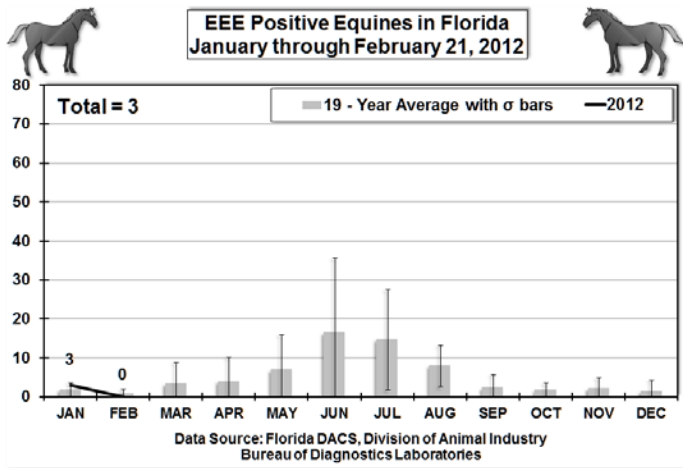
During my day at the Capitol, I was invited to attend a meeting with the Deputy Commissioner of Agriculture, Dr. Marion Aller, and some of her staff. Besides our Legislative Committee Co-Chairs and me, several other FMCA members were in attendance, including at least two district directors and an elected mosquito control commissioner. That meeting proved to be a real eye opener. Perhaps the biggest bomb to drop was regarding the waste tire money that is supposed to be passed through from Department of Environmental Protection (FDEP) to Florida Department of Agriculture and Consumer Services (FDACS). FDACS advised that they agreed that mosquito control was essential to Florida and that FDACS was not supporting reducing state aid to mosquito control. They advised that they were forced to remove the waste tire money from their budget if it is not passed through to them. We learned that FDEP was the initiator of the reduction to state aid. In a subsequent meeting with FDEP officials and the Chairs of the FMCA Legislative Committee, also attended by Walter Tabachnick (FMEL), and Chris Lyon (our Tallahassee lobbyist), FDEP also agreed that the state aid to mosquito control was essential to the well-being of Florida. Both agencies agreed with our position and efforts that should serve mosquito control well in gaining support through state aid in the future.

An important change to FMCA was approved at the last Board of Directors meeting in Jacksonville. The Board approved a recommendation to disband the Education Coordination Committee. The Committee no longer functioned as it was intended to, and rarely met. The various subcommittees were (and are) operating well on their own and will be raised to full committees.

We are barely into the New Year and already we've had Legislative Days, the Dodd Courses, the Coordinating Council meeting, and at the end of February we've had the national meeting of the AMCA in Texas. Mosquito control programs throughout the state are already getting ready for the upcoming mosquito season. It really never does stop.

A bit of surprising news, and not good news, from Europe is the discovery of Schmallenberg virus in Germany. During a very short time the virus was detected in Belgium, France, Netherlands, and the United Kingdom. The virus is pathogenic to cattle, goats, and sheep and causes deformities in newborn animals, and can result in stillborn or aborted animals. Schmallenberg virus is an Orthobunyavirus, a group of viruses normally found in Africa, Australia, and Oceania. Mosquitoes are not believed to be vectors of this virus; but biting midges (Diptera: Ceratopogonidae) also known as "no see ums", are the usual culprits. It goes to show that at any time, a new threat can arise seemingly from nowhere.

Larry Hribar, FMCA President



## Key West Must Continue the Fight Against Dengue

There were no reported dengue cases in Key West during 2011! This welcome breathing spell provides Key West with time to reflect and prepare itself for any dengue in its future.

In 2009 Key West had 23 cases of locally-acquired dengue. The U. S. Centers for Disease Control studied the blood of 113 Key West residents that allowed CDC to estimate that about 1,000 Key West residents were infected with dengue virus in 2009. Most of these people were likely asymptomatic, had symptoms that were not severe enough to seek medical attention or their infections were not reported by their physicians if they did seek medical help.

In 2010 there were 65 more dengue cases in Key West, 3 times the number of cases in 2009, and hence it is reasonable to estimate that another 3,000 Key West residents could have been infected with the virus. These estimates suggest that about 4,000, or 1 in every 5, Key West

residents have been infected with the dengue strain or serotype DENV-1! Though now immune to further infection with DENV-1, these people are more at risk for severe dengue should they be infected with one of the other three dengue serotypes.

Why did dengue not occur in Key West in 2011? Three equally likely explanations come to mind. All may have contributed to some extent. 1) Key West mosquito control and the Department of Health successfully reduced populations of the dengue vector mosquito *Aedes aegypti* and reduced public exposure to *Ae. aegypti* mosquitoes. 2) Dengue virus did not survive through the Key West dry winter season when there are fewer adult mosquitoes, and/or the virus was not reintroduced into Key West from an infected traveler. 3) The 4,000 previously infected residents, all now immune to DENV-1 and likely the high risk population of Key West, reduced the number of high risk susceptible people so that the transmission of DENV-1 could not be sustained.

What does this mean for Key West? Although 4,000 citizens are immune to DENV-1 there is now the danger that these people will develop severe symptoms should they be infected by any of the other three DENV serotypes. This will result in more severe disease, more people seeking medical help, and the great potential for dengue shock syndrome in some patients, and a greater potential for fatal cases would be expected. You can learn more about dengue and disease severity at <http://edis.ifas.ufl.edu/in699> or <http://www.cdc.gov/dengue/symptoms/index.html>.

Hopefully the absence of DENV-1 in 2011 was due to the efforts of Key West mosquito control and public health agencies. If true, these efforts must be continued to reduce the impact of another serotype by reducing human exposure to both the vectors and the virus. The anti-*Aedes aegypti* campaign should include community-based participation, with the public actively eliminating all the sites where these mosquitoes breed in and around their homes and businesses. Everyone should be exerting peer pressure on their fellow citizens to actively take precautions to reduce vector abundance throughout Key West. Does one have the right to produce mosquitoes on one's property that endanger the health of one's neighbors? Actions taken now will reduce *Ae. aegypti*, and prevent or mitigate transmission should it begin again this summer.

I hope I am wrong, but I believe it is unlikely that dengue has vanished from Key West and will never appear again. It is prudent to anticipate another case of dengue in Key West's future that may be a prelude to more cases. In the event of future dengue cases it will be vital for Key West to immediately identify the dengue virus serotype. If it is not DENV-1 then the previously infected Key West citizens are in peril of severe disease. These will be the people who must understand in clear terms how they must change their behavior to reduce their exposure to *Ae. aegypti* and DENV. It is imperative that both mosquito control and the public work together to reduce the vector populations and reduce mosquito-human contact.

Key West's community leaders need to declare war on dengue to continue aggressive mosquito control operations against *Ae. aegypti*. The public should be active in reducing water containers that support *Ae. aegypti* around their homes and businesses, using effective mosquito repellent as personal protection against biting mosquitoes and, if needed, curtailing activities that increase exposure to mosquitoes. The appearance of another DENV serotype in Key West might warrant declaration of a medical threat and bring additional anti-mosquito resources to bear, so that the public is advised to minimize outdoor activities wherever and whenever *Ae. aegypti* mosquitoes are active. This would, of course, have other consequences on the Key West community and the declaration of such measures would not be taken lightly or cavalierly. However, the public health consequences might warrant such action.

Preventing dengue in Key West is important to the rest of Florida. The incidence of dengue in Key West was 325 cases/100,000 people in 2010. Should this incidence occur in Florida's Southeast Metropolitan Area extending from West Palm Beach to south of Miami, population of about 5 million, more than 15,000 people would have dengue symptoms severe enough to seek medical attention, and another 750,000 people would have less severe symptoms!

Key West's anti-dengue campaign must continue to be vigorous, even in this period without active dengue transmission. Although Key West mosquito control continues to fight *Ae. aegypti*, I fear that a call by community leaders for public action in the fight in August would be too late.

Walter J. Tabachnick  
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