

## Vector Operational Workshop Minutes

Florida Keys Mosquito Control District  
Marathon Office  
503 107<sup>TH</sup> St.  
Marathon, FL 33050

January 11, 2022 2:00 PM

The Board of Commissioners of the Florida Keys Mosquito Control District held a Vector Operational Workshop on Tuesday, January 11, 2022.

**Present Were:** Phillip Goodman, Chairman; Dr. Stanley Zuba, Vice-Chair, Brandon Pinder, Secretary-Treasurer; Jill Cranney, Commissioner; Tom McDonald, Commissioner; Andrea Leal, Executive Director; Dale Coburn, Board Attorney.

**Employees Present:** Joshua Kogut, Director of Aerial Operations; Bruce Holden, Director of Finance; Michael Behrend, Director of Human Resources; Dr. Larry Hribar, Director of Research; Robert Lee, Director of Aircraft Maintenance; Deanna Darias, Executive Assistant; Michael Boehmler, Research Biologist; Tony Nunez, Chief Technology Officer

**GUESTS PRESENT:** None

**APPROVAL OF AGENDA:** *Chairman Goodman asked the Board if there were any corrections or additions to the agenda, having none the agenda was unanimously approved.*

Chairman Goodman stated the purpose of this workshop is to discuss mosquito populations and ongoing operational vector control strategies.

### **DISCUSSION:**

Andrea Leal, Executive Director, advised the Board that during today's workshop, we will be going into mosquito populations and vector control including 2 presentations that were given at FMCA in 2021 by Dr. Larry Hribar and Michael Boehmler. Director Leal explained she will also review Vectors of Concern in the Florida Keys, Hotspots throughout the Florida Keys and our Vector Control Plans for the 2022 Season.

Dr. Larry Hribar, Director of Research presented an overview of the Rediscovery of *Aedes scapularis* (Diptera: Culicidae) in the Florida Keys. Dr. Hribar discussed the difference in geography of the Upper and Lower Keys and our two different ecosystems which is why we see a difference in number of adult mosquitos in our traps. He reviewed the types of traps we use, our trap locations, and the methods of larval surveillance. Dr. Hribar explained larvae from the *Aedes scapularis* were found on Vaca Key in the 1940s and until 2020 were not found again in the Florida Keys; we discovered 8 females on Boca Chica Key in 2020 and 1 female in Key West in 2021. He advised that the State of Florida has detected 9 new species of mosquitoes in the last 20 years. Dr. Hribar explained the importance of routine surveillance and without this we would not find the new species of mosquitoes that are coming into Florida. Chairman Goodman asked if any of the new species discovered are Vector disease carrying mosquitoes which Dr. Hribar confirmed that some of them are, however they are not commonly collected at this time so more research will need to be conducted. Director Leal then reviewed the vectors of concern in our district which are the *Aedes aegypti* and the *Culex* mosquitos which can carry Dengue and the West Nile Virus.

Michael Boehmler, Research Biologist then presented the Successes and Obstacles of the 2020 Dengue Outbreak in Key Largo, FL. The outbreak was caused by the *Aedes aegypti* mosquito and Mr. Boehmler reviewed what diseases they can carry, their breeding habits and characteristics of this specific species. He also discussed his findings on the specifics of the outbreak and what he feels contributed to the spread of the disease and locations affected. He speculated that during the early days of the Covid-19 pandemic and shut downs in Monroe County, people spent more time outside at home and this may have caused a higher transmission rate than if homeowners were not confined at home. Many people stated they had been working outside during the shut downs. At the

time, Covid-19 was thought to be transmitted not only through airborne means but also by contact with contaminated surfaces. Ultimately, this caused homeowners to distrust people coming onto their property and our inspectors handling their breeding containers. This is in spite of the fact that these containers were breeding from neglect. Mr. Boehmler then reviewed our truck, aerial, and ground operational response to the outbreak and what FKMCD can do moving forward to prevent future outbreaks in the Florida Keys. Chairman Goodman referred to the gap in the chart from when we were not conducting surveillance due to Covid-19 and the how numbers increased dramatically after this gap and questioned how we might handle a similar situation in the future. Director Leal advised the information collected will help us make a decision if we are put in that situation in the future and FKMCD would possibly increase truck missions and backpack sprayer usage.

Director Leal then moved onto reviewing the map of the hotspots throughout the Florida Keys and where we collect the highest numbers of *Aedes aegypti* and our areas of concern; she explained it is difficult to know where and when the next outbreak will occur. She then reviewed the Districts Vector Control Plans for the 2022 Season which included neighborhood cleanups and working with local businesses to remove sources of breeding in these hotspot areas. The District will be bringing back Tire Amnesty days where residents can drop off old tires at our locations for disposal. FKMCD will also be working diligently with local homeowners associations to get information out to residents and short term renters on how to help us control the mosquito breeding. Additionally, the District will be looking into new products including traps, *Wolbachia* trials and creating a database of all properties that will document permission for us to enter each property.

Chairman Goodman questioned if the Health Department could assist FKMCD to help fight the hotspots and work with the residents that will not allow us on their properties and how the Health Department can allow tires to buildup on properties. Director Leal stated that we do work closely with the Health Department when necessary. Commissioner Pinder asked Director Leal if we can test our mosquito pools for the Vector disease carrying mosquitoes which might help stop the outbreak before it happens. Director Leal stated the cost to do the testing on the mosquito pools is very costly, however if that is something the board wants to look into doing we can definitely do that in the future.

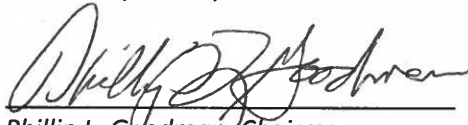
**ADJOURN:** There being no further business to come before the Board, the workshop was adjourned.

*Respectfully submitted,*

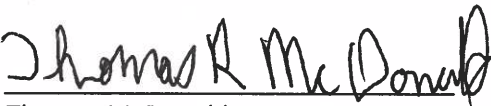


*Andrea Leal*  
*Executive Director*

*Board of Commissioners*  
*Florida Keys Mosquito Control District*



*Phillip L. Goodman, Chairman*



*Thomas McDonald, Secretary-Treasurer*

*For additional information, please refer to [www.keysmosquito.org](http://www.keysmosquito.org).*