

**Front Line
of
Real Time Mosquito Control**



**Beach Mosquito Control
2015/2016 Annual Report**

BEACH MOSQUITO CONTROL DISTRICT'S

MISSION STATEMENT:

Beach Mosquito Control District seeks to protect the public's health, safety and welfare by using science-based, environmentally sensitive, integrated mosquito control techniques employing public education, surveillance source reduction, biological control and the judicious use of pesticides to enhance the quality of life for the district's residents.

Board of Commissioners

Treasurer



Larry J. Couch Sr.

Home Phone: (850) 234-5483

Cell Phone: (850) 596-2461

Chairman



John P. Smith PhD

Home Phone: (850) 233-6895

Cell Phone: (850) 319-9475

Secretary



Joyce Dean

Cell Phone: (850) 832-2150



James F. Clauson Director

Beach Mosquito Control District

www.pcbeachmosquito.org

Phone: (850) 233-5030

FAX: (850) 233-5033

Information Recording: (850) 233-5034

2015-2016 Beach Mosquito Control District

Board of Commissioners

Chairman's Summary Report

On behalf of the Beach Mosquito Control District, thank you for placing your trust and confidence in the District's elected Board of Commissioners. The commission continues to make policy decisions designed to improve mosquito control services while maintaining fiscal accountability.

The District is very excited about our plans to relocate our facility to Griffin Rd. in the Commerce Park. We have a 4-year plan where we should be completed construction.

The District continues to be prominently involved and visible in many community activities. It is hard to "live on the Beach" and be unaware of BMCD and the services provided. District personnel are actively engaged with neighborhood associations, civic clubs, public schools, and numerous community outreach festivities and events. The activities of BMCD have been highlighted on a regular basis by local television stations and newspaper.

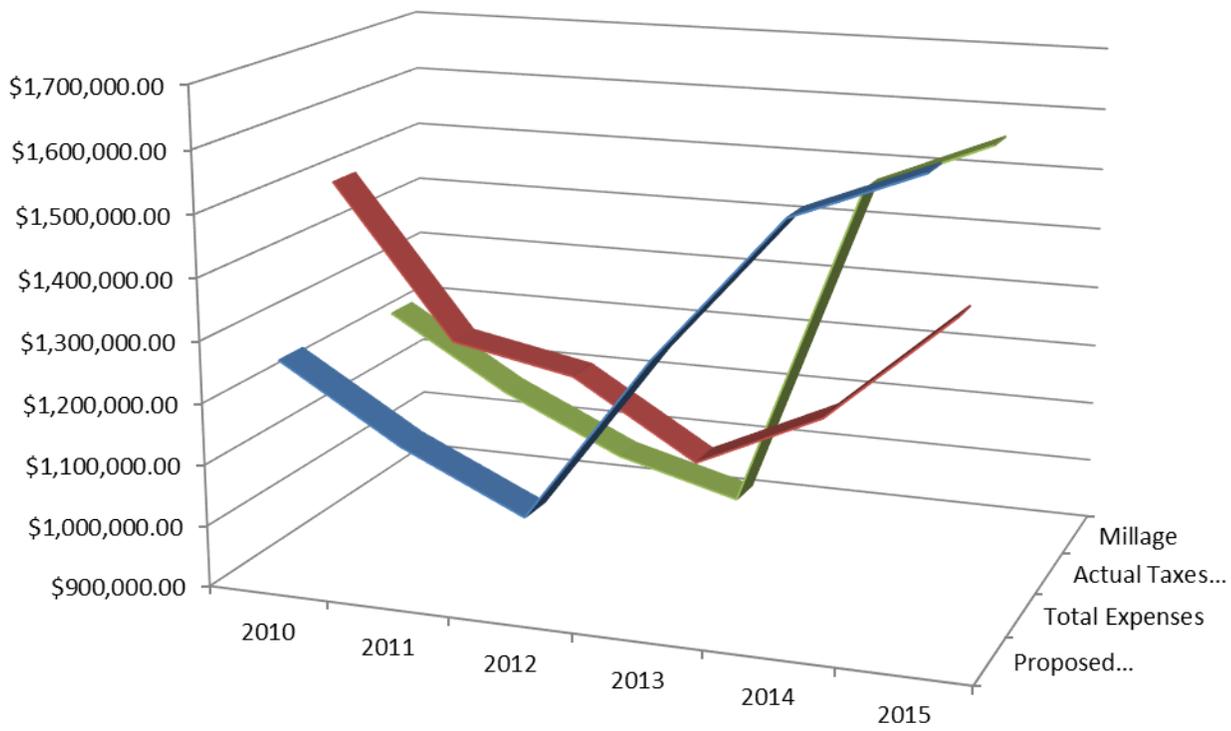
In closing, I hope you will take the time to learn more about the District and its many services. The quickest way to access information about Beach Mosquito Control District is through its website available at: <http://pcbeachmosquito.org> or through its Facebook page. Lastly, I would encourage you to call the District at (850)233-5030, should you ever have need of the District's services. BMCD cannot help you if they do not know you have a problem...please call them!

John P. Smith

Chairman,

Beach Mosquito Control District Commission

Beach Mosquito Control District Ad Valorem Receipts/Millage Rates



	2010	2011	2012	2013	2014	2015
■ Proposed Local Funds	\$1,263,385.91	\$1,144,023.00	\$1,052,738.00	\$1,321,078.36	\$1,549,831.00	\$1,629,516.00
■ Total Expenses	\$1,506,952.58	\$1,260,691.08	\$1,222,120.72	\$1,101,965.20	\$1,195,073.24	\$1,371,586.59
■ Actual Taxes Received	\$1,240,659.41	\$1,123,064.16	\$1,031,760.98	\$978,824.99	\$1,512,077.66	\$1,595,436.39
■ Millage	0.1438	0.1438	0.1438	0.1438	0.227	0.223

Proposed Local Funds are the monies that Beach Mosquito Control District bases the budget on. Total Expenses are the actual monies spent to run Beach Mosquito Control District. Actual Taxes Received is the local funds that were received through Ad Valorem Taxes. Millage is the final rate that was voted on and accepted by the Beach Mosquito Control District Board of Commissioners.

Beach Mosquito Control District's Director's Message

I am pleased to present Beach Mosquito Control District's (BMCD) 10th annual report to the citizens of Panama City Beach and surrounding Beach Communities. The mosquito season was somewhat mild (relative to abundance of mosquitoes) than the previous year. We had somewhat light rains throughout the summer of 2016. We had sporadic mosquito-borne diseases in our sentinel chicken flocks, with 1 human case of WNV (West Nile Virus) and one travel cases of Zika. This report will cover the BMCD's calendar year beginning October 1, 2015 through September 31, 2016.

While you review this report, please note the additional improvements that were made while working diligently to accomplish the mission statement for our district. These goals would not have been accomplished without the support of the local taxpayers.

In addition, I would like to extend special thanks to the Beach Mosquito Control District's dedicated Commissioners, administrative staff and employees for their support and quality service given to the Beach Mosquito Control District. The citizens ultimately benefit from this dedicated and professional service.

Please feel free to call myself or any of the staff at Beach Mosquito Control District for any mosquito related question or issue. We are here to serve you, the taxpayers.



Sincerely,

James F. Clauson



MOSQUITO SURVEILLANCE



10/01/15 through 09/30/16



Mosquito Surveillance 2015--2016

Naval Support Active Base Panama City Beach, Florida

BMCD weekly collects mosquitoes using an updraft trap at the U.S. Naval Support Base, PCB. The trap was set for a total of 34 weeks capturing over 2919 mosquitoes. Adulticiding control measures were managed both for aerially and ground applications.

Adult Surveillance

Our district utilizes several surveillance trapping methods to monitor the local mosquito populations. Traps are set Monday through Friday. The gathered data is collected, compiled and recorded for maintaining current and historical reports. The number of mosquitoes trapped is significant because it determines if treatment is necessary. In addition, it demonstrates the impact the treatments are having to an area. This year's season consisted 122 trapping day and nights.

Domestic Surveillance

Due to growing concern of domestic urban container inhabiting mosquitoes and the Zika virus, BMCD has been conducting "artificial container" breeding mosquito surveillance. When the aedes albopictus aka Asian Tiger Mosquito is found, and exhaustive survey is conducted at the home and the surrounding neighborhood.

Sentinel Chicken Flocks

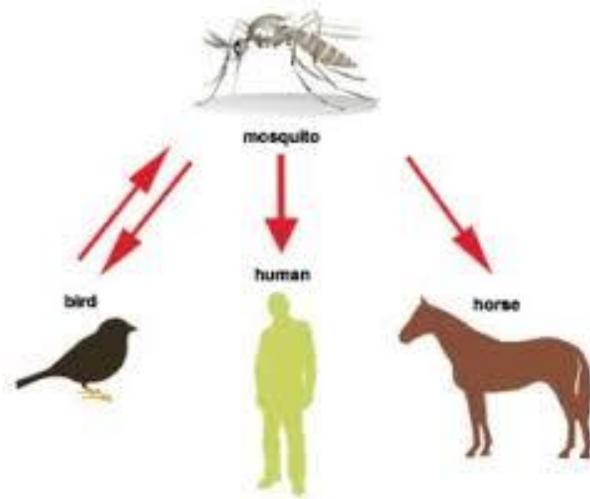
The Beach Mosquito District's weekly sentinel flock arbovirus blood serum collections this year began the first week of October, 2015 and ended the second week of December, 2016. Three flocks of 6 chickens each were set in three separate locations throughout the district. On the east end of the district behind Ed's Sheds, the central location located at the Panama City Beach Waste Water Management and Treatment Plant and at the west end of our district off of West 14th Street.

A total of 612 samples were drawn, prepared and shipped to the State of Florida Arbovirus Laboratory in Tampa to be analyzed for arbovirus antibodies. This year's total arbovirus positive results for the flocks were as follows: 0 Eastern Equine Encephalitis virus (EEE), 11 West Nile Virus (WNV) and 0 Highlands J virus. These positives indicate that a mosquito-borne virus was detected by the bird being bitten by an infected mosquito carrying the virus. The blood sera-conversion data is crucial to keeping the public safe. Our data is sent to the Bay County Health Department and they base their decision about alerting the public. This information also is extremely important for us to determine the type of method of mosquito control our district chooses to use. The surveillance collection data gathered helps BMCD to take the appropriate precautionary measures to maintain the quality of public health and safety for our community.

Mosquito Pools

West Nile Virus (WNV) surveillance has been performed by testing targeted mosquito vectors for the presence of WNV. Surveillance began May 2015 through October 2016 utilizing CDC Gravid traps. 39 mosquito pools were sent to the State of Florida Arbovirus Laboratory in Tampa to be analyzed; 7 mosquito pools tested positive for WNV. One human case of WNV was reported in BMCD.





Summary of the BMCD Mosquito Season

October 1, 2015 marked the beginning of BMCD's 2015-16 mosquito season. The year began with mosquitoes being lower than the ten year average trapped in our district. Listed are each month and their totals: October-22930, November-8324 and December-4981 mosquitoes. Mid-season and towards the end of summer, the number of mosquitoes trapped had a decline when compared to BMCD's 10-year average. These are a sample of months and their totals for the number of mosquitoes observed: April-11,581; July-6,887 and August-10,639. Our area experienced six months of mosquito collections well below the ten year average. The grand total number of mosquitoes trapped during this past year is 77,206.

The majority of the rainfall amounts for the season were average with exceptions during the months of April and September. During these two months our area experienced excess amounts of rainfall. The month of April had 8.589 inches of rain, whereas the average rainfall is normally 4.6 inches. September received 7.641 inches of rain, whereas the average for September is normally 4.6 inches.

Beach Mosquito Control District Public Health Mission Educate Through Public Outreach

Globally mosquitoes affect the economy, the quality of life for everyone and can compromise the public's health. Therefore, Beach Mosquito Control District's Integrated Mosquito Management Program (IMM) includes a public educational outreach program. The mission of our program is to educate the general public on mosquito ecology, prevention, source reduction, safety, plus to gain a positive understanding about the importance and practice of mosquito control in the local Panama City Beach area.

This year marked our 10th year educating and campaigning to citizens of all ages the importance of source reduction of mosquito breeding areas and local mosquito vector disease transmission. Truly, it all starts by emphasizing the importance of the constant, weekly practice of the elimination of standing water locations and the essential need to clean up all types of unnecessary debris outdoors. Positive mosquito control is accomplished through continuous public educational outreach efforts and encouraging the public to understand and accept the importance of their individual responsibility to practice the promotion of good mosquito related public health and safety. It really begins through education and putting knowledge into practice. Methods utilized to accomplish getting our message broadcasted include methods of computerized social media and traditional media. BMCD's continual active support and participation with the Panama City Beach community is essential to disseminating our message.

As our local area expands, so does Beach Mosquito Control District's efforts to maintain and improve our cooperative working relationships with everyone from individual citizens, public schools, citizen groups, businesses, state public lands and visitors.

We strive to maintain and promote a healthy future for our local area. The fight against the bite is a community effort. Please, remember to do your part and don't forget to contact the pros at Beach Mosquito Control district to assist with your mosquito control problems or concerns.

 **The Most Amazing People
Do Their Part
By Weekly Draining Standing
Water.** 

Stay Healthy PCB!

Are *Mosquitoes* a concern or problem?
For Fast Free Reliable Service
Contact the Pro's at
Beach Mosquito Control District
850-233-5030
Or
www.pbeachmosquito.org
Your tax dollars @ work.



Employee Requirements

Beach Mosquito Control District is professionally staffed with highly skilled employees. The entire staff maintains their State of Florida Public Health License to insure quality mosquito control by attending continuing education programs. A mandatory drug screening test is required prior to employment. Also, all employees must have a valid Florida Driver's License in good standing. Within six months of employment, each new employee must obtain a Florida Public Health and Pest Control License. The pilot must obtain an aerial license and already have earned the documented amount of flight hours for agricultural spray application. Several employees have their Aquatic Weed Control License, Advance Mosquito Control Test Certification and Limited Lawn and Ornamental Certification. The director is certified with the State of Florida.

BMCD may appear small in size but our daily control of the district's large variety of mosquito populations is a great responsibility. Due to increasing number of mosquito borne diseases throughout the state of Florida, we dedicate ourselves to promoting and protecting the health of our community and its guests.

We follow federal and state environmental guidelines; use the four basic control methods (Prevention, Source Reduction, Larviciding and Adulticiding) to establish an up-to-date, environmentally safe and professional service to our community.

To ensure a safe working environment, we hold quarterly safety meetings. During these meetings new safety topics are addressed, old ones readdressed and safety guidelines updated.

BMCD is continuously striving to educate and work with our community to promote and provide a healthier future.



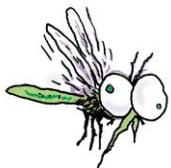
Meet the Beach Mosquito Control District Staff Members

Beach Mosquito Employees Listed From Front to Back Row (Left to Right)



Row 1: Fiscal Assistant Laurell Young, Technician II Danny Hood, Operations Team Leader Eddie Summers, Public Relations & Education Team Leader Cindy Mulla, Arbovirus Surveillance Team Leader/Entomologist Michael Riles, Director James Clauson

Row 2: Technician II Kyle Pridgen, Technician II Phillip Harvey, Chief Pilot Brad Gunn, Shop and Maintenance Team Leader Lee Duke, Technician I Cody Vinson, Technician II Travis Kern



**They Can Fly... But They Can't Hide!
We've Got Them Under Control**



Annual Aerial Adulthooding & Larviciding Summary

1 October 2015 – 30 September 2016

- Combined Total Helicopter Treatment Flight Time: 15.5 hours
- Total Flight Missions Flown: 6

Adulthooding Missions Flown: 4 Mosquito and 0 Dog Fly

<u>Product Used</u>	<u>Area Treated</u>	<u>Application Rate</u>
Dibrom	51,183 acres	.67 oz/acre

Larviciding Missions Flown: 2

<u>Product Used</u>	<u>Area Treated</u>	<u>Application Rate</u>
2800 lbs Vectobac GS	679 acres	7.1 lbs per acre
Total Acres Larvicided:	679 acres	





Professional Training, Presentation and State & National Meetings

We are always striving to offer our district the safest and healthiest quality of cost effective mosquito control. In order to maintain and improve our level of service, it's very important to continue educating our employees with up-to-date knowledge. This is accomplished through attending educational conferences or taking classes. In addition, Beach Mosquito Control District employees actively participate at these meetings by delivering presentations on their involvement with current research and development projects that benefit the mosquito control industry.

This past year, Beach Mosquito Control District staff and commissioners attended the following professional meetings: The annual Florida Mosquito Control Association (FMCA), The Florida Mosquito Control Association Aerial Short Course, The Florida Mosquito Control Association Dodd Short Courses, The Southeast Regional Public Health and Vector, FMCA Legislative Tallahassee Days, and the American Mosquito Control Association (AMCA).



Spot & Stop Mosquito Breeding

Do your part!!!

Weekly Check for Standing Water on
your property.

For Free Mosquito Assistance for Panama City Beach

Contact: Beach Mosquito Control District

Phone: (850) 233-5030

Visit: www.pcbeachmosquito.org

