Beach Mosquito Control District

2012 – 2013 Annual Report

Targeting: Public Health & Safety

Public Education
Cooperative Partners
Service Requests
Surveillance
Operations
Equals
Successful Mosquito Control

We encourage you to contact us.
(850) 233-5030
pcbeachmosquito.org
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

Chairman

Larry J. Couch Sr.
Home Phone: (850) 234-5483
Cell Phone: (850) 596-2461

Secretary

John P. Smith PhD
Home Phone: (850) 233-6895
Cell Phone: (850) 319-9475

Treasurer

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
2013 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 in the District’s elected Board of Commissioners. I realize most of you have very little idea of the Commission’s role. Aside from providing budget oversight, the activities below are among the most notable activities taken during my chairmanship. All are aimed at providing a reliable, responsive, and effective mosquito control program for all residents and tourists of the Panama City Beaches.

**Equipment Acquired from Public Health Entomology Research & Education Center Closure**

Florida A&M University closed the Public Health Entomology Research and Education Center (a state mosquito research laboratory located in Panama City) after almost 50 years of operation. Well over $100,000 in equipment and supplies were transferred to Beach Mosquito Control District along with the extensive library at no cost to the taxpayers. The equipment is being used by the District and loaned to the Panama City campus of Florida State University to continue mosquito research and to provide surveillance services for smaller mosquito control programs in NW Florida.

**Public Relations**

One of the most significant changes this Board made to BMCD is supporting development and maintenance of a highly visible public outreach program. Keeping the public informed of the services and programs provided by the District is an important part of making citizens and tourists aware of what the District does to protect their health and comfort. Members of the District staff provided several presentations in locations including, but not limited to: public schools, homeowners associations, and various civic clubs. The District also provided displays at numerous public gatherings such as parades, festivals, and other attractions. This has become an excellent tool for informing the public (particularly those new to the Beaches) on how to request service and what they can do to prevent mosquitoes around the home.

**BP Claim Filed**

BMCD joined several local governments in the Bay County area seeking remuneration from BP for losses affecting the District caused by the Deep Horizon oil spill. A claim for just over $24,000 was filed on behalf of the District. We are waiting for a decision on this claim.

In closing, I hope you will take the time to learn more about the District and its services. The quickest way to access information about Beach Mosquito Control District is through its website available at: http://pcbeachmosquito.org. 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!

Best regards,

Larry Couch
Chairman, Beach Mosquito Control District Commission
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

Once again, I am proud and pleased to present Beach Mosquito Control District’s (BMCD) seventh annual report to the citizens of Panama City Beach and surrounding Beach communities. The mosquito season was an average season which surprised us all; because of the excessive and over abundant rainfall we received. We had sporadic mosquito-borne diseases with no human cases. This report will cover the BMCD’s calendar year beginning October 1, 2012 through September 31, 2013.

While you review this report, please note the additional improvements that were made while working diligently to accomplish the mission statement for our district without raising taxes. 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

10/01/12 through 09/30/13
**Surveillance 2012 – 13**

**Avian Influenza Surveillance Project**

This project is part of a federal research grant. Beach Mosquito Control District has three sentinel chicken flocks strategically placed throughout our district. Each flock contains 6 chicken members. A reserve flock of viral free chickens are kept at the Beach Mosquito Control Headquarters. For the months of October 2012 through September 2013, each chicken of the sentinel flocks was tested with a tracheal swab, plus five birds from our reserve flock. A total of 275 were collected and sent to the State Division of Animal Industry Diagnostic Laboratories (DACS). All of the samples taken for the year 2012 – 2013 returned back negative.

**Statewide Mosquito Surveillance**

(DACS) Statewide Mosquito Surveillance Information System (SMSIS). This report contains the total number of mosquitoes plus the type species caught. Each weekly submission is combined with the pre-existing historical data. The information collected is for the preservation of trapping data which assists the understanding of mosquito activity and their population patterns in the state of Florida. BMCD submitted 50 weekly reports for the fiscal year.

**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 25 weeks capturing a total of nine hundred and sixty-two mosquitoes. Adulticiding control measures were managed both for aerially and ground applications.

**Adult Surveillance**

The trapping season began the first week of October 2012 and it continued through December 19, 2013. No traps were set during the months of January, February, and March of 2013 due to cold weather. However, late in the season due to surveillance chicken sera – conversions, arbovirus vectors caught in traps and very mild temperatures uncommon for the season; the fall trapping continued on into the month of December.

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 143 trapping day and nights.
Sentinel Chicken Flocks

The Beach Mosquito District’s weekly sentinel flock arbovirus blood serum collections this year began the first week of October 2012 and ended the last week of September 2013. 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. An approximate total of 6,060 miles were travelled to collect samples and to maintain the surveillance flock with food and water.

A total of 900 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: 3 Eastern Equine Encephalitis virus (EEE), 14 West Nile Virus (WNV) and 3 Highlands J virus. These positives indicate that a mosquito-borne virus was due to 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. Our area was under a West Nile Advisory during the beginning of our calendar year from October 2012 through the middle of November 2012 due to the number of the BMCD sentinel flock members testing positive for the WNV antibodies. 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.

Once again, we are pleased to report that during the 2012-2013 fiscal year, no human arbovirus cases were reported in our district.
Summary of the BMCD Mosquito Season
And
Future Arbovirus Surveillance Changes

October 1, 2012 marked the beginning of BMCD’s 2012-13 mosquito season. The year began with higher than the ten year average of mosquitoes normally trapped in our area. Listed are each month and their totals: October-72,693, November-31,666 and December-24,489 mosquitoes. Midseason and towards the end of summer, the number of mosquitoes trapped rose once again. These are the months and their totals for the number of mosquitoes caught: April-76,417, July-49,010 and August-53,035. Our area experienced six months of mosquito collections above the ten year average. The grand total number of mosquitoes trapped during this past year is 401,597.

The weather is a very important factor for mosquito control. Rainfall amount combined with the right temperatures triggers the rise in mosquito populations. Compared to our historical 10 year average, the temperatures we experienced this past year were right on target.

The majority of the rainfall amounts for the season were average with exceptions during the months of February, July and August. During these three months our area experienced excess amounts of rainfall. The month of February had 12.350 inches of rain. The average rainfall is normally 6.5 inches for February. July had the most rainfall recorded at 19.025 inches! The average for July is normally 6.0 inches. The month of August was second for the most rainfall at 18.5 inches. The normal average for August is 8 inches. We had two months back to back with 37.5 inches of rain total. The combined over average inches of rainfall for the months of July and August totaled 23 inches of over the average rainfall amounts.

Expected Future Changes

As Panama City Beach’s future development and populations increase and encroach near or into natural mosquito habitats so will the need to increase arbovirus surveillance and operations to protect the residents in our local area against the bite of the mosquito.

Team Leader of Arbovirus and Surveillance, Dale Martin retired at the end of June 2013 after 15 years of dedication at Beach Mosquito Control District and its ‘mission to protect our local area. Our district is proud to announce that in January of 2014 Mike Riles, a new graduate from Western Carolina University, will be filling Mr. Martin’s position. We wish both Dale and Mike all the best with beginning their new chapters in life.
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.

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.

Employee Milestones

5 YEAR, 10 YEAR and 15 YEAR

Beach Mosquito Control District would like to congratulate several employees for their respective 5, 10 and 15 year milestones with the District. Congratulations to Danny Hood for his 5 year milestone. Congratulations to Lee Duke for his 10 year milestone. Lastly, Congratulations to Dale Martin for his 15 year milestone and his retirement from BMCD. We wish him well!
Meet the Beach Mosquito Control District Staff Members

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

Row 1: Director James Clauson, Arbovirus Surveillance Team Leader Michael Riles, Public Relations & Education Team Leader Cindy Mulla, Operations Team Leader Eddie Summers, Technician Danny Hood, Technician Jim Hull

Row 2: Financial Assistant Sherry Bennett, Pilot Brad Gunn, Technician Phillip Harvey, Shop and Maintenance Team Leader Lee Duke, Technician Kyle Pridgen

They Can Fly... But They Can’t Hide!
We’ve Got Them Under Control
Annual Aerial Adultciding & Larviciding Summary

1 October 2012 – 30 September 2013

- Combined Total Helicopter Treatment Flight Time: 24.6 hours
- Total Flight Missions Flown: 8

Adultciding Missions Flown: 4 Mosquito and 0 Dog Fly

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<th>Product Used</th>
<th>Area Treated</th>
<th>Application Rate</th>
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<td>210 Gal Dibrom</td>
<td>40,649 acres</td>
<td>0.66 oz per acre (1.3 tbsp)</td>
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Larviciding Missions Flown: 4

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<th>Product Used</th>
<th>Area Treated</th>
<th>Application Rate</th>
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<tr>
<td>1080 lbs Vectobac CG</td>
<td>157 acres</td>
<td>6.88 lbs per acre</td>
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<tr>
<td>1900 lbs Aquabac 400G</td>
<td>332 acres</td>
<td>5.72 lbs per acre</td>
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<tr>
<td>44 lbs Altosid Pellets</td>
<td>5 acres</td>
<td>8.80 lbs per acre</td>
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Total Acres Larvicided: 494 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 meeting by delivering presentations on their involvement with current research and development projects that benefit the mosquito control industry.

This past year the Beach Mosquito Control selected staff and the 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