

**MASSACHUSETTS MOSQUITO CONTROL
ANNUAL OPERATIONS REPORT**



2014 Year of Report Date of Report: 12/10/2014

Project/District Name: **Dukes County Mosquito Control Project**

Address: P.O. Box 190

City/Town: Edgartown Zip: 02539

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Report prepared by: *Martina Thornton, Dukes County Manager*

NPDES permit no. **N/A**

If you have a mission statement, please include it here:

ORGANIZATION SETUP:

Please list your Commissioner's names:

- Matt Poole
- John Powers
- Maura Valley
- Shirley Fauteux
- Marina Lent
- Julie Sierputoski

Please list the Supt./Director's name: N/A

Please list the Supt./Director's contact phone number:

Please list your Asst. Supt./Asst. Director's name:

Do you have a website? Yes If yes, please list the web address here:
http://www.dukescounty.org/Pages/DukesCountyMA_Mosquito/index

Please list your staffing levels for the year of this report:

- Full time: 0
- Part time: 0
- Seasonal: 1
- Other: 0 (please describe)

Please break these down into the following areas:

Administrative staff: 0

Field staff: 1

Please check off all that apply, and list employee name(s) next to each category:

- Public relations
- Information technology
- Entomologist
- Wetland Scientist
- Biologist
- Education
- Laboratory
- Operations
- Facilities
- Other (please list) Surveillance Technical - Richard Johnson

For the year of this report, we maintained:

1 vehicles

0 modified wetland equipment (list type)

0 ULV sprayers (list type)

0 Larval control equipment (list type)

Other (please be specific):

Comments: Dukes County only provides seasonal mosquito surveillance

How many cities & towns in your service area? 6

Please list: Aquinnah, Chilmark, Edgartown, Oak Bluffs, Tisbury, West Tisbury

Any changes to your service area this year? No

Please list cities/towns added or removed

***Please attach a link to a map of your service area if possible. Martha's Vineyard**

INTEGRATED PEST MANAGEMENT (IPM):

DEFINITION: a comprehensive strategy of pest control whose major objective is to achieve desired levels of pest control in an environmentally responsible manner by combining multiple pest control measures to reduce the need for reliance on chemical pesticides; more specifically, a combination of pest controls which addresses conditions that support pests and may include, but is not limited to, the use of monitoring techniques to determine immediate and ongoing need for pest control, increased sanitation, physical barrier methods, the use of natural pest enemies and a judicious use of lowest risk pesticides when necessary.

Please check off all of the services that you currently provide to your member cities and towns as part of your IPM program; details of these services are in the next sections.

- Larval mosquito control
- Adult mosquito control
- Source reduction
- Ditch maintenance
- Open Marsh Water Management
- Adult mosquito surveillance
- Education, Outreach & Public education
- Research
- Other (please list):

Comments: Dukes County only provides seasonal mosquito surveillance, public education and outreach is done by individual Boards of Health in each town. The County helps with the dissemination of general information via the County website.

LARVAL MOSQUITO CONTROL:

Do you have a larval mosquito suppression program? No

If yes, please describe the purpose of this program:

Please give the time frame for this program:

Describe the areas that this program is used:

Do you use:

- Ground applied (includes hand, portable and/or backpack)
- Helicopter applications
- Other (please list):

Comments: _____

What products do you use in – (please use product name and EPA#)

Wetlands:

Catch basins:

Containers:

Other (please list):

Please list the rates of application for the areas listed above:

Wetlands:

Catch basins:

Containers:

Other:

What is your trigger for larviciding operations? (check all that apply)

- Larval dip counts – please list trigger for application:
- Historical records
- Best professional judgment

Comments: _____

***Please attach a link to maps of treatment areas if possible.**

ADULT MOSQUITO CONTROL:

Do you have an adult mosquito suppression program? No

If yes, please describe the purpose of this program:

Please give the time frame for this program:

Describe the areas that this program is used:

Do you use:

- Truck applications**
- Portable applications**
- Aerial applications**
- Other (please list):**

Comments: _____

Please list the names of the products used with EPA #:

- 1).
- 2).
- 3).

- 4).
- 5).
- 6).

Please list your application rates for each product:

- 1).
- 2).
- 3).
- 4).
- 5).
- 6).

Please describe the maximum amounts or frequency used in a particular time frame such as season and areas

What is your trigger for adulticiding operations? (check all that apply)

- Landing rates - please list trigger for application
- Light trap data - please list trigger for application
- Complaint calls - please list trigger for application
- Arbovirus data
- Best professional judgment

Comments: _____

***Please attach a link to maps of treatment areas if possible.**

SOURCE REDUCTION

Do you perform source reduction methods such as tire/container removal? No

If yes, please describe your program:

What time frame during the year is this method employed?

Comments: _____

DITCH MAINTENANCE

Do you have a ditch maintenance program? No

Please check all that apply:

- Inland/freshwater
- Saltmarsh

If yes, please describe:

Please check off all that apply INLAND DITCH MAINTENANCE:

- Hand tools
- Mechanized equipment
- Other (please list):

Comments: _____

Please check off all that apply SALTMARSH DITCH MAINTENANCE:

- Hand cleaning
- Mechanized cleaning
- Other (please list):

Comments: _____

Please give an estimate of cumulative length of ditches maintained from the list above
INLAND:

Hand cleaning
Mechanized cleaning
Other (please list):

Comments: _____

Please give an estimate of cumulative length of ditches maintained from the list above
SALTMARSH:

Hand cleaning
Mechanized cleaning
Other (please list):

What time frame during the year is this method employed?

Comments: _____

***Please attach a link to maps of ditch maintenance areas if possible.**

MONITORING (Measures of Efficacy)

Please describe monitoring efforts for each of the following:

- Aerial Larvicide – wetlands:**
- Larvicide – catch basins:**
- Larvicide-hand/small area**
- Ground ULV Adulticide:**
- Source Reduction:**
- Open Marsh Water Management:**
- Other (please list):**

Provide or list standard steps, criterion, or protocols regarding the documentation of efficacy, (pre and post data) and resistance testing (if any):

OPEN MARSH WATER MANAGEMENT

Do you have an OMWM program? No

If yes, please describe:

Please give an estimate of total square feet or acreage:

What time frame during the year is this method employed?

Comments: _____

***Please attach a link to maps of OMWM areas if possible.**

ADULT MOSQUITO SURVEILLANCE

Do you have an adult mosquito surveillance program? Yes

Please list the number (not location) of MDPH traps in your service area: 6

Please check off all the types of surveillance that apply to your program:

- | | |
|--|---------------------------------|
| <input checked="" type="checkbox"/> Gravid traps | |
| <input type="checkbox"/> Resting boxes | |
| <input type="checkbox"/> CDC light traps | <input type="checkbox"/> Canopy |
| <input type="checkbox"/> CDC light traps w/CO ₂ | <input type="checkbox"/> Canopy |
| <input type="checkbox"/> ABC light traps | <input type="checkbox"/> Canopy |
| <input type="checkbox"/> ABC light traps w/CO ₂ | <input type="checkbox"/> Canopy |
| <input type="checkbox"/> NJ light traps | <input type="checkbox"/> Canopy |
| <input type="checkbox"/> NJ light traps w/CO ₂ | <input type="checkbox"/> Canopy |

Other (please describe):

Please describe the purpose of this program: Surveillance for positive testing

Do you maintain long-term trap sites in any of your areas? No

If yes, please describe how you chose these long-term sites.

Please check off the species of concern in your service area:

- | | |
|---|---|
| <input type="checkbox"/> <i>Ae. albopictus</i> | <input type="checkbox"/> <i>Oc. cantator</i> |
| <input type="checkbox"/> <i>Ae. cinereus</i> | <input type="checkbox"/> <i>Oc. excrucians</i> |
| <input type="checkbox"/> <i>Ae. vexans</i> | <input type="checkbox"/> <i>Oc. fitchii</i> |
| <input type="checkbox"/> <i>An. punctipennis</i> | <input checked="" type="checkbox"/> <i>Oc. j. japonicus</i> |
| <input type="checkbox"/> <i>An. quadrimaculatus</i> | <input type="checkbox"/> <i>Oc. punctor</i> |
| <input type="checkbox"/> <i>Cq. perturbans</i> | <input type="checkbox"/> <i>Oc. sollicitans</i> |
| <input checked="" type="checkbox"/> <i>Cx. pipiens</i> | <input type="checkbox"/> <i>Oc. stimulans</i> |
| <input checked="" type="checkbox"/> <i>Cx. restuans</i> | <input type="checkbox"/> <i>Oc. taeniorhynchus</i> |
| <input type="checkbox"/> <i>Cx. salinarius</i> | <input type="checkbox"/> <i>Oc. triseriatus</i> |
| <input type="checkbox"/> <i>Cs. melanura</i> | <input type="checkbox"/> <i>Oc. trivittatus</i> |
| <input type="checkbox"/> <i>Cs. morsitans</i> | <input type="checkbox"/> <i>Ps. ferox</i> |
| <input type="checkbox"/> <i>Oc. abserratus</i> | <input type="checkbox"/> <i>Ur. sapphirina</i> |
| <input type="checkbox"/> <i>Oc. canadensis</i> | |

Other (please list):

Do you participate in the MDPH Arboviral Surveillance program? Yes

How many pools do you submit weekly on average? 46

Please check off the arboviruses found in your area in the past 5 years:

- West Nile Virus
 Eastern Equine Encephalitis
 Other Please list:

Did the above listed diseases cause human or horse illnesses? No

Please explain: No human or horse illnesses were reported on Martha's Vineyard

At what arbovirus risk level did the year begin in your area? (If more than one please list)

WNV: low

EEE: no

At what arbovirus risk level did the year end in your area? (If more than one please list)

WNV: low
EEE: no

What time frame during the year is this method employed? July - September

Comments: _____

***Please attach a link to maps of surveillance areas if possible.**

EDUCATION, OUTREACH & PUBLIC RELATIONS

Do you have an education/public outreach program program? Yes

If yes, please describe: The individual town Boards of Health provide the information that Dukes County helps disseminate through the county website.

Please check off all that apply:

- School based program
- Website
- PR brochures/handouts
- Community events
- Science fairs
- Meeting presentations
- Other (please describe):

Please give an estimate of attendance/participants in this program:

Please list some events you participated in for the year of this report:

What time frame during the year is this method employed? spring and summer mostly

Have you performed any research projects, efficacy, bottle assays, etc.? Not at this time

If yes, please elaborate on your research projects:

Are you involved in any collaboration with academia, industry, environmental groups, etc.? Not at this time

If yes, please elaborate on your collaborations this past year:

Please provide a list of technical reports, white/grey papers, publication in journal or trade magazines, etc.

Does your staff participate in educational opportunities? No

If yes, please list the training and education your staff received this year:

Please list the certifications and degrees held by your staff:

Comments: _____

BIOLOGICAL CONTROL EFFORTS

Do you have a biological control program? No

If yes, please describe:

Is this program the introduction of mosquito predators or the enhancement of habitat for native predators?

Please check off all that apply:

- Predatory fish
- Predatory invertebrates
- Other (please describe):

What time frame during the year is this method employed?

Comments: _____

INFORMATION TECHNOLOGY

Does your program use (check all that applies):

- Computers
- GIS mapping
- GPS equipment
- Computer databases
- Aerial Photography
- Other (please describe):

Please describe your capabilities in these areas:

Please describe your current GIS abilities: None

Give details if possible on your GIS abilities:

Please describe any changes/enhancements in this area from the previous year:

Comments: We do surveillance in 6 locations (one in each town) once per week. We do not feel any of the above technologies is needed to accomplish that task.

REVENUES & EXPENDITURES

Please give a concise statement of revenues & expenditures for the prior fiscal year ending June 30.

Surveillance Technician	\$3,500
Time and travel expense to meetings off island	\$259
Supplies	\$88
Truck (insurance, gas)	\$840
Cost of testing 46 pools	\$1380
Total expenses:	\$6,067

List each **member municipality along with the corresponding (cherry sheet) funding assessment** dollar amount for the prior fiscal year.

Comments: The cost is paid by each Town's Board of Health (not on cherry sheet). They pay their portion of the actual expenses at the end of the season.

PESTICIDE USAGE

Please total your pesticide usage with information from your Mass. Pesticide Use Report, WNV Larvicide Use records and contracted pesticide applications. Applications methods include; hand/backpack, aerial, ULV, mistblower, other (please explain)

Product Name:
EPA Reg. #:
Application method:
Targeted life stage: Choose one
Total amount of concentrate applied:
Comments: _____

Product Name:
EPA Reg. #:
Application method:
Targeted life stage: Choose one
Total amount of concentrate applied: .
Comments: _____

Product Name:
EPA Reg. #:

Application method:
Targeted life stage: Choose one
Total amount of concentrate applied:
Comments: _____

Product Name:
EPA Reg. #:
Application method:
Targeted life stage: Choose one
Total amount of concentrate applied:
Comments: _____

Product Name:
EPA Reg. #:
Application method:
Targeted life stage: Choose one
Total amount of concentrate applied:
Comments: _____

Product Name:
EPA Reg. #:
Application method:
Targeted life stage: Choose one
Total amount of concentrate applied: .
Comments: _____

Product Name:
EPA Reg. #:
Application method:
Targeted life stage: Choose one
Total amount of concentrate applied:
Comments: _____

Product Name:
EPA Reg. #:
Application method:
Targeted life stage: Choose one
Total amount of concentrate applied:
Comments: _____

Product Name:
EPA Reg. #:
Application method:
Targeted life stage: Choose one
Total amount of concentrate applied:
Comments: _____

LARGE AREA EXCLUSIONS

Do you have large areas of pesticide exclusion, such as estimated or priority habitats?
No

If yes, please explain, and attach maps or a web link if possible.

SPECIAL PROJECTS

Do you perform any inspectional services such as inspections at sewage treatment facilities or review sub division plans? No

If yes, please elaborate

Do you work with DPW departments or other local or state officials to address stormwater systems, clogged culverts or other areas that you have identified as man-made mosquito problem areas? No

If yes, please elaborate:

Have you worked with these departments on long term solutions? No

If yes, please elaborate:

Did you conduct or participate in any cooperative research or restoration projects?

If yes, please elaborate:

Did you or participate on any **State/Regional/National workgroups or panels or attend any meeting pertaining to the above?**

If yes, please elaborate:

CHILDREN AND FAMILIES PROTECTION ACT

Is your program impacted by the Children and Families Protection Act? No

If yes, please explain:

If you have data on compliance with this Act and your program, please list here:

If you had difficulties with implementation of your program due to this law, please elaborate here:

Comments:

NPDES SECTION

Did your program note any adverse incidents during this reporting period? No

If yes please list any corrective actions here: _____

GENERAL COMMENTS

Please list any comments not covered in this report: _____