

**MASSACHUSETTS MOSQUITO CONTROL  
ANNUAL OPERATIONS REPORT**

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2009 Year of Report

Date of Report: JANUARY 4, 2010

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

Address: 19 HARRIS ST.

City/Town: PITTSFIELD, MA.

Zip: 01201

Phone: 413 447-9808

Fax: 413 447-7185

E-mail: bcmcp@bcn.net

**Report prepared by: JAKE JURGENSON**

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

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**ORGANIZATION SETUP:**

Please list your Commissioner's names:

DAVID COLBURN, CHAIRMAN

WALLY TERRILL

Please list the Supt./Director's name: JAKE JURGENSON

Please list the Supt./Director's contact phone number: 413 447-9808

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

Do you have a website? No

If yes, please list the web address here: http://

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

Full time: 1

Part time: 2

Seasonal:

Other: (please describe)

Please break these down into the following areas:

Administrative staff: 1

Field staff: 2

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

- Public relations JAKE JURGENSON
- Information technology JAKE JURGENSON
- Entomologist
- Wetland Scientist
- Biologist
- Education
- Laboratory
- Operations JAKE JURGENSON
- Facilities JAKE JURGENSON
- Other (please list)

For the year of this report, we maintained:

4 vehicles

modified wetland equipment (list type)

2 ULV sprayers (list type) BECOMIST LONDON-AIR

Larval control equipment (list type)

Other (please be specific):

**Comments:** \_\_\_\_\_

How many cities & towns in your service area? 8

Please list: BECKET, CLARKSBURG, HINSDALE, OTIS, RICHMOND, SHEFFIELD  
STOCKBRIDGE, TYRINGHAM

**\*Please attach a link to a map of your service area if possible.**

### **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:** \_\_\_\_\_

**LARVAL MOSQUITO CONTROL:**

Do you have a larval mosquito suppression program? Yes

If yes, please describe the purpose of this program: ELIMINATE NUISANCE MOSQUITOES IN DISTRICT MEMBER COMMUNITIES

Please give the time frame for this program: APRIL THRU MID-SEPTEMBER

Describe the areas that this program is used: VERNAL POOLS, MARSHES, FLOOD PLAINS, ROADSIDE DITCHES

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:** VECTOBAC G                    275-50

**Catch basins:** ALTOSID WSP PACKETS

**Containers:** VECTOBAC G                    275-50

**Other (please list):**

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

**Wetlands:** 4LBS. PER ACRE

**Catch basins:** 1 PACKET PER BASIN

**Containers:** AS NEEDED

**Other:**

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

- Larval dip counts – please list trigger for application: 3+LARVE PER DIP
- 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? Yes

If yes, please describe the purpose of this program: REDUCE NUISANCE MOSQUITOES IN DISTRICT MEMBER TOWNS

Please give the time frame for this program: JUNE 1<sup>ST</sup> THRU SEPTEMBER 15TH

Describe the areas that this program is used: PARKS, SUMMER CAMPS, CAMPGROUNDS, RESIDENTIAL DEVELOPMENTS, DISTRICT TOWN STREETS, EVENTS.

Do you use:

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

**Comments:** \_\_\_\_\_

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

- 1). ANVIL 10 + 10                      EPA # 1021-1688-83290
- 2).
- 3).
- 4).
- 5).
- 6).

Please list your application rates for each product:

- 1). 0.78 OUNCES PER ACRE
- 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 5 MOSQUITOES PER MINUTE
- Light trap data - please list trigger for application
- Complaint calls - please list trigger for application 2 CALLS PER STREET , DUE TO THE RURAL TERRITORY IN OUR DISTRICT THIS CANNOT ALWAYS HAPPEN
- Arbovirus data
- Best professional judgment

**Comments:** OUR SERVICE AREA IS VERY RURAL WE SOMETIMES RECEIVE A CALL FROM ONLY HOUSE ON STREET, SO WE USE PROFESSIONAL JUDGEMENT ON TRIGGER OF APPLICATION.

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

### **SOURCE REDUCTION**

Do you perform source reduction methods such as tire/container removal? Yes

If yes, please describe your program: IF CONTAINERS ARE FOUND AT SERVICE REQUEST AREA WE WILL REMOVE OR INFORM HOME OWNER.

What time frame during the year is this method employed? JUNE THRU SEPTEMBER

**Comments:** \_\_\_\_\_

### **DITCH MAINTENANCE**

Do you have a ditch maintenance program? Choose one

Please check all that apply:

- Inland/freshwater
- Saltmarsh

If yes, please describe: OLD DITCHES ARE MAINTAINED AND CLEANED ON A AS NEEDED BASIS DURING OCTOBER AND NOVEMBER

Please check off all that apply INLAND DITCH MAINTENANCE:

- Hand tools**

- Mechanized equipment  
 Other (please list): **BRUSH AND CHAIN SAWS**  
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 6,545 LINEAR FEET**  
**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):**

**PRE AND POST DIPPING**

**PRE AND POST LANDING RATES**

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: 0

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 checked="" type="checkbox"/> CDC light traps        | <input type="checkbox"/> Canopy |
| <input type="checkbox"/> CDC light traps w/CO <sub>2</sub> | <input type="checkbox"/> Canopy |
| <input type="checkbox"/> ABC light traps                   | <input type="checkbox"/> Canopy |
| <input type="checkbox"/> ABC light traps w/CO <sub>2</sub> | <input type="checkbox"/> Canopy |
| <input type="checkbox"/> NJ light traps                    | <input type="checkbox"/> Canopy |
| <input type="checkbox"/> NJ light traps w/CO <sub>2</sub>  | <input type="checkbox"/> Canopy |

Other (please describe):

Please describe the purpose of this program: AT TIMES MEMBER TOWNS BOH REQUEST ADULT TRAPPING DATA IN AREAS OF HIGH ADULT MOSQUITO ACTIVITY. BECAUSE OF SHORTAGE OF STAFF WE CANNOT ALWAYS PERFORM THIS SERVICE.

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 checked="" type="checkbox"/> <i>Oc. cantator</i>    |
| <input type="checkbox"/> <i>Ae. cinereus</i>                   | <input checked="" type="checkbox"/> <i>Oc. excrucians</i>  |
| <input checked="" type="checkbox"/> <i>Ae. vexans</i>          | <input type="checkbox"/> <i>Oc. fitchii</i>                |
| <input checked="" type="checkbox"/> <i>An. punctipennis</i>    | <input type="checkbox"/> <i>Oc. j. japonicus</i>           |
| <input checked="" 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 checked="" type="checkbox"/> <i>Oc. trivittatus</i> |
| <input type="checkbox"/> <i>Cs. morsitans</i>                  | <input type="checkbox"/> <i>Ps. ferox</i>                  |
| <input checked="" type="checkbox"/> <i>Oc. abserratus</i>      | <input type="checkbox"/> <i>Ur. sapphirina</i>             |
| <input checked="" type="checkbox"/> <i>Oc. canadensis</i>      |  |

Other (please list):

Do you participate in the MDPH Arboviral Surveillance program? No

How many pools do you submit weekly on average?

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? Choose one

Please explain:

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

**WNV: REMOTE**  
**EEE: REMOTE**

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

**WNV: REMOTE**  
**EEE: REMOTE**

What time frame during the year is this method employed?

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:

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: 250

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

What time frame during the year is this method employed? MAY

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.? Please select

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? Yes

If yes, please list the training and education your staff received this year: CLARK MOSQUITO WORKSHOPS, NMCA MEETING

Please list the certifications and degrees held by your staff: PESTICIDE LICENSES CATEGORY 47

**Comments:** \_\_\_\_\_

## **BIOLOGICAL CONTROL EFFORTS**

Do you have a biological control program? Choose one

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: BEGINNER

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:** \_\_\_\_\_

## REVENUES & EXPENDITURES

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

EXPENDITURES \$ 148,532

REVENUES \$ 166,512

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

### Comments:

**BECKET \$20,811 CLARKSBURG \$ 5,187 HINSDALE \$ 11,429**

**OTIS \$ 27,380 RICHMOND \$ 19,895 SHEFFIELD \$ 27,362**

**STOCKBRIDGE \$ 28,735 TYRINGHAM \$ 7,478**

## 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: VECTOBAC G

EPA Reg. #: 275-50

Application method: HAND

Targeted life stage: Larvae

Total amount of concentrate applied: 3,944 LBS.

Comments: \_\_\_\_\_

Product Name: ALTOSID WSP PACKETS

EPA Reg. #: 2724-448

Application method: HAND

Targeted life stage: Larvae

Total amount of concentrate applied: 13.04 LBS.

Comments: \_\_\_\_\_

Product Name: ANVIL 10 + 10

EPA Reg. #: 1021-1688-8329

Application method: TRUCK MOUNTED ULV SPRAYERS

Targeted life stage: Adult

Total amount of concentrate applied: 115.3 GALS.

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?  
Yes

If yes, please explain, and attach maps or a web link if possible. WE DO HAVE LARGE AREAS OF PRIORITY HABITAT. DUE TO LACK OF RESOURCES, STAFF, ETC. WE ARE UNABLE TO TREAT THESE AREAS.

## **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? Yes

If yes, please elaborate: WE NOTIFY DPW OFFICIALS IF CLOGGED CULVERTS OR BROKEN TUBES ARE FOUND AND WE REMOVE BLOCKAGE IF POSSIBLE OR DPW CORRECT PROBLEM.

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? Yes

If yes, please explain: WE NO LONGER ADULTICIDE SCHOOL PROPERTY OR DAY CARE CENTERS.

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:

### **GENERAL COMMENTS**

Please list any comments not covered in this report: BUDGET FISCAL YEAR 2009

AA PAYROLL\$66,640                      BB TRAVEL \$ 655.00

DD-DO1 RETIREMENT \$ 10,145              DD-D09 GIC FRINGE CHARGES \$ 7,777

EE-E01 OFFICE SUPPLIES \$ 261              EE-E06 POSTAGE \$ 176.00

EE-E13 ADVERTISING \$ 781.00              EE-E19 VEHICLE,LIABILITY INS. \$ 15,122.00

EE-E19 CONFERENCE-TRAINING \$ 205.00              EE-E19 TOLLS \$ 63.00

EE-E19 PESTICIDE LICENSES \$ 300.00              EE-E32 TORT CHARGEBACK \$ 3,000.00

FF-F09 CLOTHING/BOOTS \$ 43.50              FF-F10 FURNISHINGS \$ 64.00

FF-F11 LAUN-SUPPLIES \$ 308.00              FFF/24 MOTOR VEHICLE PARTS \$ 365.00

GG-G03 ELECTRIC \$ 1,772.00              GG-G05 FUEL VEHICLES \$ 11,290.00

GG-G11 NATURAL GAS \$ 1,646.00              GG-G01 SPACE RENTAL \$ 10,804.00

NN-N50 REM ENTERPRISES (ALARM MONITOR) \$ 240.00

NN-N52 CARR HARDWARE \$ 51.00              NN-N52 PITTS FIRE+SAFETY \$ 77.00

NN/N64 CLARKE MOSQUITO CONTROL \$ 15,020.00

NN-N64 AR SANDRI INC. \$ 892.00

UU-U02 SPRINT/NEXTELL \$ 391.00              UU-U02 VERIZON \$ 899.00

UU-U02 MENTY'S (INTERNET SERVICE ) \$ 200.00