

THE COMMONWEALTH OF MASSACHUSETTS
STATE RECLAMATION & MOSQUITO CONTROL BOARD

CENTRAL MASSACHUSETTS MOSQUITO CONTROL PROJECT

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ANNUAL REPORT 2005

PREFACE

The 2005 Annual Report of the Central Massachusetts Mosquito Control Project (the Project) has been prepared to provide the citizens and officials of the member cities and towns with information pertaining to the Project's control procedures and related activities.

As you read through this report you will notice that the Project is committed to an Integrated Mosquito Management (IMM) program. IMM utilizes a variety of control techniques and evaluation procedures. All control efforts are undertaken only after surveillance data has been collected and analyzed. This allows control decisions to be made based on the exact need that exists at each specific site. Environmental considerations are paramount when prescribing various control techniques.

The CMMCP Board of Commission is appointed by the State Reclamation and Mosquito Control Board to represent your community's interest. The Commissioners meet with the Executive Director and Director of Operations on a regular basis to discuss and formulate policies, and to provide their expertise in the operation of the Project. The Commissioners welcome your input, and we encourage you to schedule an appointment to visit our Project headquarters.

Copies of this report are distributed to key officials and departments in our member communities, as well as to the public libraries. We would encourage officials to take time from their busy schedule to read this report. Project personnel are available to answer questions you may have, and to meet with you to discuss out procedures and techniques. The Project's website at www.cmmcp.org has extensive information on mosquito control in Central Massachusetts.

The Project's goal is to provide effective and environmentally sound mosquito control, reducing mosquito annoyance and the potential for the transmission of mosquito-borne diseases. Our staff of competent, well-trained employees are known throughout the member communities as individuals who take great pride in their work.

Thank you,

Richard J. Day, Chair
Board of Commissioners
Central Massachusetts Mosquito Control Project

THE COMMONWEALTH OF MASSACHUSETTS

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<http://www.mass.gov/agr/mosquito/>

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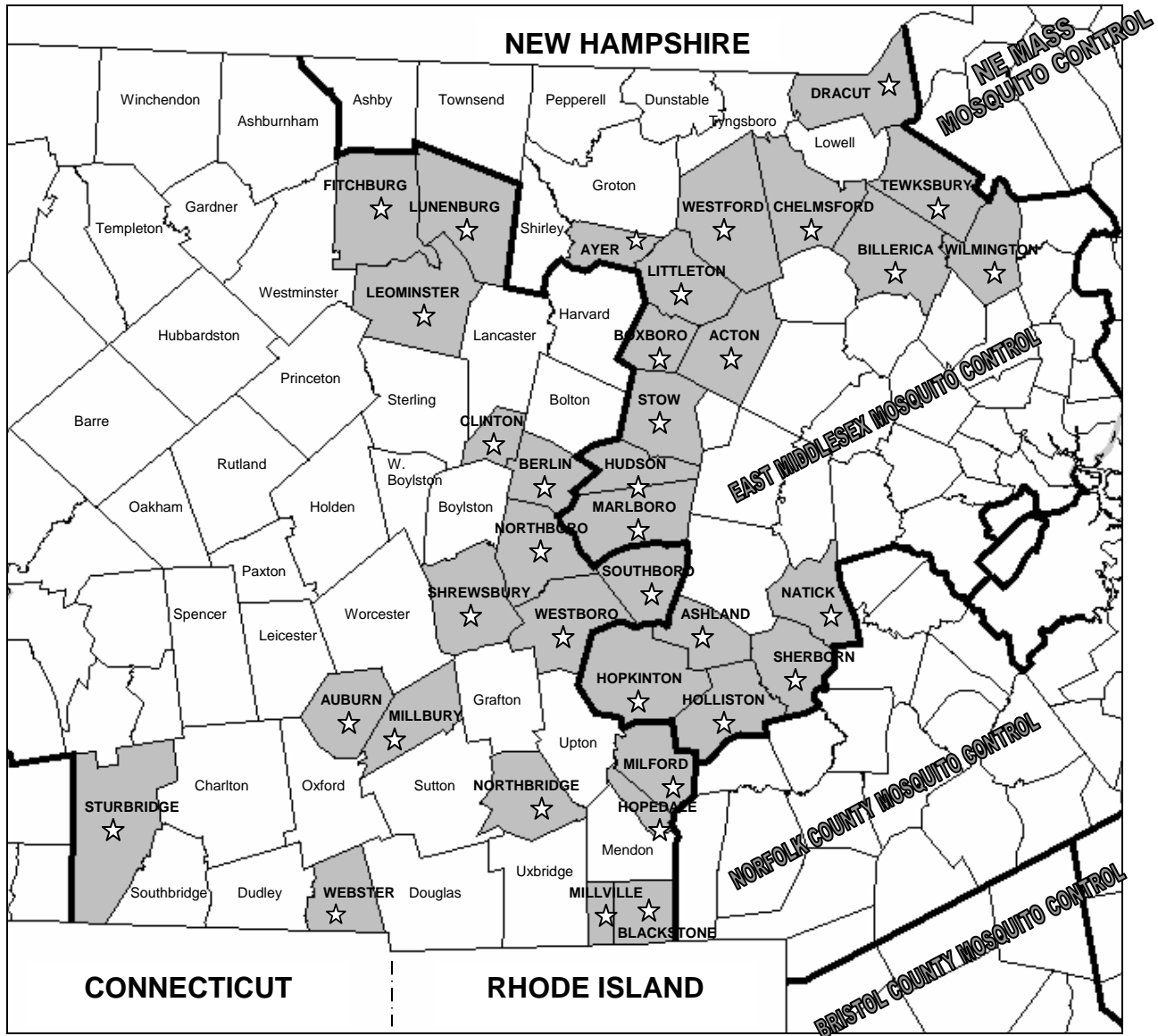
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LIST OF MEMBER COMMUNITIES

<u>TOWN</u>	<u>SQUARE MILES</u>
DISTRICT ONE	
BILLERICA	25.96
CHELMSFORD	22.70
DRACUT	20.90
LITTLETON	16.60
TEWKSBURY	20.70
WESTFORD	30.60
WILMINGTON	17.12
DISTRICT TWO	
ACTON	20.00
AYER	9.00
BOXBOROUGH	10.40
FITCHBURG	27.80
LEOMINSTER	28.90
LUNENBURG	26.40
STOW	17.60
DISTRICT THREE	
BERLIN	12.90
CLINTON	5.70
HUDSON	11.50
MARLBOROUGH	21.10
NORTHBOROUGH	18.50
SHREWSBURY	20.70
SOUTHBOROUGH	14.10
DISTRICT FOUR	
ASHLAND	12.40
HOLLISTON	18.70
HOPEDALE	5.27
HOPKINTON	26.60
MILFORD	14.60
NATICK	15.10
SHERBORN	16.00
WESTBOROUGH	20.50
DISTRICT FIVE	
AUBURN	15.40
BLACKSTONE	10.90
MILLBURY	15.70
MILLVILLE	4.92
NORTHBRIDGE	17.20
STURBRIDGE	37.40
WEBSTER	12.50
Total Square Miles	642.37

CMMCP SERVICE AREA



≈ 2005 ≈

 = member towns



MOSQUITO CONTROL ACTIVITIES

One basic fact of the mosquito's biology is the dependence on still, stagnant water to complete its life cycle from egg to adult. Currently, there are two basic control methods practiced by the Project to disrupt this process. The first and most permanent method is called "*water management, source reduction or wetlands restoration*". This method reduces or eliminates the source of a potential mosquito problem, and consists of cleaning road-side ditches and culverts, removal of brush and accumulated debris from streams, and removal of containers which contain water. All of the above mentioned methods serve to accomplish the same goal - they permit water to flow freely, and reduce the likelihood for stagnant areas, areas in which the mosquito needs to reproduce. Source reduction is practiced year-round, and is done only after extensive examinations, and permission is received by the property owner(s).

There are places where water management is neither practical nor feasible for one reason or another. In these situations, we practice a method called *larviciding*. After a field technician has determined that larval mosquitoes are present, a small amount of environmentally sensitive product is applied to the area according to label directions. This is often a very effective control method, reducing the emergence of the adult mosquito from that area. Larviciding is practiced from late-March to September. Bti is the product of choice for larviciding in wetlands.

A third method is to attempt to control the adult mosquito. The control of adult mosquitoes is done on a *request-only* basis, and the presence of adult mosquitoes is confirmed before any application is done. Adulticiding can be an effective method of *temporary* control, which can be beneficial prior to public gatherings, outdoor events and festivals, or when mosquito populations have been determined to be intolerable. Since this part of the program is done **only upon request**, this allows the individual resident to have the ultimate discretion on mosquito spraying in their area - how much or how little. Exemptions for spraying are handled through the City/Town Clerk and the Project office, and are updated each year. Adulticiding is done from approximately Memorial Day to Labor Day, depending on prevalent mosquito populations and the mosquito-borne disease situation.

All products used by the Project have been extensively tested by manufacturers, the US government and mosquito control agencies for many years. They are registered by the EPA and the Mass. Pesticide Bureau. Labels and fact sheets are available upon request to the public from the Project's office, or from our website.

We operate a full surveillance program in our service area. The landing rates performed by our field staff are brought back to the Project lab to be keyed out to species, allowing us to tailor our larviciding program and reduce future dependence on adulticides. We have a mobile team of specialized mosquito traps, called *gravid traps*, designed to capture virus-bearing mosquitoes. These mosquito collections, called *pools*, are sent into the Mass. Dept. of Public Health (MDPH) laboratory in Jamaica Plain for testing of West Nile Virus, Eastern Equine Encephalitis, and other arboviruses of concern by MDPH. These traps are used in a rotation throughout our service area, and are then concentrated in areas showing arboviral activity to supplement MDPH's collection protocols. Additional trap types are utilized in suspect areas to monitor and evaluate the risk of viral transmission to the local populace.

A comprehensive educational program is offered to area schools and civic groups. The program is aimed towards mosquito biology, mosquito habitat, and efforts citizens can undertake to reduce the potential for mosquito populations in their own neighborhood. This program is tailored to suit the requirements of the individual group, from elementary school children, to high school, to adult groups.

PROGRAM EVALUATION

This is a part of the program which many people involved directly never see. It must begin with a carefully planned program, one designed so that the data obtained during surveys before treatment and the surveys taken after treatment can be analyzed by statistically sound methods. Only by doing this can the value of a mosquito control program be determined. We will then know what type (species) of mosquito we are dealing with; what the population density is; what method(s) of control provide the most economical and efficient results.

Then and only then can we say that we have or have not affected mosquito control on a level that is acceptable to the community.

SEASONAL OUTLINE OF MOSQUITO CONTROL PROGRAM

1. Vehicle and equipment repair and storage - November through March
2. Wetlands Restoration - throughout the year
3. Program Preparation - December through March
4. Map compilation and training - throughout the year
5. Larviciding - May through September
6. Adulticiding - June through September
7. Catch Basin Treatment - May through September

Any mosquito control being done by individual member communities must, by law, be coordinated through the Central Massachusetts Mosquito Control Project.

SERVICES AND ACTIVITIES

The following services and activities are available to those communities participating in the Central Massachusetts Mosquito Control Project:

ADMINISTRATIVE

1. Assess the need for mosquito control within each of the member communities.
2. Plan and organize a mosquito control program for each member community based on the specific needs of that community.
3. Assist member communities to implement mosquito control programs so as to enable the residents of that community to receive maximum benefits from organized mosquito control.
4. Administer new and coordinate existing mosquito control programs.
5. Collect and maintain accurate records of mosquito populations, ascertain prevalent species, and collate pertinent data for each member community.
6. Cooperate with federal, state and local agencies concerned with vector control programs which may be implemented in the community.
7. Prepare annual reports of Project activities, mosquito population density profiles, recommendations, and any other data requested by the member communities.
8. Provide supervision to staff members and encourage policies which lend themselves to effective and efficient mosquito control.

PUBLIC EDUCATION

1. Inform the general public, as well as professional groups, of the mosquito control activities intended for each member community through news releases, speakers for community and professional organizations, special educational and training programs (including seminars for environmental interest groups), integration of proposed vector control programs with other organizations, agencies and institutions with similar goals.
2. Offer educational programs to the public school system within the member cities and towns. Programs will be aimed toward mosquito biology, mosquito habitat, and efforts which citizens can undertake to reduce mosquito populations in their neighborhoods.
3. Keep the member communities informed of changes and advancements in mosquito control technology and legislation.

MEDICAL ENTOMOLOGY LABORATORY REPORT 2005

The mission of the Medical Entomology Laboratory is to refine and maximize the CMMCP's ongoing effort to control mosquitoes. During 2005 CMMCP personnel carried forward this mission in the following ways:

- Medical Entomology Laboratory personnel made educational presentations about mosquito biology and mosquito control practices before elementary school students;
- CMMCP's larviciding and adulticiding practices were evaluated for efficacy;
- Mosquito species native to the CMMCP district were tested for resistance to an insecticide used to control adult mosquitoes;
- An evaluation comparing ground based traps to elevated traps in the tree canopy to maximize adult mosquito collections.

Our physical capabilities were improved during 2005 by the acquisition of seventeen (17) New Standard Miniature Light Traps with Photocell-controlled CO₂ Release and two (2) Collection Bottle Rotators. These miniature light traps use a small incandescent light bulb to attract mosquitoes. Cleaner collections may be made by not using the light bulb, and instead use CO₂ gas released from a cylinder as the attractant. The addition of CO₂ gas also results in larger collections of mosquitoes. This trap has a small precision pneumatic valve which is controlled by an internal photoswitch that times the release of the CO₂ with the ambient light level. Therefore the release of gas is only taking place when mosquitoes are most likely to be active in the area being monitored.

The Collection Bottle Rotator is a device which allows segregating the catch of a light trap into 8 bottles over periods of time determined by a programmable timer. These will provide information about the periodicity of mosquito activity which in turn will help target more precisely our mosquito control activities.

During 2005 four (4) interns were employed for part of the season to operate the mosquito surveillance traps and perform efficacy or resistance studies. Using their knowledge of mosquito behavior and the local terrain, these skilled and experienced personnel monitored the adult mosquito populations in our service area. Crews were rotated through the member cities and towns on a (minimum) bi-weekly basis, and were dispatched to area "hot zones" when avian and/or mosquito data showed the presence of mosquito-borne diseases. The New Standard Miniature Light traps with the timed release of CO₂ were used to monitor the adult mosquito population for Eastern Equine Encephalitis (EEE). The CO₂ used as the attractant sample for mammal-biting species. Modified Reiter Gravid Traps were used to monitor the adult populations for West Nile Virus (WNV). These traps are attractive to the mosquito species data has shown to be most likely to have a role in the maintenance cycle and transmission of WNV in our area and across the US.

Laboratory personnel made more than 1,254 collections this season. These collections contained more than 90,000 adult mosquitoes. These collections were identified to species and sorted to identify the species known to play a role in arbovirus transmission in our area. Collections were sent to the Mass. Department of Public Health (MDPH) State Laboratory in Jamaica Plain each week to be tested for EEE, WNV and other diseases. CMMCP staff logged in these collections through a new system implemented by MDPH this year. This system is a web-based, bar code system which allows for faster tracking and testing. The web-based system allowed CMMCP administrative staff to log in for results and not wait for phone or internet notifications. Eight (8) CMMCP collections were confirmed positive for mosquito-borne diseases (see table 1). Our surveillance confirms that these pathogens were circulating in the local environment in

2005. Intervention measures were performed in collaboration with the local Boards of Health.

TABLE 1

Pool ID	Town	Tested Date	Species	Result
CM05-00672	Westborough	8/23/2005	<i>Culex species</i>	WNV Positive
CM05-00737	Westborough	8/29/2005	<i>Culex salinarius</i>	WNV Positive
CM05-00769	Westborough	8/29/2005	<i>Culiseta melanura</i>	EEE Positive
CM05-01096	Westborough	9/28/2005	<i>Culiseta melanura</i>	WNV Positive
CM05-01097	Westborough	9/28/2005	<i>Culex species</i>	WNV Positive
CM05-01144	Holliston	10/4/2005	<i>Culex species</i>	WNV Positive
CM05-01157	Wilmington	10/4/2005	<i>Culex species</i>	WNV Positive
CM05-01170	Westborough	10/4/2005	<i>Culiseta melanura</i>	EEE Positive

The Medical Entomology Laboratory at CMMCP is committed to the advancement of mosquito control practices by the application of the scientific method. Such a commitment will further enable us to provide our member communities with quality mosquito control for comfort and health.

WNV Surveillance Summary - <u>Statewide</u>	
Dead Birds Reported	2,493
Birds Submitted for Testing	322
Birds Tested	303
Birds Positive	83
Mosquito Pools Positive	99
Horses Positive	0
Humans Positive	6
EEE Surveillance Summary - <u>Statewide</u>	
Mosquito Pools Positive	45
Horses Positive	4
Humans Positive	4
** An emu from Athol in Worcester County tested positive for EEE in 2005.	
CMMCP Surveillance Summary	
Mosquito Pools Submitted for testing	1,192
Mosquito Pools (total)	3,607
Mosquito Pools Positive WNV	6
Horses Positive	0
Humans Positive	0
Pools Positive EEE	2
Horses Positive	0
Humans Positive	0

CMMCP RESEARCH AND EFFICACY

In 2005 we dedicated a limited amount of resources for efficacy and research. One summer intern was hired to perform efficacy and resistance studies, one intern collected data for his senior thesis at college, and other full time employees performed limited research according to their busy schedules and on their own time. The results of this research are outlined in the next few pages, and are summarized below.

- ◆ Pesticide Resistance in Adult Mosquitoes – a Bottle Assay
- ◆ Satisfaction Survey of Service Requests in 2005
- ◆ 2005 Larval Control program – Product Efficacy Evaluation
- ◆ A Preliminary Study of Ovitrap in Central Mass.
- ◆ Tree Canopy Preference of *Culex* and *Culiseta* Mosquitoes

CMMCP is committed to be on the forefront of mosquito control and strives to offer the latest advances in our industry. If you have any questions please call (508) 393-3055 or e-mail us at cmmcp@cmmcp.org. Additional information on these studies is available on our website at <http://www.cmmcp.org/research.htm>

Thank you

Timothy D. Deschamps

Executive Director

RESISTANCE TO SCOURGE® INSECTICIDE IN THE MOSQUITO POPULATIONS OF FOUR TOWNS IN THE CENTRAL MASS. MOSQUITO CONTROL PROJECT SERVICE AREA: WESTBOROUGH, BILLERICA, TEWKSBURY, AND WILMINGTON

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ABSTRACT

The Central Massachusetts Mosquito Control Project (CMMCP) has been using a synthetic pyrethroid called resmethrin, trade name Scourge®, since the early 1990's to control adult mosquito populations in its service area. The current CMMCP policy is to accept service requests from residents and town officials for adult mosquito control and to perform limited, targeted applications, and not perform random, area-wide spraying as was the standard procedure for adult mosquito control in Massachusetts decades ago. As part of our Standard Operating Procedures manual and as a function of an Integrated Mosquito Management (IMM) plan, surveillance is analyzed before any product is applied to justify the application. This can be in the form of landing rate counts or data collected from mosquito traps. Resistance to a class of chemicals has been noted in other areas of the world, and we will attempt to determine if any mosquito species or any collections of mosquitoes from a given area will show resistance to the synthetic pyrethroid class of chemicals. If resistance is noted, this may affect the product choice for vector-borne disease control, as well as the reduction of nuisance levels of mosquitoes. Initial results from 2005 show a minor potential for resistance, but no change in product usage is recommended at this time. There is no indication that resistance levels will increase due to the limited, sporadic nature of the CMMCP adulticide program, but further study would be prudent.

INTRODUCTION

The purpose of this study was to determine whether or not resistance to resmethrin was developing in the mosquito populations at the most frequently sprayed properties. If significant resistance were present, it could necessitate changing from resmethrin to a different product registered in Massachusetts and accepted by the Centers for Disease Control (CDC) for mosquito control. This would be particularly important in the case of an outbreak of mosquito-borne diseases such as West Nile Virus (WNV) or Eastern Equine Encephalitis (EEE). If a particular species of mosquito or a mosquito collection from a given area has been shown to be resistant to the pyrethroid class of chemicals, then vector suppression may need to be done using different products and procedures. The towns of Westborough, Billerica, Tewksbury and Wilmington were chosen for the study because these are the only towns in the CMMCP service area where WNV or EEE have been found either in mosquitoes, horses or humans. WNV was found in a collection of mosquitoes in Westborough in 2003, and that same year a woman in the area of the virus positive mosquito also contracted WNV. Horses in Billerica and Wilmington were identified to have been infected with EEE in 2004, and mosquitoes positive for EEE were found in Tewksbury in 2002.

METHODS AND MATERIALS

Five study sites were chosen in each town, from among the most frequently sprayed properties in the town according to the CMMCP database of service requests. The frequency of spraying was determined from a database of spray requests from 1998 to the present. Because the towns vary in their overall mosquito population and the number of requests is determined by the property owners, no two sites had exactly the same number of requests in each season. The number of spray requests varied considerably. The most frequently sprayed property had been sprayed 38 times over the eight year period, while the least frequently sprayed property had only been sprayed four times, all in 2004. Most of the properties had been sprayed between 12 and 25 times since 1998. All but two of the properties were at private homes; one was a public recreational area, and another was a wetland area at the end of a cul-de-sac.

The cul-de-sac site was chosen because at that site mosquitoes had been found to be positive for West Nile in 2003 and this was in the neighborhood of the human WNV case in 2003.

A control site was chosen in the town of Westborough in a swamp bordering an organic farm. This site has never been sprayed for mosquitoes by CMMCP, and to the best of our knowledge the town and the property owners did not apply any insecticides in that area. It was presumed that mosquitoes from this site would have no resistance to resmethrin having never been exposed to any insecticides.

At each site, live adult mosquitoes were collected using two CDC-style traps (John W. Hock Company) baited with carbon dioxide at 20 psi. The traps were set early in the morning and collected the following morning. Traps were set for one or two nights, depending on how many mosquitoes were collected. The number of mosquitoes tested for each site varied from 30 to 152; for most sites it was approximately 50.

The resistance testing was conducted according to the bottle bioassay procedure described by Brogdon and McAllister¹. Scourge® insecticide (18% Resmethrin + 54% piperonyl butoxide synergist, lot no. 465-0815) manufactured by Bayer Environmental Science Company was diluted in acetone to make a 0.005% solution, and was evenly applied to coat the insides of 250ml Wheaton bottles (Fisher Scientific Company). Each bottle was coated with 1ml of acetone and 1ml of Scourge solution, containing 9.05 µg of resmethrin and 27.02 µg of piperonyl butoxide. This dosage was determined by testing seven batches of mosquitoes from the control site with Scourge/acetone solutions of different strengths. Controls consisted of bottles coated only with acetone.

After the mosquitoes were aspirated from the trap cage and introduced into the coated bottles, each bottle was checked at five-minute intervals, and the number of mosquitoes knocked down was recorded. A mosquito was considered knocked down if it could not regain a standing position when knocked off its feet by gently tapping or shaking the bottle. Knock-down was chosen as the standard rather than overall mortality because resmethrin may cause the mosquitoes to twitch even after they are dead, making the time of death difficult to determine exactly.

RESULTS

No mosquitoes were knocked down in the acetone-only control bottles. The mosquitoes from the unsprayed control site were all knocked down within ten minutes, with 96% knocked down after only five minutes.

The mosquitoes from the recreational area site survived the longest, reaching 100% knocked down only at 35 minutes. At one other site, 100% were knocked down at 25 minutes. At twelve sites, 100% were knocked down at 20 minutes, and at six sites, 100% were knocked down at 15 minutes. Sample graphs are included in this presentation, and all data is available on the CMMCP website at <http://www.cmmcp.org/2005resistance.htm>.

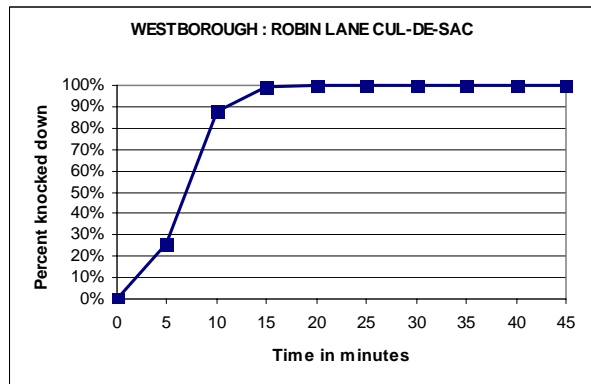
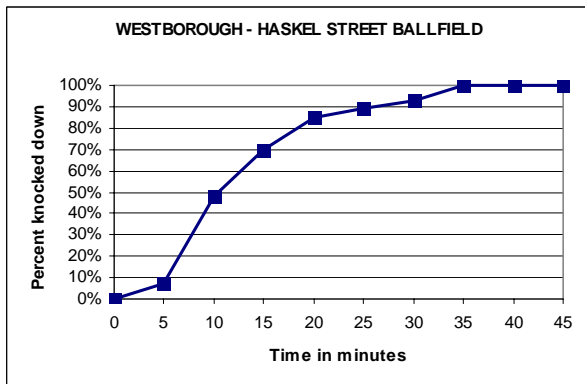
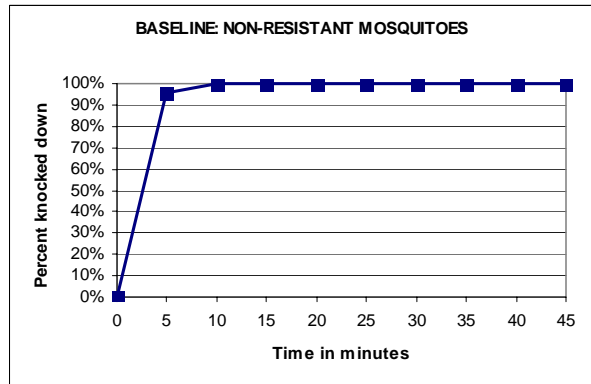
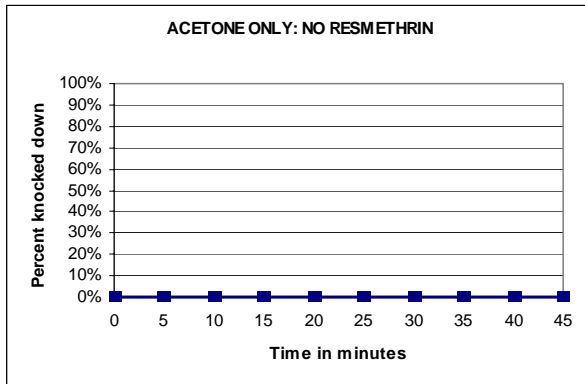
DISCUSSION AND CONCLUSIONS

At all of the study sites, the mosquitoes survived longer than those from the control site. The majority of the samples contained some individual mosquitoes that survived at least twice as long as the control mosquitoes. This would seem to indicate that some resistance to resmethrin may be developing in the populations surveyed.

However, another bottle bioassay study of resistance to various insecticides, including resmethrin, found resistant mosquitoes surviving for up to three hours.² In comparison, mosquitoes that survive for 20 to 35 minutes do not seem to be very resistant to resmethrin. If resistance is developing in the CMMCP service area, it appears to be at an early stage. A change of insecticide is not recommended at this time, although continued monitoring of resistance would be a wise course of action. Greater resistance could develop at a later date.

REFERENCES

1. Brogdon WG and McAllister JC. Simplification of adult mosquito bioassays through use of time-mortality determinations in glass bottles. *J Am Mosq Control Assoc* 14:159-164 (1998).
2. McAbee RD, Kang KD, Stanich MA, et al. Pyrethroid tolerance in *Culex pipiens pipiens* var *molestus* from Marin County, California. *Pest Manag Sci* 60:359-368 (2003).



SATISFACTION SURVEY OF SERVICE REQUESTS IN THE CENTRAL MASSACHUSETTS MOSQUITO CONTROL PROJECT SERVICE AREA – 2005

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ABSTRACT

Residents of our service area request service from the menu of services offered to them by CMMCP. Requests for adulticiding (spraying) and larval control are the most common forms of service requests we receive. We accept requests for service through a variety of means, primarily by telephone, but increasing more by the online service request form from the CMMCP website. Additional methods include personal visits to our office, phone calls on behalf of residents from town and/or state officials, and direct requests to our field staff. The CMMCP Commission authorized a survey of residents who requested service in 2005 to determine if our staff was meeting acceptable levels of customer satisfaction. After compiling these results, we find that a majority of residents in our service area were satisfied with our control efforts and methods.

SURVEY METHODOLOGY

In 2005 we received 7,086 requests for service, ranging from adulticiding to larval control. 5,712 adulticiding calls were filtered and placed into a separate database. Service calls were sorted according to town, and each town was tabulated for total requests received in 2005. These towns were then graphed to show which towns had the most calls down to the towns with the fewest. Each town was assigned a percentage according to this data. This percentage would determine the number of postcards sent to each town from the overall total. The CMMCP Commission decided that 1,000 postcards would be a representative sample of the 5,712 service calls. The survey was designed to be as easy as possible for residents to access and complete. An online survey was created, and the postcards would include unique identifiers that the residents would use. The postcards contained a blind weblink to the survey so that unauthorized users would not be able to participate in the survey. Information such as how they contacted us, were the office and field staff helpful and informative, how long did they wait for service, was the service provided effective, and their overall satisfaction was measured.

SURVEY FINDINGS

From 1,000 postcards mailed, 244 responses were received (24.4%). The results are as follows:

1). In your most recent experience, how did you contact the Central Mass. Mosquito Control Project?

	Number	Percent
Telephone	191	81%
Website	38	16%
In person	3	1%
Other*	5	2%
Total	237	100%

*4 through town offices, 1 through a neighbor

	Number	Percent
Yes	192	99.5%
No	1	0.5%
Total	193	100%

2). If by telephone or in person at the CMMCP office, were your questions or concerns answered to your satisfaction?

3). If by telephone, did you experience difficulty reaching our staff?

	Number	Percent
Yes	19	9.9%
No	172	90.1%
Total	191	100%

	Number	Percent
Yes	51	98.1%
No	1	1.9%
Total	52	100%

4). If through the website or e-mail, did you find the information you needed in a satisfactory manner?

5). Please give the approximate time you waited for service from your initial request:

NOTE: 87.3% within a week or less

	Number	Percent
1-3 days	74	31.4%
3-5 days	60	25.4%
1 week	72	30.5%
2 weeks+	30	12.7%
Total	236	100%

	Number	Percent
Yes	223	95.5%
No	13	5.5%
Total	236	100%

6). Did you find our response from your initial request to when you received service within a reasonable amount of time?

7). Were your questions and concerns answered by the Technician to your satisfaction?

	Number	Percent
Yes	204	95.8%
No	9	4.2%
Total	213	100%

	Number	Percent
Yes	138	40%
No	192	60%
Total	330	100%

8). Did you receive any written information (pamphlets, etc.) from our representative?

9). Did you find this information useful?

	Number	Percent
Yes	80	95%
No	4	5%
Total	84	100%

	Number	Percent
Yes	91	38.2%
No	147	61.8%
Total	238	100%

10). Did you request service more than once in 2005?

11). If you requested additional service in 2005, was it because the original application was insufficient to meet your needs, or for a later re-treatment or follow up?

	Number	Percent
Re-treatment	87	79.8%
Insufficient	22	20.2%
Total	109	100%

	Number	Percent
Yes	230	98.3%
No	4	1.7%
Total	234	100%

12). Would you/did you recommend our service to others in the future?

13). In your opinion, did our application made your area better, worse, or had no effect?

	Number	Percent
Better	205	87.6%
Worse	0	0%
No Effect	29	12.4%
Total	234	100%

	Number	Percent
1-2 days	30	15.3%
3-5 days	34	17.4%
1 week	40	20.4%
2 weeks+	92	46.9%
Total	196	100%

14). If you think your area improved, can you give an approximate length of time you experienced relief from mosquito annoyance?

NOTE: 2/3 of residents polled reported relief of 1 week or greater, nearly 1/2 report more than 2 weeks of relief

15). On average, our services cost \$2.00 – \$4.00 per person each year (withheld from local aid rec'd from the State). In your opinion, is this amount too high, too low, or sufficient?

	Number	Percent
Sufficient	189	80.4%
Too Low	41	17.5%
Too High	5	2.1%
Total	235	100%

	Number	Percent
1+	55	24.3%
August	24	10.6%
July	67	29.7%
June	80	35.4%
Total	226	100%

16). In which month or months do you recall receiving service?

17). Overall, are you happy with the service provided this year by CMMCP?

	Number	Percent
Yes	211	90.9%
No	21	9.1%
Total	232	100%

	Number	Percent
Yes	228	98.3%
No	4	1.7%
Total	232	100%

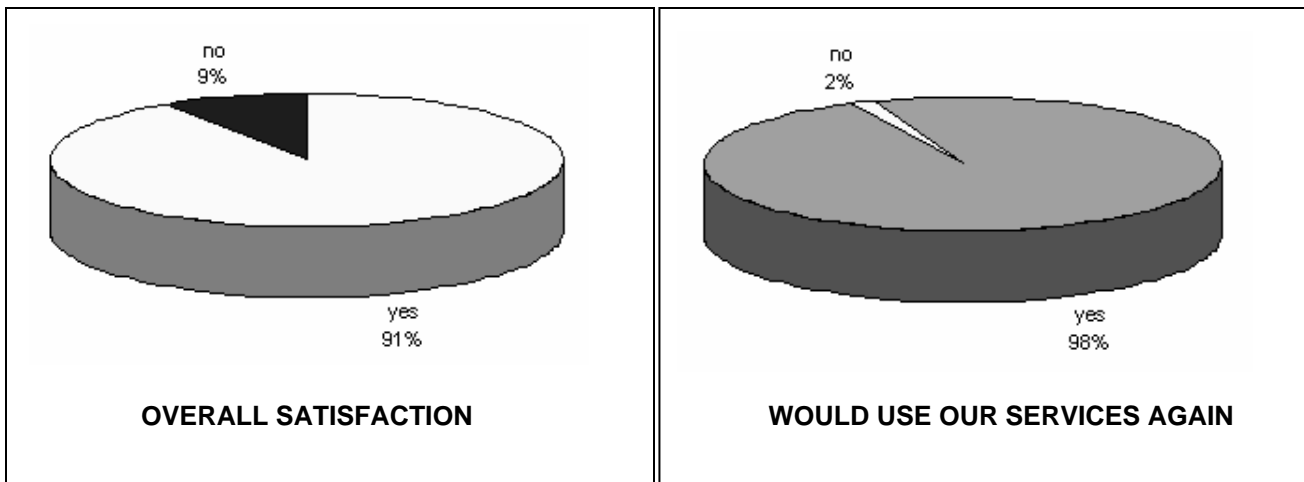
18). Do you plan on using our service again in the future?

Please rate our performance for 2005 from 0 to 5, where 5 is the best rating, 0 is the worst rating:

QUESTION	POINTS	AVERAGE
The information you received over the phone was informative & helpful	851 points from 1,010	4.2 average from 5
The information on our website is easily available and helpful	604 points from 745	4.0 average from 5
The response time for service is reasonable	992 points out of 1,145	4.3 average from 5
Our field staff that responded is knowledgeable and competent	939 points out of 1,070	4.3 average from 5
The service provided was effective	888 points out of 1,135	3.9 average from 5
This service is reasonable compared to the cost	995 points out of 1,120	4.4 average from 5
Please rate your overall satisfaction with the service received in 2005	975 points out of 1,140	4.2 average from 5
Total satisfaction rating: 6,244 points out of 7,365 possible – 4.23 average		

CONCLUSION

Overall satisfaction was 90.9% to 9.1%, and 98% would use our services again in the future. One weakness identified in this study is that only 40% of the residents polled recalled receiving our written information. The importance of public education and outreach will be stressed to all CMMCP personnel in 2006.



2005 CMMCP LARVAL CONTROL PROGRAM PRODUCT EFFICACY EVALUATION

TIMOTHY D DESCHAMPS, Executive Director & TIMOTHY E. McGLINCHY, Director of Operations
Central Mass. Mosquito Control Project
111 Otis Street Northborough, Massachusetts 01532

ABSTRACT

The Central Massachusetts Mosquito Control Project (CMMCP) has used the bio-pesticide *Bacillus thuringiensis var. israelensis* (Bti) since the late 1980's as the product of choice for mosquito larval control in area wetlands. The product efficacy evaluations performed each year are designed not only to check for Bti efficacy, but to monitor our application methods and amounts. Most areas showed nearly 100% control; some areas done by helicopter required follow up applications by ground equipment around the perimeter of the targeted wetlands. Our website at www.cmmcp.org has detailed information on this program. Bti will continue to be the foundation of our larval control program.

INTRODUCTION

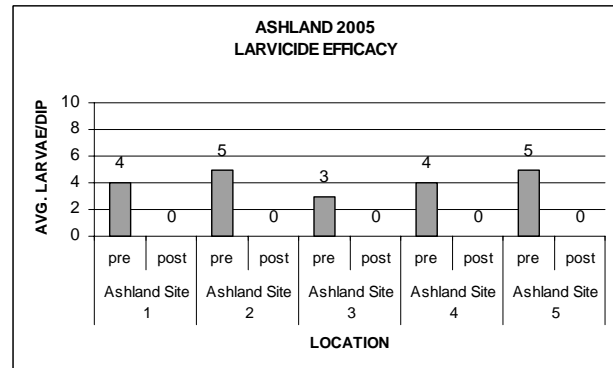
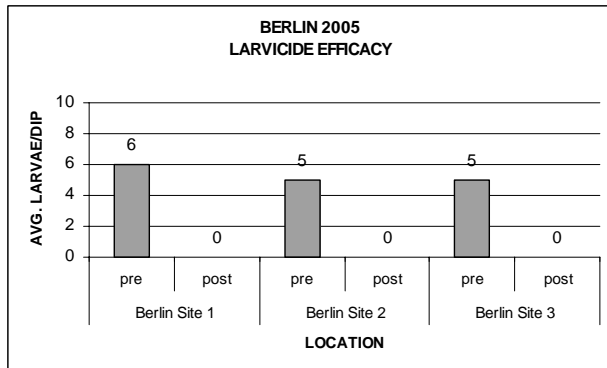
Larval control is the basis of an Integrated Mosquito Management (IMM) plan. Control of mosquitoes in the larval stage can show higher efficacy and lower non-target effects than other control methods, especially adulticiding. Broad-spectrum, chemical products available for larval control such as organophosphates have been used in the past by CMMCP, but we recognize the benefits of biocontrols such as Bti and have chosen this product over other products available for use, such as Abate®. Significant research has been done on Bti by researchers, university staff and mosquito control programs for many years, and the benefit-to-risk ratio is well documented.

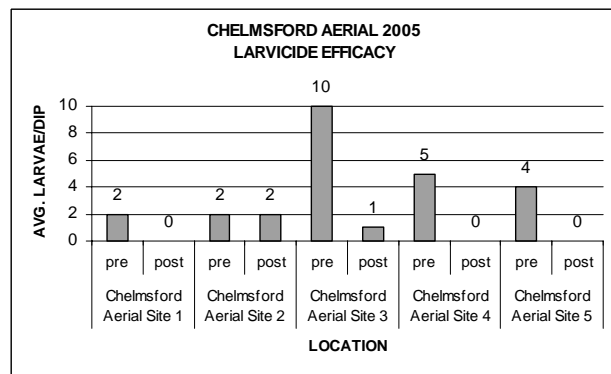
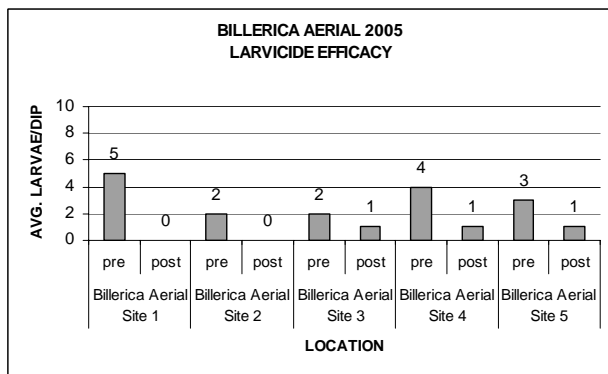
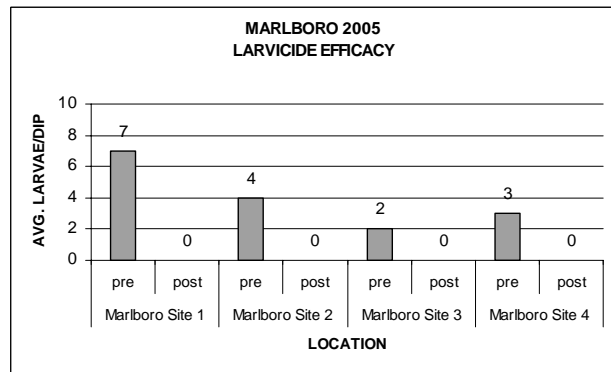
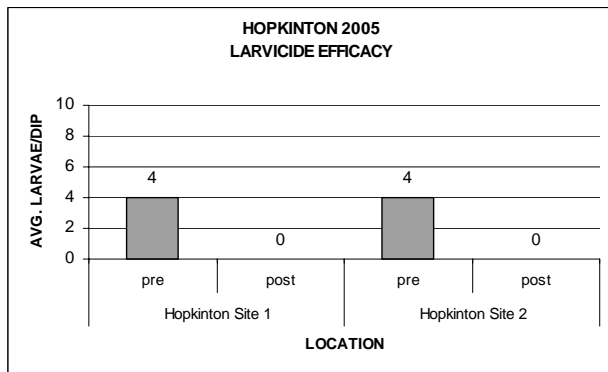
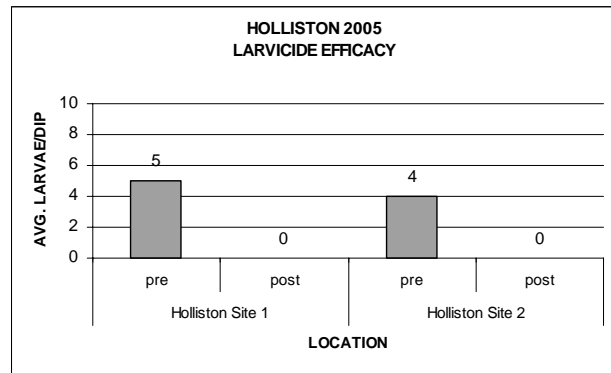
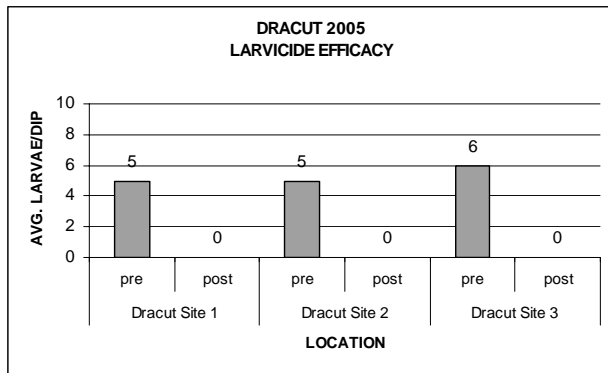
MATERIALS AND METHODS

Granular Bti can be applied in a variety of ways. It can be broadcast by hand, where the applicator can access areas not available to truck mounted equipment or aerial applications due to a heavy tree cover (canopy). Aircraft, either fixed wing or helicopter, can be used to deliver it to large, widespread areas inaccessible to any truck or hand applications because of size or location.

Label rates for applications are followed closely, and can range from 5 to 20 lbs per acre. Higher rates are recommended when late 3rd and early 4th instar larvae predominate, mosquito populations are high, water is heavily polluted, and/or algae are abundant.

The following graphs show pre- and post treatment data for 29 sites in 8 member towns from 2005. 2 sites are from the aerial program, and the other 6 are from ground applications. Post monitoring data is done from 24 to 48 hours after the original treatment. The website has detailed information on the collection data, with types of area, product amounts, larval instars, etc.





RESULTS & DISCUSSION

All sites done by hand showed 100% control. A wider study of hand applications would certainly show lower efficacy, but 90% on average is not unexpected based on previous results. The aerial application showed a range of 0% to 100% control. The wide range of results is not surprising; our aerial efficacy program is more intensive, with 20 dips per every 250 acres set up as recoverable dip stations. Dip stations near the perimeter of the wetlands, roads or residential areas will not show good control due to the buffer zone employed by the helicopter pilots. Hand applications around the perimeters are often used to increase total efficacy from an area. Surveys conducted by the ground crews during post-monitoring noted that where Bti granular product was observed, very effective larval control was achieved.

NOTE: REFERENCES FOR CLAIMS STATED HEREIN ARE AVAILABLE UPON REQUEST

A PRELIMINARY STUDY OF THE ATTRACTIVENESS OF OVITRAP CUPS IN COLLECTING CONTAINER SPECIES IN MASSACHUSETTS

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ABSTRACT

Using ovitraps to collect species data and to test for efficacy is a technique that has been well documented in many areas of mosquito control and research. A quick search on the Google website (www.google.com) using “Mosquito+Ovitrap” as the keywords turns up a wealth of information. In 2005 we employed ovitrap cups following the US Public Health Service & the Air Force Institute for Operational Health guidelines. Results were not entirely surprising, with *Oc. j. japonicus* as the predominant species, although *Oc. triseriatus* did not appear as anticipated, nor were any *Culex* identified. Ovitrap cups may be employed in the future by CMMCP to monitor population trends among the container species and for adulticide efficacy studies.

INTRODUCTION

The goal at CMMCP this year was simple and straightforward – will mosquitoes use ovitraps if presented, and what species will we expect to sample? Can ovitraps be used as a device to monitor container species and check for adulticide efficacy?

MATERIALS & METHODS

Ovitrap cups have been used at CMMCP in the past using coffee cans and seed germination paper. Dark colors are preferred by many container species of mosquitoes for oviposition (AFIOH website, Surveillance Methods/Ovitrap Collections). The coffee cans were painted black, but a source of seed germination paper can be hard to find once available stock is used up. To save on labor and to use materials readily available, the ovitraps will be designed according to the standards written by the US Public Health Service (figure 1). Black plastic cups with the CMMCP logo and “Mosquito Ovitrap” printed on the front were secured. Standard 6” hardwood tongue depressors and 8” natural (unbleached) paper towels were used to make the ovipaddle. A section of paper towel 8” square was cut and folded in half, then wrapped around the tongue depressor and secured at the top and bottom with office staples. A quarter-inch hole should be drilled in the cup 3.5 inches up from the bottom to prevent rainwater from overflowing the ovitrap. The cups may need to be secured in the area using a variety of methods such as a stone on the bottom, wired to a tree, etc.



Figure 1

10 ovitraps were placed in a wooded area with other container-breeding sources such as tarps, cans, etc. Each cup was filled with approximately 10 ounces of water from a nearby pond, and the cups were allowed to season for 1 week without the ovipaddle. After 1 week, the ovipaddles were placed in the cups and allowed to remain for 2 additional weeks. After 2 weeks the ovipaddles were collected, and the larvae present in the cups was placed in a single breeding chamber and reared to adult to determine species (table 1). The ovipaddles were allowed to desiccate and then the egg clusters on each ovipaddle were counted (table 2).

Several ovipaddles were submerged in water at a later date to encourage the eggs to hatch with the intent of identifying these to species. However most of the eggs did not successfully hatch, possibly due to extreme desiccation or exposure to high temperatures. The Air Force Institute for Operational Health recommendations are to place each ovipaddle in a sealed plastic bag, which should slow desiccation if the intent is to hatch at a later date (AFIOH website, Sorting, Packaging and Shipping Specimens).

Table 1:

ADULT IDENTIFICATION OF ALL HATCHED LARVAE IN OVITRAPS	
<i>Oc. j. japonicus</i> (11 male, 13 female)	

Table 2:

OVIPADDLE EGG COLLECTION COUNT			
PADDLE 1:	350+	PADDLE 6:	350+
PADDLE 2:	275+	PADDLE 7:	175+
PADDLE 3:	200+	PADDLE 8:	350+
PADDLE 4:	250+	PADDLE 9:	250+
PADDLE 5:	200+	PADDLE 10:	350+
AVERAGE PER CONTAINER – 275			

CONCLUSION

As expected, *Oc. j. japonicus* dominated the collections. This species prefers cleaner water with less tannins than their counterparts *Oc. triseriatus* and *Culex* (Rutgers University, New Jersey Mosquito/Biology & Control website), and the pond water used would favor this species. If collections of *Oc. triseriatus* and *Culex* are the intended targets as well as *Oc. j. japonicus*, then water containing bacteria and tannins such as a hay infusion used in gravid traps should be used in the ovitraps.

Gravid females seemed to prefer to oviposit the eggs on the folded margins and on the dimples present on the oviposition substrate. The ovitraps collected an average of 275 eggs each over a 2 week period, and may be a useful device to monitor efficacy and to check for population trends among the container species especially if hay infusion water is used. The ovipaddles could also be collected and stored to be hatched at a later time for species composition, educational demonstrations, to check for larvicidal product efficacy, etc.

REFERENCES

Air Force Institute for Operational Health (AFIOH) website:
http://www.brooks.af.mil/afioh/Health%20Programs/rsrh_ent_methods.htm

Rutgers University, New Jersey Mosquito/Biology & Control website:
<http://www-rci.rutgers.edu/~insects/njspp.htm>

ENVIRONMENTAL INFLUENCES FOR THE TREE CANOPY PREFERENCE OF *CULEX PIFIENS* AND *CULISETA MELANURA*

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Central Mass. Mosquito Control Project
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Senior Thesis for Unity College, ME

ABSTRACT

In our study we found that when mosquito collections were made on the same night and location, with one trap placed in the tree canopy and the other trap at ground level, there were a significantly higher number of *Culex pipiens* and *Culiseta melanura* in the tree canopy traps. These two trap levels also exhibited no significant difference in temperature, although it was determined that there was a significantly higher relative humidity at the ground level than in the canopy. This difference in relative humidity was also found to not be significantly correlated with the collections. By learning more about the biology of *Culex pipiens*, as well as other mosquitoes, we will be able to devise more effective methods to hamper their negative effects on humans without impacting other parts of the ecosystem.

INTRODUCTION

Since the discovery of West Nile virus (WNV) in the United States in 1999, much emphasis has been placed on learning more about its transmission and characteristics of the specific mosquito species involved (Kulasekera, 2001; Nasci, 2001; Kilpatrick, 2005). The first known human case of WNV was reported in New York City, in August of 1999. After this first case there were an additional 61 humans positive for WNV in New York, from August to October of 1999, consisting mostly of elderly people (Enserink, 2000; Rappole, 2000). As of March 2005, WNV has infected over 17,000 and killed over 670 people in North America (Kilpatrick, 2005). From its initial discovery, WNV quickly spread across the U.S. and has made its way down into Mexico and Central America (Knight, 2003).

An important vector of WNV in the United States is the mosquito species *Culex pipiens* (Goddard, 2002; Anderson, 2004; Kilpatrick, 2005). It has been suggested that these mosquitoes act as hosts for overwintering flaviviruses such as WNV, until they reemerge in the spring (Goddard, 2002). Some studies suggest that *Culex pipiens*, along with *Culex restuans*, may in fact be responsible for up to 80% of human WNV infections in the northeast United States (Kilpatrick, 2005). Previously believed to feed mainly on birds, and therefore reducing their likelihood of infecting humans, *Culex pipiens* are now thought to more commonly feed on humans than previously thought (Kilpatrick, 2005). By learning more about the biology of *Culex pipiens*, as well as other mosquitoes, we will be able to devise more effective methods to hamper their negative effects on humans without impacting other parts of the ecosystem.

The vast majority of female adult mosquitoes require a blood meal to begin development of each clutch of eggs, and obtain this from a variety of sources (Bates, 1949; Knight, 2003). Most mosquito species will feed on warm-blooded animals after receiving cues to induce biting. These signals include carbon dioxide and ammonia, especially when coupled with a temperature and moisture level similar to breath (Bates, 1949). Respiration of animals, along with color, motion, and smell to a lesser degree attract the mosquitoes to feed upon various hosts (Bates, 1949). Some mosquitoes exhibit host preference while others do not. For example, past studies have the *Culex pipiens* species preferentially feeding on birds, but also feeding on assorted mammals (Nasci, 2001).

Once they have acquired their blood meal necessary for egg development, mosquitoes may use many different types of areas for breeding, including irrigated agricultural lands, shallow isolated pools, dumping areas, and wetlands (Knight, 2003). After obtaining a blood meal, the female mosquitoes will usually have a resting period before oviposition. It has been shown that mosquitoes don't lay eggs randomly but instead may lay eggs where there are fewer predators present (Kiflawi, 2003).

In many aspects of mosquito life history, temperature seems to play a very influential role. Low air temperatures in the winter lead many mosquito adults to enter a hibernation state and high temperatures in the summer can also lead to decreased adult mosquito activity (Knight, 2003). As noted before, temperature also plays an important role in the feeding habits of mosquitoes. *Culex pipiens* have been shown to prefer host temperatures between 32° C and 43°C, with temperatures above 49°C and below 30°C showing less attraction. Temperature also seems to have an effect on oviposition, with mosquitoes avoiding water temperatures outside the range of 20°C to 30°C (Bates, 1949).

There are several common trapping methods for adult mosquitoes. These include gravid traps that simulate oviposition habitat, light traps, and carbon dioxide traps with the latter two possibly being combined. With carbon dioxide being a major attractant for mosquitoes, yields from these traps are especially clean, containing almost no unwanted insects. The traps with light alone can produce many kinds of non-targeted insect species, which can slow research.

Culex pipiens, as well as other mosquito species, has been discovered to prefer inhabiting tree canopies, or at least seem to frequent tree canopy height. The specific reasons for this behavior are not clear although it has been speculated that they may be influenced by temperature, humidity, light, as well as the potential feeding of nesting birds (Anderson, 2004). This project was geared toward gathering data on two of these possibilities, temperature and humidity. My hypothesis is that *Culex pipiens* and *Culiseta melanura* will both show a significant preference for the canopy level, but that this will not have a significant relationship with either temperature or humidity.

METHODS

Data collection for the project was started in late May 2005 and ended September 2, 2005. There were three different sites, two in Westborough, MA, and the other in neighboring Hopkinton. The two sites in Westborough were located off of Rogers St. (42°16.427'N, 071°36.033'W) and Hopkinton Rd. (42°15.709'N, 071°35.812'W), while the Hopkinton site was located off of Woods St. (42°15.354'N, 071°35.149'W).

Trapping involved using two CDC light/CO₂ mosquito traps (John W. Hock Co., model 512) with net collection bags, one placed approximately 6.5 meters into the air and the other about 1.5 meters high at the same site. Carbon dioxide was used as the only means of attractant, with the light feature of the traps being disabled to avoid non-target insects. The CO₂ tanks were adjusted with regulators to 15psi. On each trap there was a temperature/relative humidity data logger (Onset 64K HOBO Pro RH/Temp Logger) that logged each every 40 seconds while the trap was collecting.

The traps were set and collected overnight and retrieved approximately 24 hours later and set again usually at one of the other sites, with new collection bags, new batteries and new CO₂ tanks. The data logger information was downloaded and reset at each retrieval. The specimen collections were knocked down and stored in a refrigerator until identification. The specimens were identified as *Culex pipiens*, *Culiseta melanura*, or "other," by using the Darsie mosquito index (1981) and a dissecting microscope.

The data collected from the data loggers and mosquito identification was then used in several ANOVAs to determine whether there were significantly different findings for the two trap levels,

three trap sites, any interaction between those factors, and also for the temperature and relative humidity of the two trap levels. Significantly different mosquito numbers were then put through a test for normality and then a Spearman correlation test to determine if they were associated with any of the two possible environmental influences that were tested.

RESULTS

There were 42 viable collections made, which included both canopy and ground traps along with complete temperature and relative humidity data sets. An ANOVA for the number of *Culex pipiens* caught was performed against the two trap levels and the three sites. It was then determined that there was a significantly higher number of these mosquitoes caught in the canopy traps than in the ground traps (figure 1), but no significant difference between any of the sites and any interactions within the trap levels and sites.

Figure 1: Average # *Culex pipiens* at Canopy and Ground Trap Levels

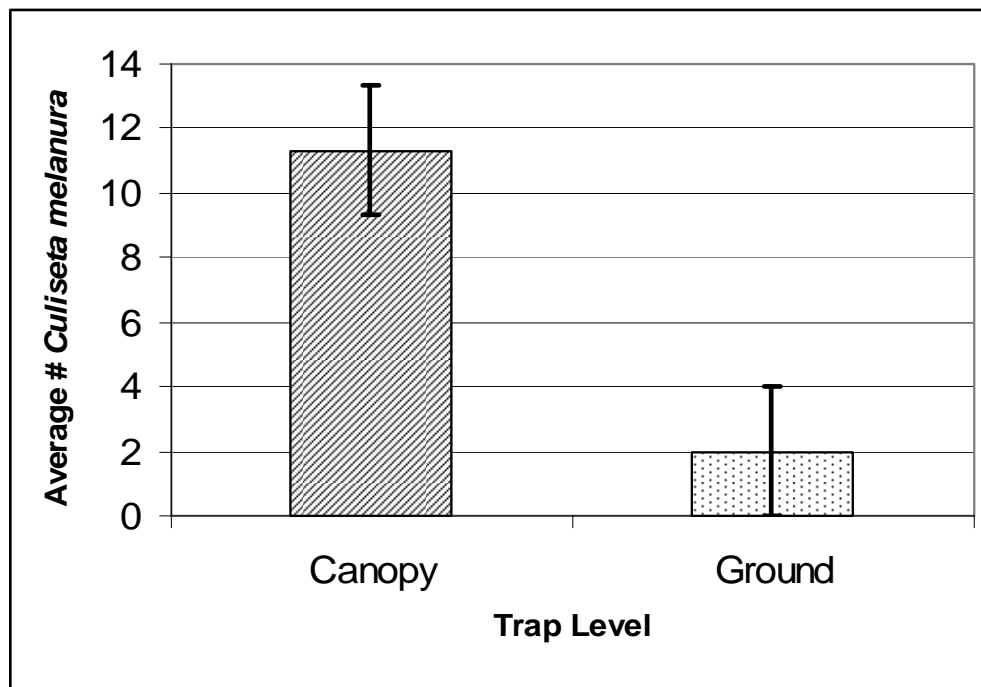


Similar results were found when an ANOVA was performed for the number of *Culiseta melanura* caught against the two trap levels and the three sites. There was a significantly higher amount of *Culiseta melanura* mosquitoes found in the canopy traps as opposed to the ground traps (Figure 2). Again, there was no significant difference between the number caught from the three sites or any interactions between the levels and sites.

When two-way ANOVAs were used with average temperature and average relative humidity against the trap levels and different sites, it was determined that there was a significant difference in the relative humidity readings of the canopy and ground level traps, but not in those of the average temperature of the two levels. There was no significant difference in the environmental factors between each site and also no significant difference in any interaction between trap level and site.

A test for normality showed that the mosquito collection data was not normal, and so the resulting Spearman correlation test showed that there was not a significant positive correlation between the *Culex pipiens* and *Culiseta melanura* canopy preference and the significantly different relative humidity of the two levels.

Figure 2: Average # *Culiseta melanura* at Canopy and Ground Trap Levels



DISCUSSION

Our collections exhibited the canopy preference shown by *Culex pipiens* and other mosquitoes in previous studies (Anderson, 2004). Our study also showed that there was not a significant difference in the average temperatures of the two traps level. However, the relative humidity of the two levels did prove to be significantly difference, leading us to perform a correlation, which showed that there was not a significant relationship between relative humidity and collections.

Through the lack of a correlation, I believe our results seem to support the idea that the canopy preference is due more to the feeding habitat of these mosquitoes on roosting birds than abiotic environmental influences. The preference for obtaining blood meals through birds by *Culex pipiens* seems to be more behavioral than being influenced by certain environmental factors, temperature and relative humidity in this case. Our results support the possibility that these target mosquitoes are present in the canopy not because of the proposed abiotic factors but more likely because the dominant feeding patterns and the location of these organisms.

Because of the susceptibility of *Culex pipiens* and *Culiseta melanura* to acquire and transmit West Nile virus and also other diseases including Eastern Equine Encephalitis, it is important to know where they are predominantly located and also the reasons why. Previous studies along with this one seem to indicate that these mosquito species do prefer canopy level, which could be very influential in the control aspect of mosquito (Anderson, 2004). With the right thermal currents, a mosquito control application could be administered so that it would rise through the canopy, eliminating those targets before any virus is allowed to transfer and build in bird hosts. Lessening the amount of virus that bird host populations are exposed to could significantly decrease the chances of a mosquito with bird and mammal feeding preference to obtain virus and transmit it to humans.

Similar research of canopy preference of *Culex pipiens*, *Culiseta melanura* and other mosquito species, may lead mosquito surveillance projects to change their trapping protocol. By shifting the focus of surveillance techniques to the canopies as opposed to the standard ground level, there could be an increased chance of finding infected mosquitoes before they have a chance to infect birds, which would begin to build up the virus in themselves. Finding these infected mosquitoes before they have a chance to infect birds would give mosquito control projects a head start on signaling potentially high risk areas, and taking any proper actions.

These ideas were relevant during this project as one of the collections from a canopy trap was found to have West Nile virus. Signs were posted and a press release was announced, allowing local residents to take their own precautions to avoid contracting WNV. In response to these findings more traps were established in the local area, which later in the season resulted in a positive Eastern Equine Encephalitis pool of mosquitoes. These traps were located in an area that was frequented by children and senior citizens, emphasizing the importance of identifying it for infectious mosquitoes early.

In conclusion this study reinforces the canopy preference for *Culex pipiens* and *Culiseta melanura*. It was also found that there was no correlation between the canopy preference and canopy temperature and relative humidity. This finding leads one to believe that the canopy preference exhibited by these mosquitoes is influenced by something else, host availability being among the possibilities.

ACKNOWLEDGMENTS

This project was funded, in part, by a grant from Sigma Xi, #G200537105031856, Grant-in-Aid of Research program.

I would like to give a special thanks to the following people and groups, for their help and guidance throughout this project:

Dr. Amy Arnett
Professor Barry Woods
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Timothy Deschamps
Timothy McGlinchy
Central Massachusetts Mosquito Control Project

PLEASE NOTE: THIS THESIS IN ITS ORIGINAL FORMAT INCLUDING TABLES AND REFERENCES IS AVAILABLE ON THE CMMCP WEBSITE AT www.cmmcp.org/cornine.pdf

TOWN OF WESTBOROUGH

<u>DATE</u>	<u>WORK DONE</u>	<u>LOCATION</u>
01-11-05	Brush Cutting 300'	Denny Street
	Stream Cleaning 300'	Denny Street
01-19-05	Brush Cutting 200'	Denny Street
03-21-05	Brush Cutting 400'	Denny Street
	Ditch Digging 800'	Denny Street
	Stream Cleaning 100'	Denny Street
	Culvert Cleaning	Denny Street
	Larva Survey	Hopkinton Road
03-21-05	Ditch Digging 450'	Denny Street
03-22-05	Ditch Digging	Denny Street - clean up
03-22-05	Larval Survey	Rodgers Road
	Larval Survey	Boston Turnpike Road
04-19-05	Public Relations	Brady Road, Wachusett View Drive, Lydia's Path
	Larval Survey	Brady Road, Wachusett View Drive, East Main Street, Samuel Harrington Road, Haskell Street, Jasper Street, Lyman Street
	Larviciding	Brady Road, Wachusett View Drive, East Main Street, Haskell Street, Mt. Pleasant Street, Lydia's Path
04-25-05	Administrative Contact	Town Hall - Clerk's Office
	Public Relations	Flanders Road
	Larval Survey	Flanders Road, Friberg Parkway, West Park Drive, Washington Lane, Walkup Drive
	Larviciding	Flanders Road, Walkup Drive, Flanders Lane
04-27-05	Larviciding	Milk Street
05-04-05	Public Relations	Lydia's Path, Blake Street, Flanders Road
	Larval Survey	Route 9, Smith Parkway, Fisher Street, Edward Dunn Way, Nichols Terrace, Mill Street, Mathieu Drive, Old Nourse Road, Robin Road
	Larviciding	Smith Parkway, Lydia's Path, Old Nourse Road, Old Nourse Road, Andrew Street, Quail Hollow Road, Flanders Road
05-12-05	Administrative Contact	Board Of Health
	Public Relation	Nourse Street, Wachusett View Drive, Baker Way
	Larval Survey	State Coach Plaza, Nipmuck Drive, Oak Street, Wachusett View Drive, Baker Way, West Main Street, Adams Street, Nash Street, Carroll Drive, Kendal Drive, Primrose Lane, Catie Drive, Nourse Street
	Larviciding	Stage Coach Plaza, Nipmuck Drive
05-16-05	Set Trap	St. Luke's Cemetery - Hopkinton Road
05-18-05	Public Relations	Glen Road
	Larval Survey	Glen Road
05-19-05	Larval Survey	Cedar Street
	Pick Up Trap	St. Luke's Cemetery - Hopkinton Road
05-23-05	Set Trap	St. Luke's Cemetery - Hopkinton Road
05-24-05	Pick Up Trap	St. Luke's Cemetery - Hopkinton Road
05-25-05	Larval Survey	East Main Street, Bellows Street, Lyman Street, Janlyn Circle, Summer Street, Robin Lane, Robin Circle, Park Street, Milk Street,
	Larviciding	East Main Street, Janlyn Circle, Robin Road, Milk Street
	Catch Basin Larviciding	Westboro Country Village, Westboro Health Care Center, Mayberry Senior Housing, The Willows, Whittier Hospital
	[50]	
05-26-05	Set Trap	St. Luke's Cemetery - Hopkinton Road
05-27-05	Pick Up Trap	St. Luke's Cemetery - Hopkinton Road
05-31-05	Set Trap	St. Luke's Cemetery - Hopkinton Road
06-01-05	Pick Up Trap	St. Luke's Cemetery - Hopkinton Road
06-02-05	Administrative Contact	Police Department
	Public Relations	Arrowhead Lane, Glen Street, Nash Street, Lackey Street, Stratton Drive, Robin Lane
	Adulticiding	Glen Street, Nash Street, Lackey Street, Stratton Drive, Arrowhead Lane, Robin Lane, Carlton Gardens Condominium, Tree Top Park Condominium, Otis Street
	Baseball Fields	
	Set Trap	St. Luke's Cemetery - Hopkinton Road
06-03-05	Pick Up Trap	St. Luke's Cemetery - Hopkinton Road
06-08-05	Administrative Contact	Police Department

TOWN OF WESTBOROUGH

<u>DATE</u>	<u>WORK DONE</u>	<u>LOCATION</u>
06-08-05	Public Relations	Fisher Street, Maynard Street, Lydia's Path, Janlyn Circle, West Street, Blake Street, Mill Road, West Main Street, Glen Street, Arch Street, Nourse Street, Adams Street, Long Drive, Bowman Street, Phylmor Drive, Stratton Drive, Haskell Street, Thomas Newton Drive, Lyons Street, Walker Street, Smith Road, Flanders Road, Rocklawn Road, Hundreds Road, Washington Street, Wachusett View Drive, Pine Street, Green Street, Cedar Street, Baker Way, Haskell Street
	Landing Count	Pine Street, Flanders Road, Baker Way, Walker Street, Haskell Street
	Larval Survey	Thomas Newton Drive, Hundreds Road, Flanders Road, Janlyn Circle, Long Drive
	Larviciding	Walker Street
	Adulticiding	Baker Way, Wachusett View Drive, Flanders Road, Lyons Street, Smith Street, Walker Street, Haskell Street, Washington Street, Hundreds Road, Cottage Street, Green Street, Spruce Street, Elm Street, Pine Street, Beach Street, Cedar Street, Fisher Street, Maynard Street, Lydia's Path, Fiske Street, Mill Road, Arch Street, Glen Street, Nourse Street, West Main Street, Adams Street, Long Drive, Bowman Street, Phylmor Drive, Stratton Drive, Janlyn Circle, West Street, Blake Street
06-09-05	Set Trap	St. Luke's Cemetery - Hopkinton Road
06-10-05	Pick Up Trap	St. Luke's Cemetery - Hopkinton Road
06-13-05	Public Relations	Harvey Industries - Hopkinton Road
	Trap Survey	Harvey Industries - Hopkinton Road, Walkup Drive, Rodgers Street Baseball Field - Rogers Street
06-14-05	Administrative Contact	Police Department
	Public Relations	Hastings Elementary School (2 nd Grade)
	Adulticiding	Rogers Road
	Pick Up Trap	Rogers Street
	Set Trap	Hopkinton Road
06-15-05	Administrative Contact	Police Department
	Public Relations	Harvey's Industries - Hopkinton Road, St. Luke's Cemetery - Hopkinton Road, Gary Circle, Fisher Street, Milk Street, Blake Street, Church Street, Mayberry Drive, Westboro State Hospital - Lyman Street, Chauncy Circle, Harvey Industries - Hopkinton Road, Bullard Street, Forbes Street, Piccadilly Way, Belknap Street, Lackey Street, Rev. Thomas Hooker Road, Mt. Pleasant Street, Gurgles Street, Pinecrest Drive, Courtland Road, Westminster Way, Old Colony Road, Long Road, O'Neil Drive, Hundred Road, Butterfield Drive, Rocklawn Road, Lyman State Hospital, Piccadilly Way, Connector Road, Rocklawn Road, Lackey Street
	Landing Count	Lyman State Hospital, Piccadilly Way, Connector Road, Rocklawn Road, Lackey Street
	Larval Survey	Piccadilly Way
	Pick Up Trap	St. Luke's Cemetery - Hopkinton Road
	Set Trap	St. Luke's Cemetery - Hopkinton Road, Hadley Lane
06-16-05	Pick Up Trap	Hadley Lane
06-17-05	Pick Up Trap	St. Luke's Cemetery - Hopkinton Road
06-17-05	Administrative Contact	Police Department
	Public Relations	Long Drive
	Administrative Contact	Long Drive
06-20-05	Set Trap	St. Luke's Cemetery - Hopkinton Road, Rogers Street
06-21-05	Pick Up Trap	Rogers Street
	Set Trap	Rogers Street
	Pick Up Trap	St. Luke's Cemetery - Hopkinton Road
06-22-05	Administrative Contact	Police Department
	Public Relations	Maynard Street, Lydia's Path, Gary Circle, Fisher Street, Blake Street, Church Street, Forbes Street, Lackey Street, Crown Ridge Road, Belknap Street, Warren Street, Bowman Street, Rev. Thomas Hooker Road, Hopkinton Road, Bullard Road, Piccadilly Way, Mt. Pleasant Street, Ruggles Street, Westminster Road, Old Colony Way, Arch Street, Pinecrest Drive, Cortland Drive, Samson Drive,

TOWN OF WESTBOROUGH

<u>DATE</u>	<u>WORK DONE</u>	<u>LOCATION</u>
06-22-05	Public Relations (Continued)	Butterfield Drive, Rocklawn Road, Research Drive, Lyons Street, Westboro State Hospital, Chauncy Circle, Milk Street, Hopkinton Road
	Adulticiding	Westboro State Hospital, Research Drive, Hopkinton Road, Belknap Street, Lackey Street, Crown Ridge Road, Bowman Street, Warren Street, Rev. Thomas Hooker Road, Ruggles Street, Piccadilly Way, Mt. Pleasant Street, Arch Street,
06-22-05	Adulticiding	Pinecrest Drive, Cortland Drive, Westminster Way, Old Colony Drive, O'Neil Drive, Forbes Street, Mayberry Condominiums, Samson Drive, Lyons Street, Chauncy Circle, Milk Street, Maynard Street, Lydia's Path, Gary Circle
	Pick Up Trap	Bullard Street, Hopkinton Road
	Set Trap	Rogers Street, St Luke's Cemetery - Hopkinton Road
06-23-05	Set Trap	Walkup Drive
	Pick Up Trap	Hadley Lane, St. Luke's Cemetery - Hopkinton Road
06-24-05	Pick Up Trap	St. Luke's Cemetery - Hopkinton Road, Walkup Drive
06-27-05	Set Trap	St. Luke's Cemetery - Hopkinton Road, Hadley Lane
06-28-05	Pick Up Trap	Hadley Lane, Walk-Up Drive, Rogers Street
	Set Trap	Hadley Lane, Hopkinton Road
06-29-05	Administrative Contact	Police Department, Board Of Health
	Public Relations	Hundreds Road, Jefferson Road, Byard Lane, Wachusett View Drive, Thomas Newton Drive, Smith Street, Church Street, Blake Street, Robin Lane, Overlook Drive, Valley Brook Road, Ruggles Street, Old Coach Road, Morse Street
	Larval Survey	Robin Lane, Research Drive, Wachusett View Drive
	Adulticiding	Research Drive, Hundreds Road, Jefferson Road, Byard Lane, Wachusett View Drive, Thomas Newton Drive, Smith Street, Robin Lane, Overlook Drive, Valley Brook Road, Ruggles Street, Old Coach Road, Morse Street, Church Street, Blake Street
	Pick Up Trap	Haskell Street, Hopkinton Road
	Set Trap	Haskell Street
06-30-05	Administrative Contact	Police Department
	Public Relations	Fisher Street
	Adulticiding	Fisher Street
	Set Trap	Hopkinton Road, Robin Lane
	Pick Up Trap	Haskell Street, Rogers Street
07-01-05	Pick Up Trap	Hopkinton Road, Rogers Street
07-05-05	Set Trap	Robin Lane, Hopkinton Road
07-06-05	Pick Up Trap	Robin Lane, Hopkinton Road
	Set Trap	Byard Lane
07-07-05	Administrative Contact	Police Department
	Public Relations	Belknap Street, Wachusett View Drive, Hundreds Road, Fisher Street
	Adulticiding	Fisher Street, Wachusett View Drive, Otis Street, Hundreds Road, Belknap Street
	Set Trap	Hopkinton Road, Rogers Street, Walk-Up Drive, Byard Lane
07-08-05	Pick Up Trap	Byard Lane, Hopkinton Road, Rogers Road, Walk-Up Drive
07-11-05	Set Trap	Byard Lane, Hopkinton Road
07-12-05	Pick Up Trap	Byard Lane
07-13-05	Administrative Contact	Police Department
	Public Relations	Lyons Street
	Landing Count	Haskell Street, Otis Street
	Adulticiding	Lyons Street
	Larval Survey	Lyman Street, Brady Road, East Main Street
	Larviciding	Haskell Street, Brady Road, East Main Street
	Set Trap	Baxter Street, Rogers Street
	Pick Up Trap	Hopkinton Road
07-14-05	Set Trap	Hopkinton Road, Walk-Up Drive
	Pick Up Trap	Baxter Lane, Rogers Street
07-15-05	Pick Up Trap	Hopkinton Road, Walk-Up Drive, Baxter Street
07-18-05	Set Trap	Hopkinton Road
07-19-05	Pick Up Trap	Hopkinton Road
	Set Trap	Rodgers Street

TOWN OF WESTBOROUGH

<u>DATE</u>	<u>WORK DONE</u>	<u>LOCATION</u>
07-20-05	Administrative Contact Public Relation Landing Count Adulticiding Larval Survey Larviciding Pick Up Trap	Police Department Stratton Drive, Hundreds Road, Chauncy Circle Milk Street, Chauncy Circle, Hundreds Road, Stratton Drive Hundreds Road, Chauncy Circle, Stratton Drive Hundreds Road, Crossman Lane, Lackey Street, Upton Road, Bridle Lane, East Main Street, Milk Street, Flanders Lane, Thomas Newton Street Upton Road, Crossman Lane, Lackey Street, Milk Street, Flanders Lane Rogers Street
07-21-05	Pick Up Trap	Rogers Street
	Set Trap	Walk-Up Drive, Hopkinton Road
07-22-05	Pick Up Trap	Hopkinton Road
07-26-05	Set Trap	Hopkinton Road
07-27-05	Administrative Contact Public Relations Adulticiding Larval Survey Larviciding Pick Up Trap Set Trap	Police Department Old Colony Drive, Rocklawn Road Old Colony Drive Old Colony Drive, Arrow Head Lane, Olde Hickory Path, Whispering Brook, Nourse Street, Old Nourse Road, Andrews Street, Nichols Terrace, Fisher Street, Smith Parkway, Edward Dunn Way, Carroll Drive, Gibbon's Middle School Washington Lane, Smith Parkway Hopkinton Road Rogers Street
07-28-05	Set Trap Pick Up Trap	Hopkinton Road, Walk-Up Drive Rogers Street
07-29-05	Pick Up Trap	Walk-Up Drive, Hopkinton Road
08-1-05	Set Trap	Rogers Street
08-02-05	Pick Up Trap Set Trap	Rogers Street Hopkinton Road
08-03-05	Administrative Contact Public Relations Adulticiding Larval Survey Pick Up Trap	Police Department, Board Of Health Bowman Street, Hundreds Road, Hundreds Road Pool, Rocklawn Road, Assabet Drive, Research Drive, Ruggles Street Research Drive, Rocklawn Road, Hundreds Road, Hundreds Road Pool, Ruggles Street, Bowman Street, Assabet Drive Spring Road, Lackey Street, Piccadilly Way, Flanders Road, Friburg Parkway, West Park Drive Hopkinton Road
08-04-05	Set Trap	Hopkinton Road, Walk-Up Drive, Rogers Street
08-05-05	Pick Up Trap	Hopkinton Road, Rogers Street, Walk-Up Drive
08-08-05	Set Trap	Hopkinton Road
08-09-05	Pick Up Trap	Hopkinton Road
08-10-05	Administrative Contact Public Relations Adulticiding	Police Department Church Street, Folly Lane, Water Street, Haskell Street, Olde Coach Road Church Street, Folly Lane, Water Street, Haskell Street, Olde Coach Road
08-11-05	Set Trap	Rogers Street, Walk-Up Drive, Hopkinton Road
08-12-05	Pick Up Trap	Hopkinton Road, Walk-Up Drive, Rogers Street
08-15-05	Set Trap	Rogers Street
08-16-05	Pick Up Trap Set Trap	Rogers Street Hopkinton Road
08-17-05	Larval Survey Larviciding Pick Up Trap Set Trap Pick Up Trap	Old Flanders Road, Flanders Road, West Park Drive, Haskell Street, Oak Street, Maynard Street, Lydia's Path, Bridle Path, Janlyn Circle, Nipmuck Drive, Nash Street, East Main Street Flanders Road, Haskell Street, Milk Street, Nash Street, East Main Street Hopkinton Road St. Luke's Cemetery St. Luke's Cemetery, Rogers Street, Walk-Up Drive
08-18-05	Set Trap	St. Luke's Cemetery
08-19-05	Pick Up Trap	St. Luke's Cemetery, Rogers Street, Walk-Up Drive

TOWN OF WESTBOROUGH

<u>DATE</u>	<u>WORK DONE</u>	<u>LOCATION</u>
08-22-05	Set Trap	Rogers Street
08-23-05	Pick Up Trap	Rogers Street
08-24-05	Administrative Contact Public Relations Adulticiding Larval Survey Larviciding Set Trap	Police Department, Board Of Health Rogers Road, Haskell Street Haskell Street, Rogers Road Flanders Road, Walkup Drive, Old Flanders Road, Fisher Street, Smith Parkway, Mill Street, Nourse Street Walkup Drive, Flanders Road, Smith Parkway Rogers Street, Hopkinton Road
08-25-05	Pick Up Trap Set Trap	Rogers Street, Hopkinton Road Rogers Street, Walk-Up Drive, St. Luke's Cemetery
08-26-05	Pick Up Trap	St. Luke's Cemetery
08-29-05	Set Trap	Walk-Up Drive, Rogers Street, Hopkinton Road
08-30-05	Administrative Contact Public Relations Adulticiding Larval Survey Larviciding Stream Cleaning 20' Stream Cleaning 25' Stream Cleaning 20' Stream Cleaning 20' Stream Cleaning 10' Stream Cleaning 70' Culvert Cleaning (24)	Police Department Cross Street, Beach Street, Fully Lane, Washington Street Flanders Road, Longmeadow Road, Hundreds Road, Jefferson Road, Sherborne Road, Nottingham Road, Yorkshire Circle, Samson Drive, Baker Way, Robinson Place, Colonial Drive, Union Street, Brigham Street, Cottage Street, Green Street, Elm Street, Pine Street, Cottage Point, Cedar Street, Beach Street, Central Street, Naponen Way, Cross Street, Harrison Avenue, Myrtle Street, Forbes Street, Baxter Street, Maple Avenue, Pine Grove Cemetery, Ruggles Pond Road, Bullard Street, Hopkinton Road, Prospect Street, State Street, Washington Street, Old Flanders Road, Fruit Street, Rocklawn Road, Chamberlain Court, Butterfield Drive, Friberg Parkway, West Park Drive, Walkup Drive, Solectron Drive, Gilmore Road, Flanders Lane Flanders Lane, Old Flanders Road, West Park Drive Flanders Lane, Water Street, Olympian Drive West Main Street Old Nourse Road Flanders Road Walk Up Drive Westboro Housing Authority, East Main Street, Water Street, Olympian Drive, Ken Sutton Way, West Main Street, Old Nourse Road, Flanders Road, Gilmore Road, Walkup Drive
08-31-05	Pick Up Trap Administrative Contact Public Relations Adulticiding Stream Cleaning (9) Larval Survey Larviciding Pick Up Trap Set Trap	Hopkinton Road Police Department, Board Of Health Blake Street, Warren Street, Arrowhead Lane, Arch Street, Flanders Road Warren Street, Arch Street, Flanders Road, Forest Lane, Rogers Road, Blake Street, Otis Street Walkup Drive, Flanders Road Blake Street, Walkup Drive Flanders Road Hopkinton Road Rogers Road
09-01-05	Administrative Contact Public Relations Adulticiding Larval Survey Larviciding Set Trap Pick Up Trap	Police Department Flanders Road, Linda Street, Smith Street Washington Street, Flanders Lane, Gilmore Road, Fruit Street, Old Flanders Road, West Park Drive, National Grid, Flanders Road, Linda Street, Smith Street, Friberg Road, Research Drive, Connector Road, Flanders Road Haskell Street, Lyman Street, Thomas Newton Drive, East Main Street, Walker Street, Milk Street, Janlyn Circle, Hancock Way, Route 9 (Cloverleaf Chevrolet), Norse Street, West Main Street, Catie Drive, Kendall Drive, Carroll Drive, Adams Street, Nash Street, Primrose Lane, Wayside Road, Linda Street Wessonville Village Way, Hancock Way, Milk Street, Hopkinton Road, Walkup Drive Rogers Road

TOWN OF WESTBOROUGH

<u>DATE</u>	<u>WORK DONE</u>	<u>LOCATION</u>
09-02-05	Pick Up Trap	Hopkinton Road, Walkup Drive
09-06-05	Administrative Contact Public Relations Adulticiding Larval Survey	Police Department Westboro State Hospital Westboro State Hospital Adams Street, Primrose Lane, Adams Street, Kendall Drive, Carroll Drive, Stone Hill Road, Belknap Street, Bertis Adams Way, Bowman Lane, Lackey Street
09-07-05	Set Traps	Rogers Road, Walkup Drive
09-08-05	Administrative Contact Public Relations Adulticiding Pick Up Trap Set Trap	Police Department Arch Street, Gary Circle, Baker Way, Flanders Road, Haskell Street Ballfield Arch Street, Gary Circle, Baker Way, Flanders Road, Haskell Street Ballfield Rogers Road, Walkup Drive Rogers Road, Walkup Drive, Hopkinton Road
09-09-05	Pick Up Trap	Rogers Road, Walkup Drive, Hopkinton Road
09-12-05	Administrative Contact Public Relations Adulticiding Larval Survey	Police Department, Board Of Health Roger's Road Ball Fields, Haskell Street Ball Fields, Otis Street Ball Fields (Target) Roger's Road Ball Fields, Haskell Street Ball Fields, Otis Street Ball Fields (Target) East Main Street, Ruggles Street, Wayside Road, Milk Street, State Coach Plaza, Oak Street, Chauncy Street, Lyman Street, Powder Hill Way, Thomas Newton Street Rogers Road, Walkup Drive
09-13-05	Set Trap Administrative Contact Public Relations Adulticiding Pick Up Trap Set Trap	Police Department Colonial Drive Colonial Drive Rogers Road, Walkup Drive Rogers Road, Walkup Drive
09-14-05	Administrative Contact Public Relations Adulticiding Pick Up Trap Set Trap	Police Department Brady Road, Chauncy Circle, Hadley Lane, Andrews Street, Edmund Brigham Way, Rosewood Place, Piccadilly Way Brady Road, Chauncy Circle, Hadley Lane, Andrews Street, Edmund Brigham Way, Rosewood Place, Piccadilly Way, Haskell Street, Rogers Road Ball Fields, Rogers Senior Center, Otis Ball Fields Rogers Road, Walkup Drive Rogers Road, Walkup Drive
09-15-05	Adulticiding Public Relations Adulticiding Pick Up Trap Set Trap	Police Department McDonald Place McDonald Place Rogers Road, Walkup Drive Rogers Road, Walkup Drive, Hopkinton Road
09-16-05	Pick Up Trap	Rogers Road, Walkup Drive, Hopkinton Road
09-19-05	Set Trap	Rogers Road, Walkup Drive
09-20-05	Pick Up Trap	Rogers Road, Walkup Drive
09-21-05	Administrative Contact Adulticiding Pick Up Trap Set Trap	Police Department Otis Street Ball Field Rogers Road, Walkup Drive Rogers Road, Walkup Drive
09-22-05	Administrative Contact Adulticiding Pick Up Trap Set Trap	Police Department Otis Street Ball Field, Rogers Road Ball Fields, Haskell Street Ball Field Rogers Road, Walkup Drive Rogers Road, Walkup Drive, Hopkinton Road
09-23-05	Pick Up Trap	Rogers Road, Walkup Drive, Hopkinton Road
09-26-05	Set Trap	Rogers Road, Walkup Drive
09-27-05	Pick Up Trap	Rogers Road, Walkup Drive
09-28-05	Pick Up Trap	Rogers Road, Hopkinton Road
10-14-05	Stream Cleaning 25' Stream Cleaning 25' Stream Cleaning 25' Culvert Cleaning (18)	Morse Street Morse Street Route 135 Fisher Street, Route 135, Warren Street, Morse Street, Old Connecticut Path, Upton Road

TOWN OF WESTBOROUGH

<u>DATE</u>	<u>WORK DONE</u>	<u>LOCATION</u>
10-20-05	Administrative Contact Stream Cleaning 25' Stream Cleaning 50' Stream Cleaning 30' Stream Cleaning 20'	Board Of Health Flanders Road Walkup Drive Haskell Street Bowman Street
10-20-05	Culvert Cleaning (30)	Flanders Road, Walkup Drive, West Park Drive, Rogers Road, Haskell Street, Upton Road, Lackey Street, Phylmor Drive, Bowman Street, Ruggles Street, Wayside Road
10-27-05	Stream Cleaning 60' Stream Cleaning 50' Stream Cleaning 60' Stream Cleaning 30' Stream Cleaning 10' Stream Cleaning 50' Stream Cleaning 40' Stream Cleaning 60' Culvert Cleaning (31)	Belknap Road Belknap Road Morse Street Morse Street Morse Street Wayside Road Wayside Road Fisher Street Belknap Road, Olde Cohn Path, Bertis Adams Way, Warren Street, Morse Street, Piccadilly Way, Upton Road, Mt. Pleasant Street, Ruggles Street, Wayside Road, Garfield Road, Bowman Street, Rogers Road, Glen Avenue, Arch Street, Burton Path, Fisher Street
11-16-05	Stream Cleaning 50' Stream Cleaning 50' Stream Cleaning 15' Culvert Cleaning (9)	Flanders Road Flanders Road Flanders Road Flanders Road, Route 135, Nottingham Road, Wessonville Village Way
11-23-05	Administrative Contact Stream Cleaning 10' Stream Cleaning 30' Stream Cleaning 10' Stream Cleaning 10' Stream Cleaning 10' Stream Cleaning 10' Stream Cleaning 10' Culvert Cleaning (16)	Board Of Health Flanders Road Walkup Drive Walkup Drive Flanders Road Flanders Road Flanders Road Flanders Road Flanders Road Flanders Road, Walkup Drive
12-07-05	Stream Cleaning 350' Stream Cleaning 10' Stream Cleaning 110' Stream Cleaning 30' Stream Cleaning 10' Stream Cleaning 20' Stream Cleaning 20' Stream Cleaning 40' Stream Cleaning 20' Stream Cleaning 20' Culvert Cleaning (25)	Belknap Street Bowman Street Bowman Street Bowman Street Bowman Street Wayside Road Adams Street Adams Street Adams Street Adams Street Belknap Street, Bowman Street, Ruggles Street, Wayside Road, Mt. Pleasant Street, Adams Street, Primrose Lane, Harvest Way, Gilmore Farm Road
12-08-05	Stream Cleaning 10' Stream Cleaning 10' Stream Cleaning 70' Stream Cleaning 120' Stream Cleaning 10' Stream Cleaning 15' Stream Cleaning 25' Stream Cleaning 30' Stream Cleaning 20' Stream Cleaning 250' Culvert Cleaning (28)	Morse Street Morse Street Morse Street Morse Street Crossman Road Phylmor Road Lackey Road Fisher Street Mill Street Belknap Road Morse Street, Warren Street, Bertis Adam Way, Olde Connecticut Path, Crossman Road, Phylmor Road, Lackey Road, Spring Road, West Main Street, Frances Road, Carroll Drive, Arch Street, Fisher Street, Mill Street, Belknap Road
12-19-05	Stream Cleaning 50' Stream Cleaning 40' Stream Cleaning 40' Stream Cleaning 25' Culvert Cleaning (34)	Brady Road Brady Road Walker Street Flanders Road Haskell Street, Wachusett View Drive, Samuel Harrington

TOWN OF WESTBOROUGH

<u>DATE</u>	<u>WORK DONE</u>	<u>LOCATION</u>
		Road, Thomas Newton Drive, Wachusett View Drive, Lyman Street, Haskell Street, Brady Road, Warburton Lane, Smith Street, East Main Street, Walker Street, Flanders Road, Washington Street, Collins Way, Rogers Road, Old Nourse Road, Brooks Way, Mathieu Drive, Glen Street, Fisher Street
12-28-05	Stream Cleaning 35'	Overlook Drive
	Stream Cleaning 20'	Chestnut Street
	Stream Cleaning 25'	Chestnut Street
	Stream Cleaning 40'	Chestnut Street
	Stream Cleaning 40'	Olympian Drive
	Stream Cleaning 20'	Mt. Pleasant Road
	Stream Cleaning 25'	Upton Road
	Stream Cleaning 25'	Morse Road
	Stream Cleaning 30'	Morse Road
	Culvert Cleaning (22)	Mill Road, Overlook Drive, Chestnut Street, Olympian Drive, Ken Sutton Way, Ruggles Street, Mt. Pleasant Road, Valley Brook, Mt. Pleasant Street, Route 135, Upton Road, Morse Road, Picadilly Way
12-30-05	Stream Cleaning 40'	Flanders Road
	Stream Cleaning 25'	Flanders Road
	Culvert Cleaning (10)	Smith Street, East Main Street, Flanders Road, Collins Way, Washington Street

2005 Mosquito Surveillance Data
WESTBOROUGH

#	Town	Date	Pool ID	# Traps	Trap Site	Pool Size	Species	Result	Virus Type
1	Westborough	5/16/2005	CM05NS-00391	1	Hopkinton Rd.	7	<i>Cs. melanura</i>	N/S	
2	Westborough	5/16/2005	CM05NS-00392	1	Hopkinton Rd.	1	<i>Oc. excrucians</i>	N/S	
3	Westborough	5/16/2005	CM05NS-00393	1	Hopkinton Rd.	1	<i>Oc. provocans</i>	N/S	
4	Westborough	5/16/2005	CM05NS-00394	1	Hopkinton Rd.	30	<i>Oc. abserratus</i>	N/S	
5	Westborough	5/18/2005	CM05NS-00362	1	Hopkinton Rd.	1	<i>Oc. cantator</i>	N/S	
6	Westborough	5/18/2005	CM05NS-00363	1	Hopkinton Rd.	3	<i>Oc. excrucians</i>	N/S	
7	Westborough	5/18/2005	CM05NS-00364	1	Hopkinton Rd.	8	<i>Oc. abserratus</i>	N/S	
8	Westborough	5/23/2005	CM05NS-00395	1	Hopkinton Rd.	1	<i>Oc. fitchii</i>	N/S	
9	Westborough	5/23/2005	CM05NS-00396	1	Hopkinton Rd.	10	<i>Oc. excrucians</i>	N/S	
10	Westborough	5/23/2005	CM05NS-00397	1	Hopkinton Rd.	30	<i>Oc. cantator</i>	N/S	
11	Westborough	5/23/2005	CM05NS-00398	1	Hopkinton Rd.	2	<i>Oc. stimulans</i>	N/S	
12	Westborough	5/23/2005	CM05NS-00399	1	Hopkinton Rd.	474	<i>Oc. abserratus</i>	N/S	
13	Westborough	5/23/2005	CM05NS-00400	1	Hopkinton Rd.	2	<i>Cs. melanura</i>	N/S	
14	Westborough	5/23/2005	CM05NS-00401	1	Hopkinton Rd.	1	<i>Ae. cinereus</i>	N/S	
15	Westborough	5/23/2005	CM05NS-00402	1	Hopkinton Rd.	1	<i>Oc. sticticus</i>	N/S	
16	Westborough	5/31/2005	CM05-00000	1	Hopkinton Rd.	7	<i>Oc. abserratus</i>	Negative	
17	Westborough	5/31/2005	CM05-00001	1	Hopkinton Rd.	11	<i>Oc. abserratus</i>	Negative	
18	Westborough	5/31/2005	CM05-00007	1	Hopkinton Rd.	1	<i>Oc. intrudens</i>	Negative	
19	Westborough	5/31/2005	CM05-00008	1	Hopkinton Rd.	1	<i>Oc. intrudens</i>	Negative	
20	Westborough	5/31/2005	CM05-00009	1	Hopkinton Rd.	13	<i>Cs. melanura</i>	Negative	
21	Westborough	5/31/2005	CM05-00015	1	Hopkinton Rd.	5	<i>Cs. melanura</i>	Negative	
22	Westborough	5/31/2005	CM05-00016	1	Hopkinton Rd.	1	<i>Oc. cantator</i>	Negative	
23	Westborough	5/31/2005	CM05-00017	1	Hopkinton Rd.	1	<i>Oc. excrucians</i>	Negative	
24	Westborough	5/31/2005	CM05-00018	1	Hopkinton Rd.	13	<i>Oc. abserratus</i>	Negative	
25	Westborough	6/7/2005	CM05-00020	1	Hopkinton Rd.	10	<i>Cs. melanura</i>	Negative	
26	Westborough	6/7/2005	CM05-00024	1	Hopkinton Rd.	1	<i>Cs. melanura</i>	Negative	
27	Westborough	6/7/2005	CM05-00025	1	Hopkinton Rd.	4	<i>Cs. melanura</i>	Negative	
28	Westborough	6/7/2005	CM05-00026	1	Hopkinton Rd.	2	<i>Cs. melanura</i>	Negative	
29	Westborough	6/9/2005	CM05NS-00010	1	Hopkinton Rd.	3	<i>Cq. perturbans</i>	N/S	
30	Westborough	6/9/2005	CM05NS-00011	1	Hopkinton Rd.	4	<i>Oc. aurifer</i>	N/S	
31	Westborough	6/9/2005	CM05NS-00012	1	Hopkinton Rd.	8	<i>Oc. canadensis</i>	N/S	
32	Westborough	6/9/2005	CM05NS-00013	1	Hopkinton Rd.	8	<i>Ae. cinereus</i>	N/S	
33	Westborough	6/9/2005	CM05NS-00014	1	Hopkinton Rd.	5	<i>Oc. excrucians</i>	N/S	
34	Westborough	6/9/2005	CM05NS-00015	1	Hopkinton Rd.	16	<i>Oc. abserratus</i>	N/S	
35	Westborough	6/13/2005	CM05NS-00029	1	Rogers Rd.	1	<i>Oc. aurifer</i>	N/S	
36	Westborough	6/13/2005	CM05NS-00030	1	Rogers Rd.	1	<i>Oc. abserratus</i>	N/S	
37	Westborough	6/13/2005	CM05NS-00031	1	Rogers Rd.	1	<i>Oc. canadensis</i>	N/S	
38	Westborough	6/13/2005	CM05NS-00032	1	Rogers Rd.	12	<i>Oc. excrucians</i>	N/S	

2005 Mosquito Surveillance Data
WESTBOROUGH

#	Town	Date	Pool ID	# Traps	Trap Site	Pool Size	Species	Result	Virus Type
39	Westborough	6/13/2005	CM05NS-00042	1	Rogers Rd.	54	<i>Oc. canadensis</i>	N/S	
40	Westborough	6/13/2005	CM05NS-00043	1	Rogers Rd.	104	<i>Cq. perturbans</i>	N/S	
41	Westborough	6/13/2005	CM05NS-00044	1	Rogers Rd.	48	<i>Ae. cinereus</i>	N/S	
42	Westborough	6/13/2005	CM05NS-00045	1	Rogers Rd.	112	<i>Oc. excrucians</i>	N/S	
43	Westborough	6/13/2005	CM05NS-00046	1	Rogers Rd.	4	<i>Ae. vexans</i>	N/S	
44	Westborough	6/13/2005	CM05NS-00047	1	Rogers Rd.	48	<i>Oc. aurifer</i>	N/S	
45	Westborough	6/14/2005	CM05NS-00078	1	Hopkinton Rd.	3	<i>Ae. cinereus</i>	N/S	
46	Westborough	6/14/2005	CM05NS-00079	1	Hopkinton Rd.	117	<i>Oc. excrucians</i>	N/S	
47	Westborough	6/14/2005	CM05NS-00080	1	Hopkinton Rd.	75	<i>Cq. perturbans</i>	N/S	
48	Westborough	6/14/2005	CM05NS-00081	1	Hopkinton Rd.	54	<i>Oc. canadensis</i>	N/S	
49	Westborough	6/14/2005	CM05NS-00082	1	Hopkinton Rd.	4	<i>Ae. vexans</i>	N/S	
50	Westborough	6/14/2005	CM05NS-00083	1	Hopkinton Rd.	15	<i>Oc. abserratus</i>	N/S	
51	Westborough	6/14/2005	CM05NS-00084	1	Hopkinton Rd.	27	<i>Oc. cantator</i>	N/S	
52	Westborough	6/14/2005	CM05NS-00085	1	Hopkinton Rd.	5	<i>Oc. aurifer</i>	N/S	
53	Westborough	6/14/2005	CM05NS-00086	1	Hopkinton Rd.	1	<i>An. punctipennis</i>	N/S	
54	Westborough	6/14/2005	CM05NS-00099	1	Hopkinton Rd.	1	<i>Oc. cantator</i>	N/S	
55	Westborough	6/14/2005	CM05NS-00100	1	Hopkinton Rd.	3	<i>Oc. canadensis</i>	N/S	
56	Westborough	6/14/2005	CM05NS-00101	1	Hopkinton Rd.	41	<i>Cq. perturbans</i>	N/S	
57	Westborough	6/14/2005	CM05NS-00102	1	Hopkinton Rd.	4	<i>Oc. excrucians</i>	N/S	
58	Westborough	6/14/2005	CM05NS-00103	1	Hopkinton Rd.	1	<i>Oc. aurifer</i>	N/S	
59	Westborough	6/20/2005	CM05NS-00503	1	Rogers Rd.	12	<i>An. punctipennis</i>	N/S	
60	Westborough	6/20/2005	CM05NS-00504	1	Rogers Rd.	65	<i>Ae. cinereus</i>	N/S	
61	Westborough	6/20/2005	CM05NS-00505	1	Rogers Rd.	117	<i>Cq. perturbans</i>	N/S	
62	Westborough	6/20/2005	CM05NS-00506	1	Rogers Rd.	54	<i>Oc. canadensis</i>	N/S	
63	Westborough	6/20/2005	CM05NS-00507	1	Rogers Rd.	5	<i>Oc. abserratus</i>	N/S	
64	Westborough	6/20/2005	CM05NS-00508	1	Rogers Rd.	69	<i>Oc. aurifer</i>	N/S	
65	Westborough	6/20/2005	CM05NS-00509	1	Rogers Rd.	1	<i>Ae. vexans</i>	N/S	
66	Westborough	6/20/2005	CM05NS-00510	1	Rogers Rd.	38	<i>Oc. excrucians</i>	N/S	
67	Westborough	6/20/2005	CM05NS-00511	1	Rogers Rd.	2	<i>An. quadrimaculatus sl</i>	N/S	
68	Westborough	6/20/2005	CM05NS-00512	1	Rogers Rd.	5	<i>Oc. canadensis</i>	N/S	
69	Westborough	6/20/2005	CM05NS-00513	1	Rogers Rd.	1	<i>Oc. excrucians</i>	N/S	
70	Westborough	6/20/2005	CM05NS-00514	1	Rogers Rd.	17	<i>Cq. perturbans</i>	N/S	
71	Westborough	6/20/2005	CM05NS-00515	1	Rogers Rd.	5	<i>Oc. aurifer</i>	N/S	
72	Westborough	6/21/2005	CM05-00056	1	Hopkinton Rd.	22	<i>Cs. melanura</i>	Negative	
73	Westborough	6/21/2005	CM05-00070	1	Rogers Rd.	2	<i>Cs. melanura</i>	Negative	
74	Westborough	6/21/2005	CM05-00086	1	Hopkinton Rd.	1	<i>Cs. morsitans</i>	Negative	
75	Westborough	6/21/2005	CM05-00087	1	Hopkinton Rd.	1	<i>Cs. melanura</i>	Negative	
76	Westborough	6/21/2005	CM05-00091	1	Hopkinton Rd.	2	<i>Cs. melanura</i>	Negative	

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77	Westborough	6/21/2005	CM05-00092	1	Hopkinton Rd.	1	<i>Cs. minnesotae</i>	Negative	
78	Westborough	6/21/2005	CM05NS-00220	1	Rogers Rd.	3	<i>Ae. cinereus</i>	N/S	
79	Westborough	6/21/2005	CM05NS-00221	1	Rogers Rd.	2	<i>Ae. vexans</i>	N/S	
80	Westborough	6/21/2005	CM05NS-00222	1	Rogers Rd.	3	<i>Oc. canadensis</i>	N/S	
81	Westborough	6/21/2005	CM05NS-00223	1	Rogers Rd.	6	<i>Oc. excrucians</i>	N/S	
82	Westborough	6/21/2005	CM05NS-00224	1	Rogers Rd.	55	<i>Cq. perturbans</i>	N/S	
83	Westborough	6/21/2005	CM05NS-00415	1	Rogers Rd.	3	<i>Oc. cantator</i>	N/S	
84	Westborough	6/21/2005	CM05NS-00416	1	Rogers Rd.	24	<i>Oc. excrucians</i>	N/S	
85	Westborough	6/21/2005	CM05NS-00417	1	Rogers Rd.	4	<i>Oc. stimulans</i>	N/S	
86	Westborough	6/21/2005	CM05NS-00418	1	Rogers Rd.	49	<i>Oc. canadensis</i>	N/S	
87	Westborough	6/21/2005	CM05NS-00419	1	Rogers Rd.	296	<i>Cq. perturbans</i>	N/S	
88	Westborough	6/21/2005	CM05NS-00420	1	Rogers Rd.	1	<i>An. punctipennis</i>	N/S	
89	Westborough	6/21/2005	CM05NS-00421	1	Rogers Rd.	47	<i>Ae. cinereus</i>	N/S	
90	Westborough	6/21/2005	CM05NS-00422	1	Rogers Rd.	35	<i>Oc. aurifer</i>	N/S	
91	Westborough	6/21/2005	CM05NS-00423	1	Rogers Rd.	1	<i>Oc. fitchii</i>	N/S	
92	Westborough	6/21/2005	CM05NS-00424	1	Rogers Rd.	1	<i>Oc. abserratus</i>	N/S	
93	Westborough	6/22/2005	CM05NS-00242	1	Walkup Dr.	3	<i>An. punctipennis</i>	N/S	
94	Westborough	6/22/2005	CM05NS-00243	1	Walkup Dr.	52	<i>Cq. perturbans</i>	N/S	
95	Westborough	6/22/2005	CM05NS-00244	1	Walkup Dr.	15	<i>Ae. cinereus</i>	N/S	
96	Westborough	6/22/2005	CM05NS-00245	1	Walkup Dr.	1	<i>Oc. provocans</i>	N/S	
97	Westborough	6/22/2005	CM05NS-00246	1	Walkup Dr.	19	<i>Oc. abserratus</i>	N/S	
98	Westborough	6/22/2005	CM05NS-00247	1	Walkup Dr.	106	<i>Oc. canadensis</i>	N/S	
99	Westborough	6/22/2005	CM05NS-00248	1	Walkup Dr.	7	<i>Ae. vexans</i>	N/S	
100	Westborough	6/22/2005	CM05NS-00249	1	Walkup Dr.	120	<i>Oc. cantator</i>	N/S	
101	Westborough	6/22/2005	CM05NS-00250	1	Walkup Dr.	26	<i>Oc. excrucians</i>	N/S	
102	Westborough	6/23/2005	CM05NS-00403	1	Hopkinton Rd.	1	<i>Cs. melanura</i>	N/S	
103	Westborough	6/23/2005	CM05NS-00404	1	Hopkinton Rd.	1	<i>Ae. vexans</i>	N/S	
104	Westborough	6/23/2005	CM05NS-00405	1	Hopkinton Rd.	52	<i>Oc. cantator</i>	N/S	
105	Westborough	6/23/2005	CM05NS-00406	1	Hopkinton Rd.	63	<i>Oc. excrucians</i>	N/S	
106	Westborough	6/23/2005	CM05NS-00407	1	Hopkinton Rd.	1	<i>An. quadrimaculatus sl</i>	N/S	
107	Westborough	6/23/2005	CM05NS-00408	1	Hopkinton Rd.	510	<i>Oc. canadensis</i>	N/S	
108	Westborough	6/23/2005	CM05NS-00409	1	Hopkinton Rd.	291	<i>Cq. perturbans</i>	N/S	
109	Westborough	6/23/2005	CM05NS-00410	1	Hopkinton Rd.	69	<i>Ae. cinereus</i>	N/S	
110	Westborough	6/23/2005	CM05NS-00411	1	Hopkinton Rd.	10	<i>Oc. abserratus</i>	N/S	
111	Westborough	6/23/2005	CM05NS-00412	1	Hopkinton Rd.	11	<i>Oc. aurifer</i>	N/S	
112	Westborough	6/23/2005	CM05NS-00413	1	Hopkinton Rd.	6	<i>An. punctipennis</i>	N/S	
113	Westborough	6/23/2005	CM05NS-00414	1	Hopkinton Rd.	9	<i>Oc. stimulans</i>	N/S	
114	Westborough	6/27/2005	CM05NS-00314	2	Hadley Ln.	1	<i>Ae. cinereus</i>	N/S	

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#	Town	Date	Pool ID	# Traps	Trap Site	Pool Size	Species	Result	Virus Type
115	Westborough	6/27/2005	CM05NS-00315	2	Hadley Ln.	1	<i>Oc. excrucians</i>	N/S	
116	Westborough	6/27/2005	CM05NS-00425	1	Rogers Rd.	2	<i>Oc. excrucians</i>	N/S	
117	Westborough	6/27/2005	CM05NS-00426	1	Rogers Rd.	1	<i>Oc. aurifer</i>	N/S	
118	Westborough	6/27/2005	CM05NS-00427	1	Rogers Rd.	1	<i>An. quadrimaculatus sl</i>	N/S	
119	Westborough	6/27/2005	CM05NS-00428	1	Rogers Rd.	1	<i>Oc. canadensis</i>	N/S	
120	Westborough	6/27/2005	CM05NS-00429	1	Rogers Rd.	50	<i>Cq. perturbans</i>	N/S	
121	Westborough	6/27/2005	CM05NS-00430	1	Rogers Rd.	7	<i>An. quadrimaculatus sl</i>	N/S	
122	Westborough	6/27/2005	CM05NS-00431	1	Rogers Rd.	11	<i>An. punctipennis</i>	N/S	
123	Westborough	6/27/2005	CM05NS-00432	1	Rogers Rd.	12	<i>Ae. cinereus</i>	N/S	
124	Westborough	6/27/2005	CM05NS-00433	1	Rogers Rd.	13	<i>Oc. aurifer</i>	N/S	
125	Westborough	6/27/2005	CM05NS-00434	1	Rogers Rd.	731	<i>Cq. perturbans</i>	N/S	
126	Westborough	6/27/2005	CM05NS-00435	1	Rogers Rd.	38	<i>Oc. canadensis</i>	N/S	
127	Westborough	6/27/2005	CM05NS-00436	1	Rogers Rd.	2	<i>Oc. cantator</i>	N/S	
128	Westborough	6/27/2005	CM05NS-00437	1	Rogers Rd.	5	<i>Oc. stimulans</i>	N/S	
129	Westborough	6/27/2005	CM05NS-00438	1	Rogers Rd.	3	<i>Ae. vexans</i>	N/S	
130	Westborough	6/27/2005	CM05NS-00439	1	Rogers Rd.	5	<i>Oc. excrucians</i>	N/S	
131	Westborough	6/27/2005	CM05NS-00630	1	Walkup Dr.	1000	<i>Cq. perturbans</i>	N/S	
132	Westborough	6/27/2005	CM05NS-00631	1	Walkup Dr.	50	<i>Oc. canadensis</i>	N/S	
133	Westborough	6/27/2005	CM05NS-00632	1	Walkup Dr.	2	<i>Oc. excrucians</i>	N/S	
134	Westborough	6/27/2005	CM05NS-00633	1	Walkup Dr.	1	<i>Cx. salinarius</i>	N/S	
135	Westborough	6/28/2005	CM05-00142	1	Rogers Rd.	11	<i>Cs. melanura</i>	Negative	
136	Westborough	6/28/2005	CM05-00143	1	Rogers Rd.	1	<i>Cx. species</i>	Negative	
137	Westborough	6/28/2005	CM05-00154	1	Walkup Dr.	1	<i>Cx. species</i>	Negative	
138	Westborough	6/28/2005	CM05NS-00347	1	Hopkinton Rd.	6	<i>Oc. canadensis</i>	N/S	
139	Westborough	6/28/2005	CM05NS-00348	1	Hopkinton Rd.	102	<i>Cq. perturbans</i>	N/S	
140	Westborough	6/28/2005	CM05NS-00349	1	Hopkinton Rd.	1	<i>Oc. aurifer</i>	N/S	
141	Westborough	6/28/2005	CM05NS-00350	1	Hopkinton Rd.	1	<i>Ae. cinereus</i>	N/S	
142	Westborough	6/28/2005	CM05NS-00804	1	Hopkinton Rd.	9	<i>Ae. cinereus</i>	N/S	
143	Westborough	6/28/2005	CM05NS-00805	1	Hopkinton Rd.	6	<i>Oc. aurifer</i>	N/S	
144	Westborough	6/28/2005	CM05NS-00806	1	Hopkinton Rd.	335	<i>Cq. perturbans</i>	N/S	
145	Westborough	6/28/2005	CM05NS-00807	1	Hopkinton Rd.	238	<i>Oc. canadensis</i>	N/S	
146	Westborough	6/28/2005	CM05NS-00808	1	Hopkinton Rd.	7	<i>Oc. cantator</i>	N/S	
147	Westborough	6/28/2005	CM05NS-00809	1	Hopkinton Rd.	27	<i>Oc. excrucians</i>	N/S	
148	Westborough	6/28/2005	CM05NS-00810	1	Hopkinton Rd.	1	<i>Ae. vexans</i>	N/S	
149	Westborough	6/28/2005	CM05NS-00811	1	Hopkinton Rd.	1	<i>An. quadrimaculatus sl</i>	N/S	
150	Westborough	6/28/2005	CM05NS-00812	1	Hopkinton Rd.	1	<i>Oc. abserratus</i>	N/S	
151	Westborough	6/30/2005	CM05NS-00485	1	Rogers Rd.	1	<i>An. punctipennis</i>	N/S	
152	Westborough	6/30/2005	CM05NS-00486	1	Rogers Rd.	4	<i>Oc. canadensis</i>	N/S	

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153	Westborough	6/30/2005	CM05NS-00487	1	Rogers Rd.	335	<i>Cq. perturbans</i>	N/S	
154	Westborough	6/30/2005	CM05NS-00488	1	Rogers Rd.	1	<i>Oc. aurifer</i>	N/S	
155	Westborough	6/30/2005	CM05NS-00642	1	Hopkinton Rd.	1500	<i>Cq. perturbans</i>	N/S	
156	Westborough	6/30/2005	CM05NS-00643	1	Hopkinton Rd.	2	<i>Oc. excrucians</i>	N/S	
157	Westborough	6/30/2005	CM05NS-01244	1	Rogers Rd.	1907	<i>Cq. perturbans</i>	N/S	
158	Westborough	6/30/2005	CM05NS-01245	1	Rogers Rd.	80	<i>Oc. canadensis</i>	N/S	
159	Westborough	6/30/2005	CM05NS-01246	1	Rogers Rd.	45	<i>An. quadrimaculatus sl</i>	N/S	
160	Westborough	6/30/2005	CM05NS-01247	1	Rogers Rd.	14	<i>Oc. abserratus</i>	N/S	
161	Westborough	6/30/2005	CM05NS-01248	1	Rogers Rd.	4	<i>Ae. cinereus</i>	N/S	
162	Westborough	6/30/2005	CM05NS-01249	1	Rogers Rd.	22	<i>An. punctipennis</i>	N/S	
163	Westborough	6/30/2005	CM05NS-01250	1	Rogers Rd.	4	<i>Cx. species</i>	N/S	
164	Westborough	6/30/2005	CM05NS-01251	1	Rogers Rd.	1	<i>Oc. cantator</i>	N/S	
165	Westborough	6/30/2005	CM05NS-01252	1	Rogers Rd.	2	<i>Oc. stimulans</i>	N/S	
166	Westborough	6/30/2005	CM05NS-01253	1	Rogers Rd.	1	<i>Oc. fitchii</i>	N/S	
167	Westborough	6/30/2005	CM05NS-01254	1	Rogers Rd.	4	<i>Oc. excrucians</i>	N/S	
168	Westborough	6/30/2005	CM05NS-01255	1	Rogers Rd.	7	<i>Cs. melanura</i>	N/S	
169	Westborough	6/30/2005	CM05NS-01256	1	Rogers Rd.	2	<i>Ae. vexans</i>	N/S	
170	Westborough	6/30/2005	CM05NS-01257	1	Rogers Rd.	3	<i>Oc. aurifer</i>	N/S	
171	Westborough	7/5/2005	CM05-00171	2	Hadley Ln.	27	<i>Oc. canadensis</i>	Negative	
172	Westborough	7/5/2005	CM05-00172	2	Hadley Ln.	41	<i>Cq. perturbans</i>	Negative	
173	Westborough	7/5/2005	CM05-00173	2	Hadley Ln.	1	<i>Cx. restuans</i>	Negative	
174	Westborough	7/5/2005	CM05-00176	1	Hopkinton Rd.	1	<i>Cs. melanura</i>	Negative	
175	Westborough	7/5/2005	CM05-00182	1	Hopkinton Rd.	6	<i>Cs. melanura</i>	Negative	
176	Westborough	7/5/2005	CM05-00188	1	Hopkinton Rd.	7	<i>Cs. melanura</i>	Negative	
177	Westborough	7/5/2005	CM05NS-00478	1	Hopkinton Rd.	3	<i>Oc. hendersoni</i>	N/S	
178	Westborough	7/5/2005	CM05NS-00479	1	Hopkinton Rd.	4	<i>Oc. canadensis</i>	N/S	
179	Westborough	7/5/2005	CM05NS-00480	1	Hopkinton Rd.	2	<i>Oc. cantator</i>	N/S	
180	Westborough	7/5/2005	CM05NS-00481	1	Hopkinton Rd.	1	<i>Oc. excrucians</i>	N/S	
181	Westborough	7/5/2005	CM05NS-00482	1	Hopkinton Rd.	1	<i>An. quadrimaculatus sl</i>	N/S	
182	Westborough	7/5/2005	CM05NS-00483	1	Hopkinton Rd.	1	<i>Oc. aurifer</i>	N/S	
183	Westborough	7/5/2005	CM05NS-00484	1	Hopkinton Rd.	127	<i>Cq. perturbans</i>	N/S	
184	Westborough	7/5/2005	CM05NS-00876	1	Hopkinton Rd.	6	<i>Oc. aurifer</i>	N/S	
185	Westborough	7/5/2005	CM05NS-00877	1	Hopkinton Rd.	1	<i>Oc. triseriatus</i>	N/S	
186	Westborough	7/5/2005	CM05NS-00878	1	Hopkinton Rd.	3	<i>Oc. trivittatus</i>	N/S	
187	Westborough	7/5/2005	CM05NS-00879	1	Hopkinton Rd.	20	<i>Ae. cinereus</i>	N/S	
188	Westborough	7/5/2005	CM05NS-00880	1	Hopkinton Rd.	359	<i>Oc. canadensis</i>	N/S	
189	Westborough	7/5/2005	CM05NS-00881	1	Hopkinton Rd.	19	<i>Oc. excrucians</i>	N/S	
190	Westborough	7/5/2005	CM05NS-00882	1	Hopkinton Rd.	1	<i>Ae. vexans</i>	N/S	

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191	Westborough	7/5/2005	CM05NS-00883	1	Hopkinton Rd.	1210	<i>Cq. perturbans</i>	N/S	
192	Westborough	7/5/2005	CM05NS-00884	1	Hopkinton Rd.	9	<i>An. punctipennis</i>	N/S	
193	Westborough	7/5/2005	CM05NS-00885	1	Hopkinton Rd.	8	<i>An. quadrimaculatus sl</i>	N/S	
194	Westborough	7/5/2005	CM05NS-00886	1	Hopkinton Rd.	11	<i>Oc. cantator</i>	N/S	
195	Westborough	7/7/2005	CM05NS-00489	1	Rogers Rd.	1	<i>An. punctipennis</i>	N/S	
196	Westborough	7/7/2005	CM05NS-00490	1	Rogers Rd.	1	<i>Oc. cantator</i>	N/S	
197	Westborough	7/7/2005	CM05NS-00491	1	Rogers Rd.	328	<i>Cq. perturbans</i>	N/S	
198	Westborough	7/7/2005	CM05NS-00492	1	Rogers Rd.	1	<i>Oc. canadensis</i>	N/S	
199	Westborough	7/7/2005	CM05NS-00493	1	Rogers Rd.	1	<i>An. quadrimaculatus sl</i>	N/S	
200	Westborough	7/7/2005	CM05NS-00627	1	Hopkinton Rd.	1	<i>Oc. excrucians</i>	N/S	
201	Westborough	7/7/2005	CM05NS-00628	1	Hopkinton Rd.	1	<i>Oc. canadensis</i>	N/S	
202	Westborough	7/7/2005	CM05NS-00629	1	Hopkinton Rd.	1000	<i>Cq. perturbans</i>	N/S	
203	Westborough	7/7/2005	CM05NS-00664	1	Walkup Dr.	1	<i>Cx. salinarius</i>	N/S	
204	Westborough	7/7/2005	CM05NS-00665	1	Walkup Dr.	150	<i>Cq. perturbans</i>	N/S	
205	Westborough	7/7/2005	CM05NS-00666	1	Walkup Dr.	4	<i>Oc. canadensis</i>	N/S	
206	Westborough	7/7/2005	CM05NS-00667	1	Walkup Dr.	2	<i>Oc. excrucians</i>	N/S	
207	Westborough	7/11/2005	CM05NS-00449	1	Hopkinton Rd.	1	<i>An. punctipennis</i>	N/S	
208	Westborough	7/11/2005	CM05NS-00450	1	Hopkinton Rd.	2	<i>Ae. cinereus</i>	N/S	
209	Westborough	7/11/2005	CM05NS-00451	1	Hopkinton Rd.	3	<i>Oc. hendersoni</i>	N/S	
210	Westborough	7/11/2005	CM05NS-00452	1	Hopkinton Rd.	1	<i>Oc. aurifer</i>	N/S	
211	Westborough	7/11/2005	CM05NS-00453	1	Hopkinton Rd.	128	<i>Cq. perturbans</i>	N/S	
212	Westborough	7/11/2005	CM05NS-00454	1	Hopkinton Rd.	4	<i>Oc. canadensis</i>	N/S	
213	Westborough	7/11/2005	CM05NS-00455	1	Hopkinton Rd.	1	<i>Oc. cantator</i>	N/S	
214	Westborough	7/11/2005	CM05NS-00456	1	Hopkinton Rd.	2	<i>Oc. excrucians</i>	N/S	
215	Westborough	7/11/2005	CM05NS-00457	1	Hopkinton Rd.	1	<i>Oc. stimulans</i>	N/S	
216	Westborough	7/13/2005	CM05-00215	1	Hopkinton Rd.	13	<i>Cs. morsitans</i>	Negative	
217	Westborough	7/13/2005	CM05-00216	1	Hopkinton Rd.	49	<i>Cs. melanura</i>	Negative	
218	Westborough	7/13/2005	CM05-00217	1	Hopkinton Rd.	1	<i>Cs. morsitans</i>	Negative	
219	Westborough	7/13/2005	CM05-00218	1	Hopkinton Rd.	4	<i>Cs. melanura</i>	Negative	
220	Westborough	7/13/2005	CM05-00226	1	Hopkinton Rd.	16	<i>Cs. melanura</i>	Negative	
221	Westborough	7/13/2005	CM05-00233	1	Walkup Dr.	2	<i>Cs. melanura</i>	Negative	
222	Westborough	7/13/2005	CM05-00234	1	Walkup Dr.	2	<i>Cs. morsitans</i>	Negative	
223	Westborough	7/14/2005	CM05NS-00559	1	Hopkinton Rd.	1	<i>Oc. hendersoni</i>	N/S	
224	Westborough	7/14/2005	CM05NS-00560	1	Hopkinton Rd.	3	<i>Oc. canadensis</i>	N/S	
225	Westborough	7/14/2005	CM05NS-00561	1	Hopkinton Rd.	1	<i>An. barberi</i>	N/S	
226	Westborough	7/14/2005	CM05NS-00562	1	Hopkinton Rd.	1	<i>Oc. sticticus</i>	N/S	
227	Westborough	7/14/2005	CM05NS-00563	1	Hopkinton Rd.	101	<i>Cq. perturbans</i>	N/S	
228	Westborough	7/14/2005	CM05NS-00735	1	Walkup Dr.	22	<i>Oc. canadensis</i>	N/S	

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#	Town	Date	Pool ID	# Traps	Trap Site	Pool Size	Species	Result	Virus Type
229	Westborough	7/14/2005	CM05NS-00736	1	Walkup Dr.	3	<i>Oc. excrucians</i>	N/S	
230	Westborough	7/14/2005	CM05NS-00737	1	Walkup Dr.	2	<i>Ae. cinereus</i>	N/S	
231	Westborough	7/14/2005	CM05NS-00738	1	Walkup Dr.	631	<i>Cq. perturbans</i>	N/S	
232	Westborough	7/14/2005	CM05NS-00739	1	Walkup Dr.	4	<i>An. punctipennis</i>	N/S	
233	Westborough	7/14/2005	CM05NS-00740	1	Walkup Dr.	7	<i>Oc. cantator</i>	N/S	
234	Westborough	7/14/2005	CM05NS-00741	1	Walkup Dr.	1	<i>Oc. fitchii</i>	N/S	
235	Westborough	7/19/2005	CM05-00259	1	Rogers Rd.	1	<i>Cs. melanura</i>	Negative	
236	Westborough	7/19/2005	CM05-00260	1	Rogers Rd.	4	<i>Cx. species</i>	Negative	
237	Westborough	7/19/2005	CM05-00261	1	Rogers Rd.	10	<i>Cs. melanura</i>	Negative	
238	Westborough	7/19/2005	CM05-00262	1	Rogers Rd.	1	<i>Cs. morsitans</i>	Negative	
239	Westborough	7/19/2005	CM05-00263	1	Rogers Rd.	6	<i>Cs. melanura</i>	Negative	
240	Westborough	7/19/2005	CM05-00266	1	Hopkinton Rd.	25	<i>Cs. melanura</i>	Negative	
241	Westborough	7/19/2005	CM05-00267	1	Hopkinton Rd.	1	<i>Cs. morsitans</i>	Negative	
242	Westborough	7/19/2005	CM05-00268	1	Hopkinton Rd.	1	<i>Cx. salinarius</i>	Negative	
243	Westborough	7/19/2005	CM05-00269	1	Hopkinton Rd.	2	<i>Cx. species</i>	Negative	
244	Westborough	7/19/2005	CM05-00270	1	Hopkinton Rd.	2	<i>Cx. pipiens</i>	Negative	
245	Westborough	7/19/2005	CM05-00279	1	Hopkinton Rd.	8	<i>Cs. melanura</i>	Negative	
246	Westborough	7/19/2005	CM05-00280	1	Hopkinton Rd.	2	<i>Cx. restuans</i>	Negative	
247	Westborough	7/19/2005	CM05-00281	1	Rogers Rd.	11	<i>Cs. melanura</i>	Negative	
248	Westborough	7/19/2005	CM05-00282	1	Rogers Rd.	1	<i>Cs. morsitans</i>	Negative	
249	Westborough	7/19/2005	CM05-00283	1	Rogers Rd.	2	<i>Cs. melanura</i>	Negative	
250	Westborough	7/19/2005	CM05-00284	1	Rogers Rd.	3	<i>Cx. species</i>	Negative	
251	Westborough	7/19/2005	CM05-00285	1	Rogers Rd.	4	<i>Cs. melanura</i>	Negative	
252	Westborough	7/19/2005	CM05-00326	1	Hopkinton Rd.	1	<i>Cs. morsitans</i>	Negative	
253	Westborough	7/19/2005	CM05-00327	1	Hopkinton Rd.	9	<i>Cx. species</i>	Negative	
254	Westborough	7/19/2005	CM05-00328	1	Hopkinton Rd.	38	<i>Cs. melanura</i>	Negative	
255	Westborough	7/19/2005	CM05NS-00816	1	Rogers Rd.	4	<i>Ae. vexans</i>	N/S	
256	Westborough	7/19/2005	CM05NS-00817	1	Rogers Rd.	4	<i>Oc. canadensis</i>	N/S	
257	Westborough	7/19/2005	CM05NS-00818	1	Rogers Rd.	136	<i>Cq. perturbans</i>	N/S	
258	Westborough	7/19/2005	CM05NS-00819	1	Rogers Rd.	1	<i>An. quadrimaculatus sl</i>	N/S	
259	Westborough	7/19/2005	CM05NS-00820	1	Rogers Rd.	1	<i>Ae. cinereus</i>	N/S	
260	Westborough	7/19/2005	CM05NS-00821	1	Rogers Rd.	1	<i>Oc. cantator</i>	N/S	
261	Westborough	7/19/2005	CM05NS-00822	1	Rogers Rd.	5	<i>Oc. triseriatus</i>	N/S	
262	Westborough	7/19/2005	CM05NS-00823	1	Rogers Rd.	5	<i>Oc. sticticus</i>	N/S	
263	Westborough	7/19/2005	CM05NS-00824	1	Rogers Rd.	56	<i>Oc. trivittatus</i>	N/S	
264	Westborough	7/21/2005	CM05NS-00894	1	Hopkinton Rd.	2	<i>Cx. territans</i>	N/S	
265	Westborough	7/21/2005	CM05NS-00978	1	Hopkinton Rd.	4	<i>An. punctipennis</i>	N/S	
266	Westborough	7/21/2005	CM05NS-00979	1	Hopkinton Rd.	8	<i>Ae. vexans</i>	N/S	

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#	Town	Date	Pool ID	# Traps	Trap Site	Pool Size	Species	Result	Virus Type
267	Westborough	7/21/2005	CM05NS-00980	1	Hopkinton Rd.	3	<i>Oc. canadensis</i>	N/S	
268	Westborough	7/21/2005	CM05NS-00981	1	Hopkinton Rd.	6	<i>Ae. cinereus</i>	N/S	
269	Westborough	7/21/2005	CM05NS-00982	1	Hopkinton Rd.	8	<i>Ps. ferox</i>	N/S	
270	Westborough	7/21/2005	CM05NS-00983	1	Hopkinton Rd.	3	<i>An. quadrimaculatus sl</i>	N/S	
271	Westborough	7/21/2005	CM05NS-00984	1	Hopkinton Rd.	1	<i>Oc. cantator</i>	N/S	
272	Westborough	7/21/2005	CM05NS-00985	1	Hopkinton Rd.	5	<i>Oc. trivittatus</i>	N/S	
273	Westborough	7/21/2005	CM05NS-00986	1	Hopkinton Rd.	489	<i>Cq. perturbans</i>	N/S	
274	Westborough	7/26/2005	CM05-00339	1	Walkup Dr.	3	<i>Cs. melanura</i>	Negative	
275	Westborough	7/26/2005	CM05-00340	1	Walkup Dr.	1	<i>Cx. species</i>	Negative	
276	Westborough	7/26/2005	CM05-00373	1	Hopkinton Rd.	2	<i>Cx. species</i>	Negative	
277	Westborough	7/26/2005	CM05-00374	1	Hopkinton Rd.	3	<i>Cs. melanura</i>	Negative	
278	Westborough	7/26/2005	CM05-00379	1	Rogers Rd.	1	<i>Cx. species</i>	Negative	
279	Westborough	7/26/2005	CM05-00380	1	Rogers Rd.	15	<i>Cs. melanura</i>	Negative	
280	Westborough	7/26/2005	CM05-00381	1	Rogers Rd.	35	<i>Ps. ferox</i>	Negative	
281	Westborough	7/26/2005	CM05-00382	1	Rogers Rd.	1	<i>Cs. minnesotae</i>	Negative	
282	Westborough	7/26/2005	CM05NS-01060	1	Hopkinton Rd.	187	<i>Cq. perturbans</i>	N/S	
283	Westborough	7/26/2005	CM05NS-01061	1	Hopkinton Rd.	2	<i>An. punctipennis</i>	N/S	
284	Westborough	7/26/2005	CM05NS-01062	1	Hopkinton Rd.	2	<i>An. quadrimaculatus sl</i>	N/S	
285	Westborough	7/26/2005	CM05NS-01063	1	Hopkinton Rd.	1	<i>Ae. vexans</i>	N/S	
286	Westborough	7/26/2005	CM05NS-01064	1	Hopkinton Rd.	1	<i>Oc. triseriatus</i>	N/S	
287	Westborough	7/26/2005	CM05NS-01240	1	Hopkinton Rd.	1	<i>Oc. excrucians</i>	N/S	
288	Westborough	7/27/2005	CM05NS-01032	1	Rogers Rd.	9	<i>Oc. canadensis</i>	N/S	
289	Westborough	7/27/2005	CM05NS-01033	1	Rogers Rd.	6	<i>Oc. trivittatus</i>	N/S	
290	Westborough	7/27/2005	CM05NS-01034	1	Rogers Rd.	1	<i>Ps. ferox</i>	N/S	
291	Westborough	7/27/2005	CM05NS-01035	1	Rogers Rd.	2	<i>Ae. cinereus</i>	N/S	
292	Westborough	7/27/2005	CM05NS-01036	1	Rogers Rd.	3	<i>An. quadrimaculatus sl</i>	N/S	
293	Westborough	7/27/2005	CM05NS-01037	1	Rogers Rd.	17	<i>Cq. perturbans</i>	N/S	
294	Westborough	7/27/2005	CM05NS-01204	1	Rogers Rd.	331	<i>Cq. perturbans</i>	N/S	
295	Westborough	7/27/2005	CM05NS-01205	1	Rogers Rd.	36	<i>Oc. canadensis</i>	N/S	
296	Westborough	7/27/2005	CM05NS-01206	1	Rogers Rd.	4	<i>Ae. vexans</i>	N/S	
297	Westborough	7/27/2005	CM05NS-01207	1	Rogers Rd.	2	<i>Oc. cantator</i>	N/S	
298	Westborough	7/27/2005	CM05NS-01208	1	Rogers Rd.	1	<i>Oc. triseriatus</i>	N/S	
299	Westborough	7/27/2005	CM05NS-01209	1	Rogers Rd.	3	<i>Ae. cinereus</i>	N/S	
300	Westborough	7/27/2005	CM05NS-01210	1	Rogers Rd.	1	<i>An. punctipennis</i>	N/S	
301	Westborough	7/27/2005	CM05NS-01211	1	Rogers Rd.	29	<i>An. quadrimaculatus sl</i>	N/S	
302	Westborough	7/27/2005	CM05NS-01212	1	Rogers Rd.	1	<i>Oc. sticticus</i>	N/S	
303	Westborough	7/27/2005	CM05NS-01213	1	Rogers Rd.	11	<i>Ps. ferox</i>	N/S	
304	Westborough	7/27/2005	CM05NS-01214	1	Rogers Rd.	12	<i>Oc. trivittatus</i>	N/S	

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305	Westborough	7/28/2005	CM05NS-01088	1	Hopkinton Rd.	1	<i>An. quadrimaculatus sl</i>	N/S	
306	Westborough	7/28/2005	CM05NS-01089	1	Hopkinton Rd.	2	<i>Oc. canadensis</i>	N/S	
307	Westborough	7/28/2005	CM05NS-01166	1	Hopkinton Rd.	35	<i>Oc. canadensis</i>	N/S	
308	Westborough	7/28/2005	CM05NS-01167	1	Hopkinton Rd.	10	<i>Ae. vexans</i>	N/S	
309	Westborough	7/28/2005	CM05NS-01168	1	Hopkinton Rd.	280	<i>Cq. perturbans</i>	N/S	
310	Westborough	7/28/2005	CM05NS-01169	1	Hopkinton Rd.	16	<i>An. punctipennis</i>	N/S	
311	Westborough	7/28/2005	CM05NS-01170	1	Hopkinton Rd.	21	<i>An. quadrimaculatus sl</i>	N/S	
312	Westborough	7/28/2005	CM05NS-01171	1	Hopkinton Rd.	2	<i>Oc. triseriatus</i>	N/S	
313	Westborough	7/28/2005	CM05NS-01172	1	Hopkinton Rd.	7	<i>Ae. cinereus</i>	N/S	
314	Westborough	7/28/2005	CM05NS-01173	1	Hopkinton Rd.	1	<i>Oc. excrucians</i>	N/S	
315	Westborough	7/28/2005	CM05NS-01174	1	Hopkinton Rd.	1	<i>Oc. stimulans</i>	N/S	
316	Westborough	7/28/2005	CM05NS-01175	1	Hopkinton Rd.	1	<i>Ps. ferox</i>	N/S	
317	Westborough	8/2/2005	CM05-00407	1	Hopkinton Rd.	1	<i>Cx. species</i>	Negative	
318	Westborough	8/2/2005	CM05-00408	1	Hopkinton Rd.	1	<i>Cs. melanura</i>	Negative	
319	Westborough	8/2/2005	CM05-00410	1	Hopkinton Rd.	1	<i>Cs. minnesotae</i>	Negative	
320	Westborough	8/2/2005	CM05-00414	1	Hopkinton Rd.	10	<i>Cq. perturbans</i>	Negative	
321	Westborough	8/2/2005	CM05-00415	1	Hopkinton Rd.	2	<i>An. quadrimaculatus sl</i>	Negative	
322	Westborough	8/2/2005	CM05-00447	1	Hopkinton Rd.	3	<i>Cx. species</i>	Negative	
323	Westborough	8/2/2005	CM05-00448	1	Hopkinton Rd.	12	<i>Cs. melanura</i>	Negative	
324	Westborough	8/2/2005	CM05NS-01303	1	Hopkinton Rd.	1	<i>Oc. canadensis</i>	N/S	
325	Westborough	8/2/2005	CM05NS-01304	1	Hopkinton Rd.	1	<i>Oc. stimulans</i>	N/S	
326	Westborough	8/2/2005	CM05NS-01305	1	Hopkinton Rd.	1	<i>Oc. cantator</i>	N/S	
327	Westborough	8/2/2005	CM05NS-01306	1	Hopkinton Rd.	27	<i>Ae. cinereus</i>	N/S	
328	Westborough	8/2/2005	CM05NS-01307	1	Hopkinton Rd.	40	<i>Ur. sapphirina</i>	N/S	
329	Westborough	8/2/2005	CM05NS-01308	1	Hopkinton Rd.	1	<i>Cq. perturbans</i>	N/S	
330	Westborough	8/9/2005	CM05-00473	1	Rogers Rd.	1	<i>Cx. salinarius</i>	Negative	
331	Westborough	8/9/2005	CM05-00495	1	Hopkinton Rd.	10	<i>Cx. restuans</i>	Negative	
332	Westborough	8/15/2005	CM05NS-01436	1	Rogers Rd.	3	<i>Oc. cantator</i>	N/S	
333	Westborough	8/15/2005	CM05NS-01437	1	Rogers Rd.	44	<i>Oc. canadensis</i>	N/S	
334	Westborough	8/15/2005	CM05NS-01438	1	Rogers Rd.	6	<i>Ps. ferox</i>	N/S	
335	Westborough	8/15/2005	CM05NS-01439	1	Rogers Rd.	4	<i>Oc. trivittatus</i>	N/S	
336	Westborough	8/15/2005	CM05NS-01440	1	Rogers Rd.	1	<i>Ae. vexans</i>	N/S	
337	Westborough	8/15/2005	CM05NS-01441	1	Rogers Rd.	36	<i>Cq. perturbans</i>	N/S	
338	Westborough	8/15/2005	CM05NS-01442	1	Rogers Rd.	5	<i>An. punctipennis</i>	N/S	
339	Westborough	8/15/2005	CM05NS-01443	1	Rogers Rd.	7	<i>An. quadrimaculatus sl</i>	N/S	
340	Westborough	8/15/2005	CM05NS-01444	1	Rogers Rd.	1	<i>Cs. morsitans</i>	N/S	
341	Westborough	8/15/2005	CM05NS-01445	1	Rogers Rd.	1	<i>Oc. excrucians</i>	N/S	
342	Westborough	8/15/2005	CM05NS-01446	1	Rogers Rd.	3	<i>Oc. trivittatus</i>	N/S	

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#	Town	Date	Pool ID	# Traps	Trap Site	Pool Size	Species	Result	Virus Type
343	Westborough	8/15/2005	CM05NS-01447	1	Rogers Rd.	5	<i>Oc. cantator</i>	N/S	
344	Westborough	8/15/2005	CM05NS-01448	1	Rogers Rd.	10	<i>Ps. ferox</i>	N/S	
345	Westborough	8/15/2005	CM05NS-01449	1	Rogers Rd.	24	<i>Ae. cinereus</i>	N/S	
346	Westborough	8/15/2005	CM05NS-01450	1	Rogers Rd.	34	<i>An. quadrimaculatus sl</i>	N/S	
347	Westborough	8/15/2005	CM05NS-01451	1	Rogers Rd.	26	<i>An. punctipennis</i>	N/S	
348	Westborough	8/15/2005	CM05NS-01452	1	Rogers Rd.	42	<i>Cq. perturbans</i>	N/S	
349	Westborough	8/15/2005	CM05NS-01453	1	Rogers Rd.	178	<i>Oc. canadensis</i>	N/S	
350	Westborough	8/15/2005	CM05NS-01454	1	Rogers Rd.	1	<i>Ae. vexans</i>	N/S	
351	Westborough	8/16/2005	CM05-00545	1	Hopkinton Rd.	4	<i>Cs. melanura</i>	Negative	
352	Westborough	8/16/2005	CM05-00546	1	Hopkinton Rd.	6	<i>Cx. species</i>	Negative	
353	Westborough	8/16/2005	CM05-00547	1	Hopkinton Rd.	2	<i>Cs. morsitans</i>	Negative	
354	Westborough	8/16/2005	CM05-00568	1	Rogers Rd.	47	<i>Cs. melanura</i>	Negative	
355	Westborough	8/16/2005	CM05-00569	1	Rogers Rd.	3	<i>Cs. morsitans</i>	Negative	
356	Westborough	8/16/2005	CM05-00570	1	Rogers Rd.	12	<i>Cx. species</i>	Negative	
357	Westborough	8/16/2005	CM05-00576	1	Hopkinton Rd.	1	<i>Cs. melanura</i>	Negative	
358	Westborough	8/16/2005	CM05NS-01455	1	Hopkinton Rd.	1	<i>Ps. ferox</i>	N/S	
359	Westborough	8/16/2005	CM05NS-01456	1	Hopkinton Rd.	1	<i>Cs. morsitans</i>	N/S	
360	Westborough	8/16/2005	CM05NS-01457	1	Hopkinton Rd.	5	<i>An. quadrimaculatus sl</i>	N/S	
361	Westborough	8/16/2005	CM05NS-01458	1	Hopkinton Rd.	17	<i>An. punctipennis</i>	N/S	
362	Westborough	8/16/2005	CM05NS-01459	1	Hopkinton Rd.	2	<i>Oc. cantator</i>	N/S	
363	Westborough	8/16/2005	CM05NS-01460	1	Hopkinton Rd.	11	<i>Oc. canadensis</i>	N/S	
364	Westborough	8/16/2005	CM05NS-01461	1	Hopkinton Rd.	78	<i>Cq. perturbans</i>	N/S	
365	Westborough	8/16/2005	CM05NS-01462	1	Hopkinton Rd.	1	<i>Ae. cinereus</i>	N/S	
366	Westborough	8/16/2005	CM05NS-01463	1	Hopkinton Rd.	1	<i>Oc. trivittatus</i>	N/S	
367	Westborough	8/16/2005	CM05NS-01464	1	Hopkinton Rd.	1	<i>Cq. perturbans</i>	N/S	
368	Westborough	8/16/2005	CM05NS-01465	1	Hopkinton Rd.	1	<i>An. quadrimaculatus sl</i>	N/S	
369	Westborough	8/16/2005	CM05NS-01466	1	Hopkinton Rd.	6	<i>Ae. cinereus</i>	N/S	
370	Westborough	8/16/2005	CM05NS-01467	1	Hopkinton Rd.	4	<i>Oc. trivittatus</i>	N/S	
371	Westborough	8/16/2005	CM05NS-01468	1	Hopkinton Rd.	29	<i>Oc. canadensis</i>	N/S	
372	Westborough	8/16/2005	CM05NS-01469	1	Hopkinton Rd.	3	<i>Cq. perturbans</i>	N/S	
373	Westborough	8/16/2005	CM05NS-01470	1	Hopkinton Rd.	2	<i>Oc. canadensis</i>	N/S	
374	Westborough	8/16/2005	CM05NS-01555	1	Hopkinton Rd.	1	<i>Cs. melanura</i>	N/S	
375	Westborough	8/16/2005	CM05NS-01556	1	Hopkinton Rd.	22	<i>Oc. trivittatus</i>	N/S	
376	Westborough	8/16/2005	CM05NS-01557	1	Hopkinton Rd.	9	<i>Ae. vexans</i>	N/S	
377	Westborough	8/16/2005	CM05NS-01558	1	Hopkinton Rd.	27	<i>Oc. cantator</i>	N/S	
378	Westborough	8/16/2005	CM05NS-01559	1	Hopkinton Rd.	19	<i>Ps. ferox</i>	N/S	
379	Westborough	8/16/2005	CM05NS-01560	1	Hopkinton Rd.	4	<i>Oc. triseriatus</i>	N/S	
380	Westborough	8/16/2005	CM05NS-01561	1	Hopkinton Rd.	112	<i>Ae. cinereus</i>	N/S	

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381	Westborough	8/16/2005	CM05NS-01562	1	Hopkinton Rd.	11	<i>An. quadrimaculatus sl</i>	N/S	
382	Westborough	8/16/2005	CM05NS-01563	1	Hopkinton Rd.	5	<i>An. punctipennis</i>	N/S	
383	Westborough	8/16/2005	CM05NS-01564	1	Hopkinton Rd.	65	<i>Cq. perturbans</i>	N/S	
384	Westborough	8/16/2005	CM05NS-01565	1	Hopkinton Rd.	897	<i>Oc. canadensis</i>	N/S	
385	Westborough	8/18/2005	CM05NS-01544	2	Hopkinton Rd.	2	<i>Oc. trivittatus</i>	N/S	
386	Westborough	8/18/2005	CM05NS-01545	2	Hopkinton Rd.	7	<i>Ps. ferox</i>	N/S	
387	Westborough	8/18/2005	CM05NS-01546	2	Hopkinton Rd.	1	<i>Oc. cantator</i>	N/S	
388	Westborough	8/18/2005	CM05NS-01547	2	Hopkinton Rd.	15	<i>Oc. canadensis</i>	N/S	
389	Westborough	8/18/2005	CM05NS-01548	2	Hopkinton Rd.	6	<i>Ae. vexans</i>	N/S	
390	Westborough	8/18/2005	CM05NS-01549	2	Hopkinton Rd.	54	<i>Cq. perturbans</i>	N/S	
391	Westborough	8/18/2005	CM05NS-01550	2	Hopkinton Rd.	21	<i>An. punctipennis</i>	N/S	
392	Westborough	8/18/2005	CM05NS-01551	2	Hopkinton Rd.	13	<i>An. quadrimaculatus sl</i>	N/S	
393	Westborough	8/18/2005	CM05NS-01552	2	Hopkinton Rd.	8	<i>Ae. cinereus</i>	N/S	
394	Westborough	8/18/2005	CM05NS-01553	2	Hopkinton Rd.	1	<i>Oc. japonicus</i>	N/S	
395	Westborough	8/18/2005	CM05NS-01554	2	Hopkinton Rd.	2	<i>Oc. triseriatus</i>	N/S	
396	Westborough	8/18/2005	CM05NS-01567	1	Rogers Rd.	26	<i>Ps. ferox</i>	N/S	
397	Westborough	8/18/2005	CM05NS-01568	1	Rogers Rd.	1	<i>Oc. triseriatus</i>	N/S	
398	Westborough	8/18/2005	CM05NS-01569	1	Rogers Rd.	35	<i>Ae. cinereus</i>	N/S	
399	Westborough	8/18/2005	CM05NS-01570	1	Rogers Rd.	22	<i>An. quadrimaculatus sl</i>	N/S	
400	Westborough	8/18/2005	CM05NS-01571	1	Rogers Rd.	6	<i>An. punctipennis</i>	N/S	
401	Westborough	8/18/2005	CM05NS-01572	1	Rogers Rd.	11	<i>Cq. perturbans</i>	N/S	
402	Westborough	8/18/2005	CM05NS-01573	1	Rogers Rd.	16	<i>Ae. vexans</i>	N/S	
403	Westborough	8/18/2005	CM05NS-01574	1	Rogers Rd.	1	<i>Oc. cantator</i>	N/S	
404	Westborough	8/18/2005	CM05NS-01575	1	Rogers Rd.	149	<i>Oc. canadensis</i>	N/S	
405	Westborough	8/18/2005	CM05NS-01576	1	Rogers Rd.	1	<i>Oc. trivittatus</i>	N/S	
406	Westborough	8/18/2005	CM05NS-01577	1	Rogers Rd.	3	<i>Ps. ferox</i>	N/S	
407	Westborough	8/18/2005	CM05NS-01578	1	Rogers Rd.	3	<i>Ae. cinereus</i>	N/S	
408	Westborough	8/18/2005	CM05NS-01579	1	Rogers Rd.	10	<i>An. quadrimaculatus sl</i>	N/S	
409	Westborough	8/18/2005	CM05NS-01580	1	Rogers Rd.	3	<i>An. punctipennis</i>	N/S	
410	Westborough	8/18/2005	CM05NS-01581	1	Rogers Rd.	2	<i>Oc. cantator</i>	N/S	
411	Westborough	8/18/2005	CM05NS-01582	1	Rogers Rd.	3	<i>Ae. vexans</i>	N/S	
412	Westborough	8/18/2005	CM05NS-01583	1	Rogers Rd.	13	<i>Oc. canadensis</i>	N/S	
413	Westborough	8/18/2005	CM05NS-01584	1	Rogers Rd.	18	<i>Cq. perturbans</i>	N/S	
414	Westborough	8/22/2005	CM05NS-01591	1	Rogers Rd.	5	<i>Ae. vexans</i>	N/S	
415	Westborough	8/22/2005	CM05NS-01592	1	Rogers Rd.	4	<i>Cq. perturbans</i>	N/S	
416	Westborough	8/22/2005	CM05NS-01593	1	Rogers Rd.	3	<i>An. punctipennis</i>	N/S	
417	Westborough	8/22/2005	CM05NS-01594	1	Rogers Rd.	3	<i>An. quadrimaculatus sl</i>	N/S	
418	Westborough	8/22/2005	CM05NS-01595	1	Rogers Rd.	1	<i>Ur. sapphirina</i>	N/S	

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419	Westborough	8/22/2005	CM05NS-01596	1	Rogers Rd.	27	<i>Oc. canadensis</i>	N/S	
420	Westborough	8/22/2005	CM05NS-01597	1	Rogers Rd.	2	<i>Oc. trivittatus</i>	N/S	
421	Westborough	8/22/2005	CM05NS-01598	1	Rogers Rd.	13	<i>Ps. ferox</i>	N/S	
422	Westborough	8/22/2005	CM05NS-01599	1	Rogers Rd.	2	<i>Oc. triseriatus</i>	N/S	
423	Westborough	8/22/2005	CM05NS-01600	1	Rogers Rd.	14	<i>Ae. cinereus</i>	N/S	
424	Westborough	8/22/2005	CM05NS-01601	1	Rogers Rd.	6	<i>Oc. canadensis</i>	N/S	
425	Westborough	8/22/2005	CM05NS-01602	1	Rogers Rd.	5	<i>Cq. perturbans</i>	N/S	
426	Westborough	8/22/2005	CM05NS-01603	1	Rogers Rd.	1	<i>An. quadrimaculatus sl</i>	N/S	
427	Westborough	8/22/2005	CM05NS-01604	1	Rogers Rd.	2	<i>Ae. cinereus</i>	N/S	
428	Westborough	8/23/2005	CM05-00672	1	Rogers Rd.	2	<i>Cx. species</i>	Negative	
429	Westborough	8/23/2005	CM05-00672	1	Rogers Rd.	2	Cx. species	Positive	WNV
430	Westborough	8/23/2005	CM05-00673	1	Rogers Rd.	8	<i>Cs. melanura</i>	Negative	
431	Westborough	8/23/2005	CM05-00674	1	Rogers Rd.	4	<i>Cs. melanura</i>	Negative	
432	Westborough	8/23/2005	CM05-00675	1	Rogers Rd.	1	<i>Cx. species</i>	Negative	
433	Westborough	8/23/2005	CM05-00676	1	Hopkinton Rd.	20	<i>Cx. species</i>	Negative	
434	Westborough	8/23/2005	CM05-00677	1	Hopkinton Rd.	22	<i>Cs. melanura</i>	Negative	
435	Westborough	8/23/2005	CM05-00681	1	Hopkinton Rd.	7	<i>Cx. species</i>	Negative	
436	Westborough	8/23/2005	CM05NS-01605	1	Rogers Rd.	4	<i>Oc. trivittatus</i>	N/S	
437	Westborough	8/23/2005	CM05NS-01606	1	Rogers Rd.	82	<i>Oc. canadensis</i>	N/S	
438	Westborough	8/23/2005	CM05NS-01607	1	Rogers Rd.	15	<i>Ae. vexans</i>	N/S	
439	Westborough	8/23/2005	CM05NS-01608	1	Rogers Rd.	10	<i>Cq. perturbans</i>	N/S	
440	Westborough	8/23/2005	CM05NS-01609	1	Rogers Rd.	7	<i>An. punctipennis</i>	N/S	
441	Westborough	8/23/2005	CM05NS-01610	1	Rogers Rd.	7	<i>An. quadrimaculatus sl</i>	N/S	
442	Westborough	8/23/2005	CM05NS-01611	1	Rogers Rd.	17	<i>Ps. ferox</i>	N/S	
443	Westborough	8/23/2005	CM05NS-01612	1	Rogers Rd.	42	<i>Ae. cinereus</i>	N/S	
444	Westborough	8/23/2005	CM05NS-01613	1	Rogers Rd.	2	<i>Ur. sapphirina</i>	N/S	
445	Westborough	8/23/2005	CM05NS-01619	1	Rogers Rd.	1	<i>Ae. cinereus</i>	N/S	
446	Westborough	8/24/2005	CM05NS-01614	1	Rogers Rd.	4	<i>Ps. ferox</i>	N/S	
447	Westborough	8/24/2005	CM05NS-01615	1	Rogers Rd.	1	<i>Ae. vexans</i>	N/S	
448	Westborough	8/24/2005	CM05NS-01616	1	Rogers Rd.	1	<i>Oc. triseriatus</i>	N/S	
449	Westborough	8/24/2005	CM05NS-01617	1	Rogers Rd.	1	<i>Oc. japonicus</i>	N/S	
450	Westborough	8/24/2005	CM05NS-01618	1	Rogers Rd.	1	<i>Cx. territans</i>	N/S	
451	Westborough	8/24/2005	CM05NS-01620	1	Rogers Rd.	1	<i>Cs. morsitans</i>	N/S	
452	Westborough	8/24/2005	CM05NS-01621	1	Rogers Rd.	1	<i>Ur. sapphirina</i>	N/S	
453	Westborough	8/24/2005	CM05NS-01622	1	Rogers Rd.	2	<i>Ae. vexans</i>	N/S	
454	Westborough	8/24/2005	CM05NS-01623	1	Rogers Rd.	1	<i>Oc. sticticus</i>	N/S	
455	Westborough	8/24/2005	CM05NS-01624	1	Rogers Rd.	1	<i>Oc. trivittatus</i>	N/S	
456	Westborough	8/24/2005	CM05NS-01625	1	Rogers Rd.	1	<i>An. quadrimaculatus sl</i>	N/S	

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457	Westborough	8/24/2005	CM05NS-01626	1	Rogers Rd.	1	<i>Ur. sapphirina</i>	N/S	
458	Westborough	8/24/2005	CM05NS-01766	1	Hopkinton Rd.	2	<i>Oc. canadensis</i>	N/S	
459	Westborough	8/24/2005	CM05NS-01767	1	Hopkinton Rd.	2	<i>Oc. trivittatus</i>	N/S	
460	Westborough	8/24/2005	CM05NS-01768	1	Hopkinton Rd.	1	<i>Ur. sapphirina</i>	N/S	
461	Westborough	8/24/2005	CM05NS-01769	1	Hopkinton Rd.	1	<i>Cq. perturbans</i>	N/S	
462	Westborough	8/26/2005	CM05-00735	1	Rogers Rd.	4	<i>Cx. species</i>	Negative	
463	Westborough	8/26/2005	CM05-00736	1	Rogers Rd.	1	<i>Cs. melanura</i>	Negative	
464	Westborough	8/26/2005	CM05-00737	1	Rogers Rd.	3	<i>Cx. salinarius</i>	Negative	
465	Westborough	8/26/2005	CM05-00737	1	Rogers Rd.	3	<i>Cx. salinarius</i>	Positive	WNV
466	Westborough	8/26/2005	CM05-00738	1	Rogers Rd.	1	<i>Cs. melanura</i>	Negative	
467	Westborough	8/26/2005	CM05-00739	1	Rogers Rd.	3	<i>Cq. perturbans</i>	Negative	
468	Westborough	8/26/2005	CM05-00740	1	Rogers Rd.	2	<i>An. punctipennis</i>	Negative	
469	Westborough	8/26/2005	CM05-00741	1	Rogers Rd.	1	<i>An. quadrimaculatus sl</i>	Negative	
470	Westborough	8/26/2005	CM05-00742	1	Rogers Rd.	1	<i>Cs. morsitans</i>	Negative	
471	Westborough	8/26/2005	CM05-00743	1	Rogers Rd.	1	<i>Ps. ferox</i>	Negative	
472	Westborough	8/26/2005	CM05-00744	1	Rogers Rd.	4	<i>Ae. vexans</i>	Negative	
473	Westborough	8/26/2005	CM05-00745	1	Rogers Rd.	4	<i>Oc. canadensis</i>	Negative	
474	Westborough	8/26/2005	CM05-00746	1	Rogers Rd.	1	<i>Cs. melanura</i>	Negative	
475	Westborough	8/26/2005	CM05-00747	1	Rogers Rd.	1	<i>An. quadrimaculatus sl</i>	Negative	
476	Westborough	8/26/2005	CM05-00748	1	Rogers Rd.	3	<i>An. punctipennis</i>	Negative	
477	Westborough	8/26/2005	CM05-00749	1	Rogers Rd.	5	<i>Cq. perturbans</i>	Negative	
478	Westborough	8/26/2005	CM05-00750	1	Rogers Rd.	4	<i>Oc. canadensis</i>	Negative	
479	Westborough	8/26/2005	CM05-00751	1	Rogers Rd.	9	<i>Oc. canadensis</i>	Negative	
480	Westborough	8/26/2005	CM05-00752	1	Rogers Rd.	7	<i>Cq. perturbans</i>	Negative	
481	Westborough	8/26/2005	CM05-00753	1	Rogers Rd.	3	<i>An. punctipennis</i>	Negative	
482	Westborough	8/26/2005	CM05-00754	1	Rogers Rd.	1	<i>An. quadrimaculatus sl</i>	Negative	
483	Westborough	8/26/2005	CM05-00755	1	Rogers Rd.	5	<i>Ae. cinereus</i>	Negative	
484	Westborough	8/26/2005	CM05-00756	1	Rogers Rd.	12	<i>Ps. ferox</i>	Negative	
485	Westborough	8/26/2005	CM05-00757	1	Rogers Rd.	3	<i>Oc. trivittatus</i>	Negative	
486	Westborough	8/26/2005	CM05-00758	1	Rogers Rd.	1	<i>Cx. salinarius</i>	Negative	
487	Westborough	8/26/2005	CM05-00765	1	Rogers Rd.	2	<i>Oc. canadensis</i>	Negative	
488	Westborough	8/26/2005	CM05-00766	1	Rogers Rd.	10	<i>Cq. perturbans</i>	Negative	
489	Westborough	8/26/2005	CM05-00767	1	Rogers Rd.	4	<i>An. punctipennis</i>	Negative	
490	Westborough	8/26/2005	CM05-00768	1	Rogers Rd.	4	<i>Cx. species</i>	Negative	
491	Westborough	8/26/2005	CM05-00769	1	Rogers Rd.	5	<i>Cs. melanura</i>	Positive	EEE
492	Westborough	8/26/2005	CM05-00769	1	Rogers Rd.	5	<i>Cs. melanura</i>	Positive	EEE
493	Westborough	8/26/2005	CM05-00770	1	Rogers Rd.	1	<i>An. quadrimaculatus sl</i>	Negative	
494	Westborough	8/26/2005	CM05-00771	1	Rogers Rd.	2	<i>Ae. cinereus</i>	Negative	

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495	Westborough	8/26/2005	CM05-00772	1	Rogers Rd.	3	<i>Ps. ferox</i>	Negative	
496	Westborough	8/26/2005	CM05-00777	1	Rogers Rd.	50	<i>Oc. canadensis</i>	Negative	
497	Westborough	8/26/2005	CM05-00778	1	Rogers Rd.	1	<i>Cx. salinarius</i>	Negative	
498	Westborough	8/26/2005	CM05-00779	1	Rogers Rd.	17	<i>Ae. cinereus</i>	Negative	
499	Westborough	8/26/2005	CM05-00780	1	Rogers Rd.	50	<i>Ps. ferox</i>	Negative	
500	Westborough	8/26/2005	CM05-00781	1	Rogers Rd.	2	<i>Oc. cantator</i>	Negative	
501	Westborough	8/26/2005	CM05-00782	1	Rogers Rd.	30	<i>Ps. ferox</i>	Negative	
502	Westborough	8/26/2005	CM05-00783	1	Rogers Rd.	3	<i>Cq. perturbans</i>	Negative	
503	Westborough	8/26/2005	CM05-00784	1	Rogers Rd.	13	<i>Oc. canadensis</i>	Negative	
504	Westborough	8/29/2005	CM05NS-01818	2	Hopkinton Rd.	2	<i>Ae. vexans</i>	N/S	
505	Westborough	8/29/2005	CM05NS-01819	2	Hopkinton Rd.	1	<i>Oc. cantator</i>	N/S	
506	Westborough	8/29/2005	CM05NS-01820	2	Hopkinton Rd.	1	<i>Oc. canadensis</i>	N/S	
507	Westborough	8/29/2005	CM05NS-01821	2	Hopkinton Rd.	1	<i>An. punctipennis</i>	N/S	
508	Westborough	8/29/2005	CM05NS-01822	2	Hopkinton Rd.	3	<i>Oc. triseriatus</i>	N/S	
509	Westborough	8/29/2005	CM05NS-01823	2	Hopkinton Rd.	1	<i>Cs. morsitans</i>	N/S	
510	Westborough	8/29/2005	CM05NS-01824	2	Hopkinton Rd.	2	<i>Ae. cinereus</i>	N/S	
511	Westborough	8/29/2005	CM05NS-01825	1	Hopkinton Rd.	10	<i>An. punctipennis</i>	N/S	
512	Westborough	8/29/2005	CM05NS-01826	1	Hopkinton Rd.	8	<i>An. quadrimaculatus sl</i>	N/S	
513	Westborough	8/29/2005	CM05NS-01827	1	Hopkinton Rd.	68	<i>Ae. cinereus</i>	N/S	
514	Westborough	8/29/2005	CM05NS-01828	1	Hopkinton Rd.	5	<i>Ps. ferox</i>	N/S	
515	Westborough	8/29/2005	CM05NS-01829	1	Hopkinton Rd.	5	<i>Oc. trivittatus</i>	N/S	
516	Westborough	8/29/2005	CM05NS-01830	1	Hopkinton Rd.	1	<i>Oc. triseriatus</i>	N/S	
517	Westborough	8/29/2005	CM05NS-01831	1	Hopkinton Rd.	40	<i>Oc. canadensis</i>	N/S	
518	Westborough	8/29/2005	CM05NS-01832	1	Hopkinton Rd.	23	<i>Ae. vexans</i>	N/S	
519	Westborough	8/30/2005	CM05-00709	1	Rogers Rd.	5	<i>Cx. species</i>	Negative	
520	Westborough	8/30/2005	CM05-00710	1	Rogers Rd.	1	<i>Cs. melanura</i>	Negative	
521	Westborough	8/30/2005	CM05-00711	1	Rogers Rd.	5	<i>Cx. species</i>	Negative	
522	Westborough	8/30/2005	CM05-00712	1	Rogers Rd.	3	<i>Cs. melanura</i>	Negative	
523	Westborough	8/30/2005	CM05-00732	1	Rogers Rd.	7	<i>Cx. species</i>	Negative	
524	Westborough	8/30/2005	CM05-00733	1	Rogers Rd.	2	<i>Cx. species</i>	Negative	
525	Westborough	8/30/2005	CM05-00734	1	Rogers Rd.	1	<i>Cs. melanura</i>	Negative	
526	Westborough	8/30/2005	CM05-00759	1	Rogers Rd.	1	<i>Cs. melanura</i>	Negative	
527	Westborough	8/30/2005	CM05-00760	1	Rogers Rd.	3	<i>Cx. restuans</i>	Negative	
528	Westborough	8/30/2005	CM05-00761	1	Rogers Rd.	4	<i>Cx. restuans</i>	Negative	
529	Westborough	8/30/2005	CM05-00762	1	Rogers Rd.	2	<i>Oc. canadensis</i>	Negative	
530	Westborough	8/30/2005	CM05-00763	1	Rogers Rd.	1	<i>An. quadrimaculatus sl</i>	Negative	
531	Westborough	8/30/2005	CM05-00764	1	Rogers Rd.	2	<i>Oc. japonicus</i>	Negative	
532	Westborough	8/30/2005	CM05-00773	1	Rogers Rd.	3	<i>Oc. canadensis</i>	Negative	

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533	Westborough	8/30/2005	CM05-00774	1	Rogers Rd.	1	<i>Cs. melanura</i>	Negative	
534	Westborough	8/30/2005	CM05-00775	1	Rogers Rd.	1	<i>Cx. pipiens</i>	Negative	
535	Westborough	8/30/2005	CM05-00776	1	Rogers Rd.	2	<i>Cx. restuans</i>	Negative	
536	Westborough	8/30/2005	CM05-00785	1	Rogers Rd.	2	<i>Cx. species</i>	Negative	
537	Westborough	8/30/2005	CM05NS-01969	1	Hopkinton Rd.	1	<i>Oc. canadensis</i>	N/S	
538	Westborough	8/30/2005	CM05NS-01970	1	Hopkinton Rd.	8	<i>Cq. perturbans</i>	N/S	
539	Westborough	8/30/2005	CM05NS-01971	1	Hopkinton Rd.	3	<i>An. punctipennis</i>	N/S	
540	Westborough	8/30/2005	CM05NS-01972	1	Hopkinton Rd.	2	<i>Ps. ferox</i>	N/S	
541	Westborough	8/30/2005	CM05NS-01973	1	Hopkinton Rd.	1	<i>Cs. morsitans</i>	N/S	
542	Westborough	8/30/2005	CM05NS-01975	1	Hopkinton Rd.	2	<i>Oc. triseriatus</i>	N/S	
543	Westborough	8/30/2005	CM05NS-01976	1	Hopkinton Rd.	1	<i>Oc. trivittatus</i>	N/S	
544	Westborough	8/30/2005	cm05ns-01977	1	Hopkinton Rd.	3	<i>Cq. perturbans</i>	N/S	
545	Westborough	8/30/2005	cm05ns-01978	1	Hopkinton Rd.	7	<i>An. punctipennis</i>	N/S	
546	Westborough	8/30/2005	CM05NS-01979	1	Hopkinton Rd.	6	<i>An. quadrimaculatus sl</i>	N/S	
547	Westborough	8/30/2005	CM05NS-01980	1	Hopkinton Rd.	3	<i>Ps. ferox</i>	N/S	
548	Westborough	8/30/2005	CM05NS-01981	1	Hopkinton Rd.	3	<i>Oc. trivittatus</i>	N/S	
549	Westborough	8/30/2005	CM05NS-01982	1	Hopkinton Rd.	15	<i>Ae. vexans</i>	N/S	
550	Westborough	8/30/2005	CM05NS-01983	1	Hopkinton Rd.	10	<i>Ae. cinereus</i>	N/S	
551	Westborough	8/30/2005	CM05NS-01984	1	Hopkinton Rd.	23	<i>Oc. canadensis</i>	N/S	
552	Westborough	9/1/2005	CM05NS-01890	2	Hopkinton Rd.	1	<i>Cq. perturbans</i>	N/S	
553	Westborough	9/1/2005	CM05NS-01891	2	Hopkinton Rd.	3	<i>An. punctipennis</i>	N/S	
554	Westborough	9/1/2005	CM05NS-01892	2	Hopkinton Rd.	2	<i>Ps. ferox</i>	N/S	
555	Westborough	9/1/2005	CM05NS-01893	2	Hopkinton Rd.	2	<i>Oc. trivittatus</i>	N/S	
556	Westborough	9/1/2005	CM05NS-01894	2	Hopkinton Rd.	2	<i>Oc. triseriatus</i>	N/S	
557	Westborough	9/1/2005	CM05NS-01895	2	Hopkinton Rd.	1	<i>Ae. cinereus</i>	N/S	
558	Westborough	9/1/2005	CM05NS-01938	2	Walkup Dr.	1	<i>Oc. canadensis</i>	N/S	
559	Westborough	9/6/2005	CM05-00678	1	Hopkinton Rd.	2	<i>Cs. melanura</i>	Negative	
560	Westborough	9/6/2005	CM05-00679	1	Hopkinton Rd.	1	<i>Cx. pipiens</i>	Negative	
561	Westborough	9/6/2005	CM05-00680	1	Hopkinton Rd.	1	<i>Cs. melanura</i>	Negative	
562	Westborough	9/6/2005	CM05-00707	2	Hopkinton Rd.	19	<i>Cx. species</i>	Negative	
563	Westborough	9/6/2005	CM05-00708	2	Hopkinton Rd.	7	<i>Cs. melanura</i>	Negative	
564	Westborough	9/6/2005	CM05-00815	1	Hopkinton Rd.	1	<i>Cs. melanura</i>	Negative	
565	Westborough	9/6/2005	CM05-00816	1	Hopkinton Rd.	1	<i>Cs. morsitans</i>	Negative	
566	Westborough	9/6/2005	CM05-00817	1	Hopkinton Rd.	1	<i>Cs. morsitans</i>	Negative	
567	Westborough	9/6/2005	CM05-00834	2	Hopkinton Rd.	12	<i>Cx. species</i>	Negative	
568	Westborough	9/6/2005	CM05-00835	2	Hopkinton Rd.	3	<i>Cs. melanura</i>	Negative	
569	Westborough	9/6/2005	CM05-00836	2	Hopkinton Rd.	5	<i>Cq. perturbans</i>	Negative	
570	Westborough	9/6/2005	CM05-00837	1	Hopkinton Rd.	43	<i>Cx. species</i>	Negative	

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571	Westborough	9/6/2005	CM05-00838	1	Hopkinton Rd.	8	<i>Cq. perturbans</i>	Negative	
572	Westborough	9/6/2005	CM05-00839	1	Hopkinton Rd.	1	<i>Cs. melanura</i>	Negative	
573	Westborough	9/7/2005	CM05-00889	2	Otis St. Ballfields	6	<i>Cx. species</i>	Negative	
574	Westborough	9/7/2005	CM05-00890	2	Otis St. Ballfields	2	<i>An. quadrimaculatus sl</i>	Negative	
575	Westborough	9/7/2005	CM05-00891	2	Otis St. Ballfields	10	<i>Oc. japonicus</i>	Negative	
576	Westborough	9/7/2005	CM05-00892	2	Otis St. Ballfields	5	<i>Oc. triseriatus</i>	Negative	
577	Westborough	9/7/2005	cm05ns-02017	1	Rogers Rd.	1	<i>An. quadrimaculatus sl</i>	N/S	
578	Westborough	9/7/2005	cm05ns-02018	1	Rogers Rd.	2	<i>Oc. triseriatus</i>	N/S	
579	Westborough	9/7/2005	cm05ns-02019	1	Walkup Dr.	1	<i>Cs. melanura</i>	N/S	
580	Westborough	9/8/2005	CM05NS-02034	2	Hopkinton Rd.	1	<i>Oc. canadensis</i>	N/S	
581	Westborough	9/8/2005	CM05NS-02035	2	Hopkinton Rd.	1	<i>An. punctipennis</i>	N/S	
582	Westborough	9/8/2005	CM05NS-02036	2	Hopkinton Rd.	1	<i>Oc. cantator</i>	N/S	
583	Westborough	9/8/2005	CM05NS-02037	2	Hopkinton Rd.	1	<i>Ae. vexans</i>	N/S	
584	Westborough	9/8/2005	CM05NS-02038	2	Hopkinton Rd.	4	<i>Ae. cinereus</i>	N/S	
585	Westborough	9/8/2005	CM05NS-02039	2	Hopkinton Rd.	1	<i>Oc. trivittatus</i>	N/S	
586	Westborough	9/8/2005	CM05NS-02040	2	Hopkinton Rd.	2	<i>An. quadrimaculatus sl</i>	N/S	
587	Westborough	9/8/2005	CM05NS-02073	1	Rogers Rd.	2	<i>Cq. perturbans</i>	N/S	
588	Westborough	9/8/2005	CM05NS-02074	1	Rogers Rd.	1	<i>Ae. cinereus</i>	N/S	
589	Westborough	9/8/2005	CM05NS-02075	1	Rogers Rd.	6	<i>Ps. ferox</i>	N/S	
590	Westborough	9/8/2005	CM05NS-02076	1	Rogers Rd.	2	<i>Oc. triseriatus</i>	N/S	
591	Westborough	9/8/2005	CM05NS-02077	1	Rogers Rd.	2	<i>An. quadrimaculatus sl</i>	N/S	
592	Westborough	9/8/2005	CM05NS-02078	1	Rogers Rd.	33	<i>Ae. cinereus</i>	N/S	
593	Westborough	9/8/2005	CM05NS-02079	1	Rogers Rd.	4	<i>An. punctipennis</i>	N/S	
594	Westborough	9/12/2005	CM05-00874	2	Hopkinton Rd.	4	<i>Cx. species</i>	Negative	
595	Westborough	9/12/2005	CM05-00875	2	Hopkinton Rd.	4	<i>Cs. melanura</i>	Negative	
596	Westborough	9/12/2005	CM05-00917	1	Hopkinton Rd.	33	<i>Cx. species</i>	Negative	
597	Westborough	9/12/2005	CM05-00918	1	Hopkinton Rd.	13	<i>Cs. melanura</i>	Negative	
598	Westborough	9/12/2005	CM05-00919	1	Hopkinton Rd.	6	<i>Cx. species</i>	Negative	
599	Westborough	9/12/2005	CM05-00920	1	Hopkinton Rd.	1	<i>Cs. melanura</i>	Negative	
600	Westborough	9/12/2005	CM05-00945	1	Rogers Rd.	6	<i>Cx. species</i>	Negative	
601	Westborough	9/12/2005	cm05-00946	1	Rogers Rd.	1	<i>An. punctipennis</i>	Negative	
602	Westborough	9/12/2005	cm05-00947	1	Rogers Rd.	1	<i>Ae. vexans</i>	Negative	
603	Westborough	9/12/2005	cm05-00948	1	Rogers Rd.	1	<i>Cq. perturbans</i>	Negative	
604	Westborough	9/12/2005	cm05-00949	1	Rogers Rd.	4	<i>Cx. species</i>	Negative	
605	Westborough	9/12/2005	cm05-00950	1	Rogers Rd.	30	<i>Cq. perturbans</i>	Negative	
606	Westborough	9/12/2005	cm05-00951	1	Rogers Rd.	11	<i>Ae. vexans</i>	Negative	
607	Westborough	9/12/2005	cm05-00952	1	Rogers Rd.	9	<i>Ps. ferox</i>	Negative	
608	Westborough	9/12/2005	cm05-00953	1	Rogers Rd.	4	<i>Ae. cinereus</i>	Negative	

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#	Town	Date	Pool ID	# Traps	Trap Site	Pool Size	Species	Result	Virus Type
609	Westborough	9/12/2005	cm05-00954	1	Rogers Rd.	3	<i>Oc. canadensis</i>	Negative	
610	Westborough	9/12/2005	cm05-00955	1	Rogers Rd.	2	<i>An. punctipennis</i>	Negative	
611	Westborough	9/12/2005	CM05NS-02086	1	Rogers Rd.	1	<i>An. punctipennis</i>	N/S	
612	Westborough	9/12/2005	CM05NS-02087	1	Rogers Rd.	4	<i>Ps. ferox</i>	N/S	
613	Westborough	9/12/2005	CM05NS-02088	1	Rogers Rd.	1	<i>Cx. species</i>	N/S	
614	Westborough	9/12/2005	CM05NS-02089	1	Rogers Rd.	4	<i>Oc. triseriatus</i>	N/S	
615	Westborough	9/12/2005	CM05NS-02090	1	Rogers Rd.	16	<i>Ae. cinereus</i>	N/S	
616	Westborough	9/12/2005	CM05NS-02091	1	Rogers Rd.	1	<i>An. quadrimaculatus sl</i>	N/S	
617	Westborough	9/12/2005	CM05NS-02092	1	Rogers Rd.	1	<i>Oc. japonicus</i>	N/S	
618	Westborough	9/13/2005	CM05NS-02123	1	Rogers Rd.	3	<i>Ps. ferox</i>	N/S	
619	Westborough	9/13/2005	CM05NS-02124	1	Rogers Rd.	1	<i>Oc. triseriatus</i>	N/S	
620	Westborough	9/13/2005	CM05NS-02125	1	Rogers Rd.	5	<i>Ae. cinereus</i>	N/S	
621	Westborough	9/13/2005	CM05NS-02126	1	Rogers Rd.	2	<i>An. quadrimaculatus sl</i>	N/S	
622	Westborough	9/13/2005	CM05NS-02127	1	Rogers Rd.	5	<i>An. punctipennis</i>	N/S	
623	Westborough	9/13/2005	CM05NS-02168	1	Rogers Rd.	2	<i>Oc. triseriatus</i>	N/S	
624	Westborough	9/13/2005	CM05NS-02169	1	Rogers Rd.	3	<i>Oc. japonicus</i>	N/S	
625	Westborough	9/14/2005	CM05NS-02128	1	Walkup Dr.	1	<i>Oc. canadensis</i>	N/S	
626	Westborough	9/14/2005	CM05NS-02155	3	Rogers Rd.	1	<i>Oc. canadensis</i>	N/S	
627	Westborough	9/14/2005	CM05NS-02157	3	Rogers Rd.	4	<i>Cs. melanura</i>	N/S	
628	Westborough	9/14/2005	CM05NS-02158	3	Rogers Rd.	5	<i>Ae. vexans</i>	N/S	
629	Westborough	9/14/2005	CM05NS-02374	2	Walkup Dr.	5	<i>Cx. pipiens/restuans</i>	N/S	
630	Westborough	9/14/2005	CM05NS-02375	2	Walkup Dr.	1	<i>Cx. salinarius</i>	N/S	
631	Westborough	9/14/2005	CM05NS-02376	2	Walkup Dr.	6	<i>Cs. melanura</i>	N/S	
632	Westborough	9/14/2005	CM05NS-02377	2	Walkup Dr.	15	<i>Oc. canadensis</i>	N/S	
633	Westborough	9/14/2005	CM05NS-02378	2	Walkup Dr.	26	<i>Ae. vexans</i>	N/S	
634	Westborough	9/14/2005	CM05NS-02379	2	Walkup Dr.	4	<i>Ps. ferox</i>	N/S	
635	Westborough	9/14/2005	CM05NS-02380	2	Walkup Dr.	5	<i>An. punctipennis</i>	N/S	
636	Westborough	9/14/2005	CM05NS-02381	2	Walkup Dr.	11	<i>Ae. cinereus</i>	N/S	
637	Westborough	9/14/2005	CM05NS-02382	2	Walkup Dr.	2	<i>Oc. cantator</i>	N/S	
638	Westborough	9/15/2005	CM05NS-02153	2	Walkup Dr.	1	<i>Cx. species</i>	N/S	
639	Westborough	9/15/2005	CM05NS-02154	2	Walkup Dr.	2	<i>Oc. japonicus</i>	N/S	
640	Westborough	9/15/2005	CM05NS-02159	2	Rogers Rd.	2	<i>Ae. cinereus</i>	N/S	
641	Westborough	9/15/2005	CM05NS-02160	2	Rogers Rd.	2	<i>Cx. species</i>	N/S	
642	Westborough	9/15/2005	CM05NS-02161	2	Rogers Rd.	2	<i>Ps. ferox</i>	N/S	
643	Westborough	9/15/2005	CM05NS-02162	2	Rogers Rd.	3	<i>An. punctipennis</i>	N/S	
644	Westborough	9/19/2005	CM05NS-02238	3	Rogers Rd.	13	<i>Ae. cinereus</i>	N/S	
645	Westborough	9/19/2005	CM05NS-02239	3	Rogers Rd.	2	<i>Ps. ferox</i>	N/S	
646	Westborough	9/19/2005	CM05NS-02240	3	Rogers Rd.	7	<i>Ur. sapphirina</i>	N/S	

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#	Town	Date	Pool ID	# Traps	Trap Site	Pool Size	Species	Result	Virus Type
647	Westborough	9/19/2005	CM05NS-02241	3	Rogers Rd.	1	<i>Cs. morsitans</i>	N/S	
648	Westborough	9/19/2005	CM05NS-02242	3	Walkup Dr.	6	<i>Cs. morsitans</i>	N/S	
649	Westborough	9/19/2005	CM05NS-02243	3	Walkup Dr.	3	<i>Oc. triseriatus</i>	N/S	
650	Westborough	9/19/2005	CM05NS-02244	3	Walkup Dr.	12	<i>Oc. japonicus</i>	N/S	
651	Westborough	9/19/2005	CM05NS-02245	3	Walkup Dr.	1	<i>Ur. sapphirina</i>	N/S	
652	Westborough	9/19/2005	CM05NS-02246	3	Walkup Dr.	2	<i>Oc. trivittatus</i>	N/S	
653	Westborough	9/19/2005	CM05NS-02247	3	Walkup Dr.	12	<i>Ae. cinereus</i>	N/S	
654	Westborough	9/19/2005	CM05NS-02248	3	Walkup Dr.	2	<i>Ps. ferox</i>	N/S	
655	Westborough	9/19/2005	CM05NS-02249	3	Walkup Dr.	1	<i>An. quadrimaculatus sl</i>	N/S	
656	Westborough	9/19/2005	CM05NS-02250	3	Walkup Dr.	1	<i>Cq. perturbans</i>	N/S	
657	Westborough	9/20/2005	CM05-00970	2	Hopkinton Rd.	7	<i>Cx. species</i>	Negative	
658	Westborough	9/20/2005	CM05-00971	2	Hopkinton Rd.	3	<i>Cs. melanura</i>	Negative	
659	Westborough	9/20/2005	CM05-00988	1	Rogers Rd.	1	<i>Cs. melanura</i>	Negative	
660	Westborough	9/20/2005	CM05-00989	1	Rogers Rd.	1	<i>Cx. species</i>	Negative	
661	Westborough	9/20/2005	CM05-00990	1	Rogers Rd.	5	<i>Cx. salinarius</i>	Negative	
662	Westborough	9/20/2005	CM05-00991	1	Rogers Rd.	19	<i>Cq. perturbans</i>	Negative	
663	Westborough	9/20/2005	CM05-00992	1	Rogers Rd.	12	<i>Oc. canadensis</i>	Negative	
664	Westborough	9/20/2005	CM05-00993	1	Rogers Rd.	31	<i>Ae. vexans</i>	Negative	
665	Westborough	9/20/2005	CM05-01000	1	Walkup Dr.	1	<i>Cs. melanura</i>	Negative	
666	Westborough	9/20/2005	CM05-01001	1	Walkup Dr.	1	<i>Oc. canadensis</i>	Negative	
667	Westborough	9/20/2005	CM05-01002	1	Rogers Rd.	1	<i>Cs. melanura</i>	Negative	
668	Westborough	9/20/2005	CM05-01003	1	Rogers Rd.	1	<i>Cq. perturbans</i>	Negative	
669	Westborough	9/20/2005	CM05-01004	1	Rogers Rd.	1	<i>Oc. canadensis</i>	Negative	
670	Westborough	9/20/2005	CM05-01005	1	Rogers Rd.	1	<i>Cq. perturbans</i>	Negative	
671	Westborough	9/20/2005	CM05-01006	1	Rogers Rd.	3	<i>Cs. melanura</i>	Negative	
672	Westborough	9/20/2005	CM05-01007	1	Rogers Rd.	6	<i>Oc. canadensis</i>	Negative	
673	Westborough	9/20/2005	CM05-01008	1	Rogers Rd.	36	<i>Ae. vexans</i>	Negative	
674	Westborough	9/20/2005	CM05-01009	1	Rogers Rd.	2	<i>Cs. melanura</i>	Negative	
675	Westborough	9/20/2005	CM05-01010	1	Rogers Rd.	1	<i>Cx. species</i>	Negative	
676	Westborough	9/20/2005	CM05-01029	1	Rogers Rd.	1	<i>Cx. species</i>	Negative	
677	Westborough	9/20/2005	CM05-01030	1	Rogers Rd.	4	<i>Cs. melanura</i>	Negative	
678	Westborough	9/20/2005	CM05-01031	1	Rogers Rd.	6	<i>Cs. melanura</i>	Negative	
679	Westborough	9/20/2005	CM05-01032	1	Rogers Rd.	13	<i>Cq. perturbans</i>	Negative	
680	Westborough	9/20/2005	CM05-01033	1	Rogers Rd.	4	<i>Oc. canadensis</i>	Negative	
681	Westborough	9/20/2005	CM05-01034	1	Rogers Rd.	16	<i>Ae. vexans</i>	Negative	
682	Westborough	9/20/2005	CM05-01035	1	Walkup Dr.	1	<i>Cq. perturbans</i>	Negative	
683	Westborough	9/20/2005	CM05-01036	1	Walkup Dr.	1	<i>Oc. canadensis</i>	Negative	
684	Westborough	9/20/2005	CM05-01037	1	Walkup Dr.	4	<i>Ae. vexans</i>	Negative	

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#	Town	Date	Pool ID	# Traps	Trap Site	Pool Size	Species	Result	Virus Type
685	Westborough	9/20/2005	CM05-01038	1	Walkup Dr.	2	<i>Cx. species</i>	Negative	
686	Westborough	9/20/2005	CM05-01039	1	Walkup Dr.	22	<i>Cs. melanura</i>	Negative	
687	Westborough	9/26/2005	CM05NS-02383	3	Rogers Rd.	1	<i>Oc. japonicus</i>	N/S	
688	Westborough	9/26/2005	CM05NS-02384	3	Rogers Rd.	1	<i>Ae. cinereus</i>	N/S	
689	Westborough	9/26/2005	CM05NS-02385	1	Walkup Dr.	2	<i>Oc. cantator</i>	N/S	
690	Westborough	9/27/2005	CM05-01063	2	Rogers Rd.	8	<i>Cq. perturbans</i>	Negative	
691	Westborough	9/27/2005	CM05-01064	2	Rogers Rd.	5	<i>Oc. canadensis</i>	Negative	
692	Westborough	9/27/2005	CM05-01065	2	Rogers Rd.	5	<i>Ae. vexans</i>	Negative	
693	Westborough	9/27/2005	CM05-01066	2	Rogers Rd.	50	<i>Cs. melanura</i>	Negative	
694	Westborough	9/27/2005	CM05-01067	2	Rogers Rd.	8	<i>Cs. melanura</i>	Negative	
695	Westborough	9/27/2005	CM05-01068	2	Rogers Rd.	20	<i>Cs. melanura</i>	Negative	
696	Westborough	9/27/2005	CM05-01069	2	Rogers Rd.	6	<i>Cx. salinarius</i>	Negative	
697	Westborough	9/27/2005	CM05-01070	3	Rogers Rd.	5	<i>An. quadrimaculatus sl</i>	Negative	
698	Westborough	9/27/2005	CM05-01071	3	Rogers Rd.	3	<i>An. punctipennis</i>	Negative	
699	Westborough	9/27/2005	CM05-01072	3	Rogers Rd.	3	<i>Cs. melanura</i>	Negative	
700	Westborough	9/27/2005	CM05-01080	1	Rogers Rd.	1	<i>Cx. restuans</i>	Negative	
701	Westborough	9/27/2005	CM05-01081	1	Rogers Rd.	2	<i>Cs. melanura</i>	Negative	
702	Westborough	9/27/2005	CM05-01082	1	Rogers Rd.	1	<i>Oc. canadensis</i>	Negative	
703	Westborough	9/27/2005	CM05-01088	3	Rogers Rd.	10	<i>Cs. melanura</i>	Negative	
704	Westborough	9/27/2005	CM05-01089	3	Rogers Rd.	10	<i>Oc. triseriatus</i>	Negative	
705	Westborough	9/27/2005	CM05-01090	3	Rogers Rd.	7	<i>Cq. perturbans</i>	Negative	
706	Westborough	9/27/2005	CM05-01091	3	Rogers Rd.	10	<i>An. punctipennis</i>	Negative	
707	Westborough	9/27/2005	CM05-01092	3	Rogers Rd.	4	<i>Cx. species</i>	Negative	
708	Westborough	9/27/2005	CM05-01093	3	Rogers Rd.	14	<i>Oc. canadensis</i>	Negative	
709	Westborough	9/27/2005	CM05-01094	3	Rogers Rd.	33	<i>Ae. vexans</i>	Negative	
710	Westborough	9/27/2005	CM05-01095	3	Rogers Rd.	7	<i>Oc. japonicus</i>	Negative	
711	Westborough	9/27/2005	CM05-01096	3	Walkup Dr.	33	<i>Cs. melanura</i>	Negative	
712	Westborough	9/27/2005	CM05-01096	3	Walkup Dr.	33	<i>Cs. melanura</i>	Positive	WNV
713	Westborough	9/27/2005	CM05-01097	3	Walkup Dr.	18	<i>Cx. species</i>	Negative	
714	Westborough	9/27/2005	CM05-01097	3	Walkup Dr.	18	<i>Cx. species</i>	Positive	WNV
715	Westborough	9/27/2005	CM05-01098	3	Walkup Dr.	5	<i>An. punctipennis</i>	Negative	
716	Westborough	9/27/2005	CM05-01099	3	Walkup Dr.	50	<i>Ae. vexans</i>	Negative	
717	Westborough	9/27/2005	CM05-01100	3	Walkup Dr.	19	<i>Oc. canadensis</i>	Negative	
718	Westborough	9/27/2005	CM05-01108	2	Hopkinton Rd.	46	<i>Cs. melanura</i>	Negative	
719	Westborough	9/27/2005	CM05-01109	2	Hopkinton Rd.	4	<i>Cx. species</i>	Negative	
720	Westborough	10/3/2005	ZL05-0273				Blue Jay	Positive	WNV
721	Westborough	10/4/2005	CM05-01155	3	Walkup Dr.	22	<i>Ae. vexans</i>	Negative	
722	Westborough	10/4/2005	CM05-01166	3	Rogers Rd.	2	<i>Cx. species</i>	Negative	

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#	Town	Date	Pool ID	# Traps	Trap Site	Pool Size	Species	Result	Virus Type
723	Westborough	10/4/2005	CM05-01167	3	Rogers Rd.	2	<i>Cs. melanura</i>	Negative	
724	Westborough	10/4/2005	CM05-01168	3	Rogers Rd.	2	<i>Oc. canadensis</i>	Negative	
725	Westborough	10/4/2005	CM05-01169	3	Rogers Rd.	1	<i>Ae. vexans</i>	Negative	
726	Westborough	10/4/2005	CM05-01170	1	Walkup Dr.	4	<i>Cs. melanura</i>	Positive	EEE
727	Westborough	10/4/2005	CM05-01170	1	Walkup Dr.	4	<i>Cs. melanura</i>	Positive	EEE
728	Westborough	10/4/2005	CM05-01171	1	Walkup Dr.	1	<i>Cx. species</i>	Negative	
729	Westborough	10/4/2005	CM05-01172	1	Walkup Dr.	10	<i>Ae. vexans</i>	Negative	
730	Westborough	10/4/2005	CM05-01173	1	Walkup Dr.	2	<i>Oc. canadensis</i>	Negative	
			252 pools submitted				21317 mosquitoes collected		
	4 pools	WNV VIRUS IDENTIFIED BY CMMCP				N/S= Not Submitted for testing			
	4 pools	EEE VIRUS IDENTIFIED BY CMMCP							
		1 BIRD IDENTIFIED WITH VIRUS BY MDPH							

2005 SUMMARY

The Central Massachusetts Mosquito Control Project (the Project) currently provides its services to 36 cities and towns throughout Middlesex and Worcester Counties. The Project's headquarters is located at 111 Otis Street, Northboro, MA. Tours of the headquarters or visits to field work sites may be arranged by calling the office in advance. Please call (508) 393-3055 during business hours for more information. The Project practices Integrated Mosquito Management (IMM), blending state of the art methods and techniques with expertise, experience, and scientific research to provide our member communities with environmentally sound and cost effective mosquito control.

During 2005 the Project received seven thousand and eighty five (7,085) requests for service from town residents and officials. A total of over six thousand (6,000) pounds of Bti (*Bacillus thuringiensis israelensis*) was applied by helicopter in 2 towns, Chelmsford & Billerica, and seven thousand, two hundred and ninety nine (7,299) pounds by hand throughout our service area were applied to area wetlands to reduce the emergence of adult mosquitoes. This represents over two thousand and sixty (2,060) acres of wetland that was treated with this mosquito-specific bacterium, significantly reducing adult mosquito populations in these areas. Thirty two thousand, for hundred and forty four (32,444) catch basins were treated with larvicidal product to control the mosquitoes that seek out these cool dark wet areas to breed, including the *Culex* mosquito, a major target for West Nile Virus transmission. Seven thousand, seven hundred and thirty seven (7,737) culverts were cleaned in an attempt to eliminate unnecessary standing water and reduce mosquito breeding. This work was done in conjunction with cleaning, clearing, and digging of one hundred and sixty eight thousand, three hundred and fifty two (168,352) feet of streams, brooks and ditches. This represents almost thirty two (32) miles of waterways which were cleaned and improved by Project personnel in 2005.

The Mosquito Awareness Program which we offer to elementary schools and other civic organizations in our district has become very popular. Project staff meets with students, teachers or concerned residents to discuss mosquito biology, mosquito habitat, and control procedures. Much of the presentation is directed towards what children and their families can do to prevent mosquitoes from breeding around their homes. Slides, videos, coloring books and other handouts make this an interesting program. This program is tailored to meet the needs of the specific audience. One thousand, six hundred and nineteen (1,619) students attended these programs.

As part of our effort to reduce the need for pesticides we continue to expand our wetlands restoration program. By cleaning clogged and overgrown waterways, mosquito breeding can be reduced and drainage areas are restored to historic conditions.

Bti mosquito larvicide is used to treat areas where mosquito larvae are found. We routinely check known breeding sites kept in our database, but also encourage the public to notify us of any areas they suspect could breed mosquitoes. Our field crews will investigate all such requests and treat the area only if surveillance gathered at the time shows an imminent threat of mosquito emergence.

Our goal is to manage all mosquito problems with education, wetlands restoration or larviciding, but we recognize that there are times when adult mosquito spraying is the only viable solution. In such cases specific areas are treated with either hand-held or pickup truck mounted sprayers if surveillance gathered at the time exceeds a pre-determined threshold to warrant an application. This program is offered on a **request-only** basis, and the exclusion process allows residents and/or town officials to exclude areas under their control from this or any part of our program.

The Project's surveillance program monitors adult mosquito and larval population density, and is the backbone for prescribing various control techniques. Specialized mosquito traps are deployed throughout the Project's service area to sample for mosquitoes that may be transmitting mosquito-borne diseases. In conjunction with the Mass. Dept. of Public Health we sample in areas suspected of harboring WNV and other viruses. One thousand, one hundred and fifty three (1,153) pools (collections) of mosquitoes totaling eleven thousand, nine hundred and twenty eight (11,928) specimens were tested for mosquito-borne viruses this year. Two (2) pools of *Cs. melanura* in Westborough were confirmed to be infected with the EEE virus. 6 pools of West Nile Virus were confirmed, 4 in Westborough (3 *Culex* and 1 *Cs. melanura*) and one each in Holliston and Wilmington, both *Culex* species. MDPH identified EEE in Holliston but subsequent surveillance did not confirm any additional virus isolates. No human or horse cases were identified with WNV or EEE in 2005 in our service area.

Educational pamphlets are available to anyone interested in learning about mosquito control and the services provided by the Project, and these items are routinely stocked in member Town/City Halls and libraries. Display boards with information on our program are rotated through area Town Halls throughout the year. We also have a website, www.cmmcp.org that has extensive information on mosquito biology, our control procedures, etc. This website has become a model for other Mosquito Projects and has been widely used throughout our service area and beyond.

We would like to thank you for your support during 2005 and we look forward to helping you and your community with its mosquito problems in 2006 and beyond.