

2010 Annual Report Weld County Cooperative Mosquito Control Program Town of Windsor



October 2010

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On The Cover:

Dead Mosquitoes = Satisfied Customers

In this busy world of ringing phones, text messages, e-mail, tight budgets, run here, run there, do this, do that, it's easy to lose track of what's important and what your goals are.

At Colorado Mosquito Control, even after 23 years in business, we haven't forgotten our one simple goal:

Provide our customers with the highest quality services and control mosquitoes effectively and efficiently while protecting our Colorado environment.

Colorado Mosquito Control, Inc.

TOWN OF WINDSOR
MOSQUITO MANAGEMENT PROGRAM

ANNUAL REPORT FOR 2010

TABLE OF CONTENTS

	<u>PAGE</u>
PROGRAM STATEMENT & OBJECTIVES	2
2010 SEASON PERSPECTIVE	3
WINDSOR AREA CLIMATE COMPARISON DATA	
WEST NILE VIRUS 2010	5
COUNTY LIST (2010 HUMAN CASE REPORTS)	
COLORADO MAP (2010 HUMAN CASE MAP)	
US MAP (2010 HUMAN CASE MAP)	
LARVAL MOSQUITO CONTROL	8
LARVAL SITE INSPECTIONS IN WINDSOR	
LARVAL SITE TREATMENTS IN WINDSOR	
LARVAL ACREAGE TREATMENTS IN WINDSOR	
LARVICIDE PRODUCT APPLICATION BY TYPE	
CMC SURVEILLANCE LABORATORY	12
CDC SURVEILLANCE LIGHT TRAP DATA COMPARISON	
SEASONAL ADULT MOSQUITO POPULATION DATA COMPARISON	
ADULT MOSQUITO CONTROL	15
SEASON DETAILS WITH ANNUAL COMPARISON	
ENVIRONMENTAL RESPONSIBILITY	17
TECHNOLOGY	18
PUBLIC RELATIONS & EDUCATION	20
MOSQUITOLINE CALLS IN WINDSOR	
SUMMARY	24
APPENDIX: GRAPHICS AND DATA SUMMARIES	
CDC Trap Data Composite Summaries	
Adult Mosquito Surveillance CDC Light Trap Summaries	
Adult Mosquito Control Report 2010	

Town of Windsor Mosquito Management Program Objectives

The Town of Windsor Mosquito Management Program completed its 10th year of cost effective biorational integrated mosquito management operations in 2010. The need to protect the residents and visitors to the Town of Windsor from the health risks, severe annoyance and discomfort associated with biting mosquitoes is a chronic annual problem.

The primary objective of the Town of Windsor Mosquito Management Program is to employ trained field biologists to suppress the development of larval mosquitoes in the aquatic habitats. CMC prioritizes, at minimum 90% of resource allocation on larval control efforts. Surveillance monitoring of adult mosquito populations is performed to determine the need to reduce the adult populations via adulticiding materials, when needed. This goal enables a reduction in both the overall mosquito populations and the threat of mosquito borne disease transmission at the least possible cost, while minimizing the impact on the people and natural environment.

CMC maintains its commitment to offer environmentally sensitive and technologically advanced integrated mosquito management programs to its customers and community residents. CMC works diligently to maintain the cooperative efforts for mosquito control and epizootic response management between the Town of Windsor, Larimer & Weld County Departments of Health and Environment, the City of Loveland & Fort Collins, and other local municipalities. The value of this cooperative program and its underlying data sharing and communications in the interest of public health cannot be over-emphasized.

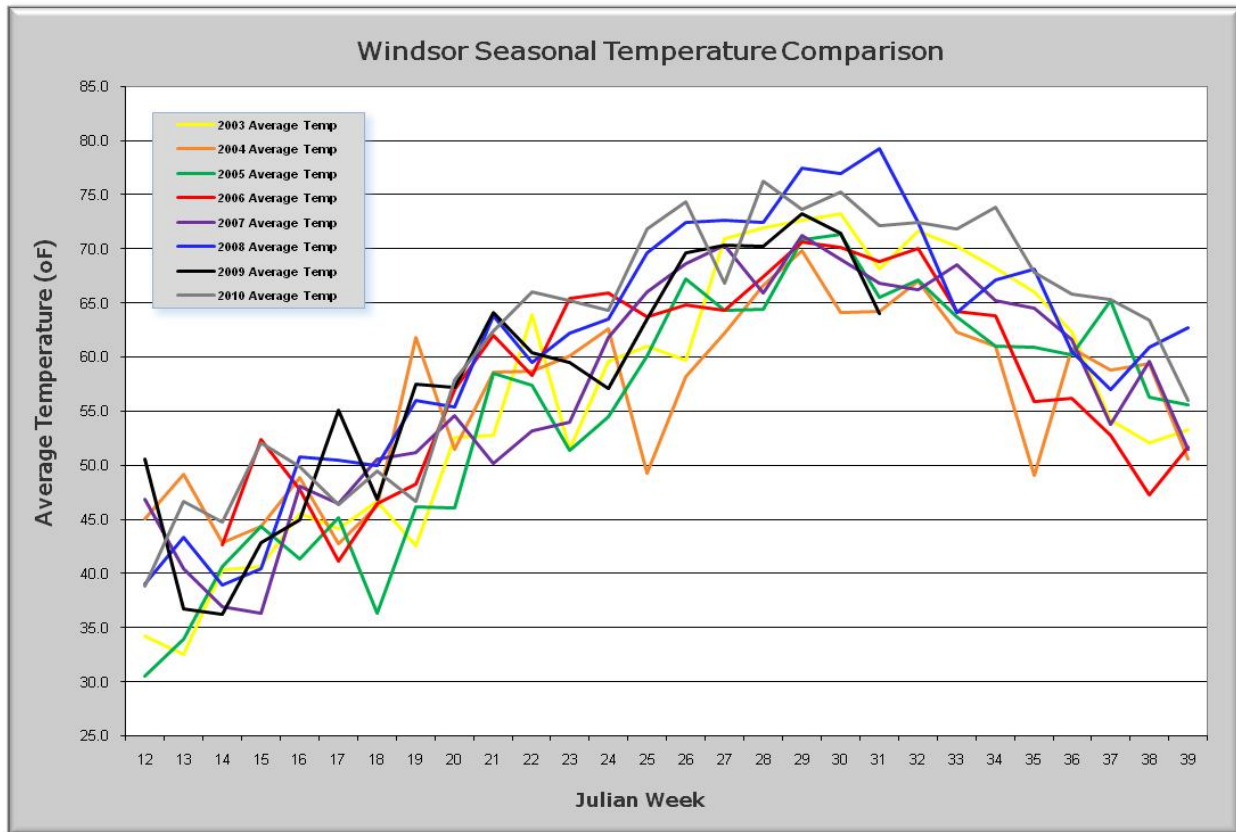
CMC Objectives

Colorado Mosquito Control, Inc. (CMC) as the contractor for the Town of Windsor Mosquito Management Program will use proven scientific integrated pest management (IPM) methods of survey, inspection, diagnosis, biological/biochemical controls, natural predators and limited low-toxicity pesticide applications to professionally accomplish the objectives of the program. CMC employs trained field and surveillance technicians who observe constantly changing mosquito populations. This enables a quick response to variations in environmental factors. All of the methods and materials used have been reviewed and registered by the U.S. EPA, Centers for Disease Control, the Colorado Department of Agriculture and the American Mosquito Control Association.

Colorado Mosquito Control (CMC), Inc. is a large-scale contractor specializing in complete integrated mosquito control services. CMC utilizes an aggressive preemptive Integrated Pest Management (IPM) approach to controlling mosquito populations within contracted areas. CMC currently has programs across the state of Colorado, providing services for homeowners associations, incorporated cities and towns, Native American reservations, and encephalitis surveillance monitoring programs for county health departments. Geographically, CMC reaches from the Ute Mountain Reservation in the southwest corner of the state to Fort Morgan in northeastern Colorado. CMC has programs in several mountain areas including the Gunnison Valley, the I-70 corridor, and parts of the upper Colorado River Valley.

2010 Season Perspective

The 2010 mosquito season can best be described as middle of the road, with very few dramatic overall highs or lows in either temperatures or precipitation. Below average precipitation levels for the months of January through March were met with above average precipitation levels in April (ncwcd.org). Temperatures in March and April were slightly above normal and May was only a few degrees cooler than normal. Rapid warming trends in the first weeks of June along the Front Range and in the mountains caused snow melt runoff to occur more quickly than normal and resulted in isolated flooding along some rivers across Colorado. The average daily temperature in June ranged between 66.7°F in Fort Collins, 67°F F in Johnstown, 68.1 °F in Windsor and 67.7°F in south Longmont. Many of the reservoirs in Larimer and Weld Counties remained full for the month of June because of snowpack levels. Water temperatures at many aquatic habitats began to warm which caused larval mosquitoes to develop more quickly. July is normally the warmest month in Colorado and July 2010 was no exception. July was also the 11th wettest July on record for the Denver area according to the National Climatic Data Center. The average temperature in July ranged between 72.9°F in Loveland, 72.9°F in Windsor, 71.7°F in Fort Collins and 71.4°F in South Longmont, only slightly warmer than normal. Daily average temperatures decreased in mid August, resulting in decreased *Culex* densities in some areas, while other areas remained within or slightly above normal trends in sections with high water content. The Northern Front Range did not see the monsoonal rains that are typical in the month of August. This aided in keeping overall floodwater mosquito populations low across the Front Range through August. The season drew to a close during September, with a significant decrease in *Culex tarsalis* mosquitoes and cooler evening temperatures. September brought drought like conditions and water levels at many sites across the Northern Front Range have diminished.



Above average workloads for larval mosquito control activities occurred in June and July due to the flushing and refilling of aquatic habitats with peak runoff and rain over the 4th of July weekend. In general, many reservoirs and ditches remained full for a large portion of the summer, because irrigation water was not moved as quickly. Many grassy edges and inlets to reservoirs were consistently producing mosquito larvae throughout most of the season. Lack of significant rainfall in August and September kept a second season spike in *Culex tarsalis* populations from occurring, thereby reducing the level of late season risk of West Virus infection that is typical into the fall months.

2010 Precipitation Comparison for Windsor Data obtained from ncwcd.org				
Week	2010 Precipitation	2010 Running Total	Avg of 2003-2008 Seasons (Full 2009 Data not Available)	Percentage of Average
12	0.67	0.67	0.52	128%
13	0.00	0.67	0.68	99%
14	0.46	1.13	0.65	175%
15	0.06	1.19	0.92	130%
16	2.32	3.51	1.00	350%
17	0.59	4.10	1.49	275%
18	0.02	4.12	1.69	244%
19	1.92	6.04	2.04	296%
20	0.24	6.28	2.26	278%
21	0.14	6.42	2.39	268%
22	0.00	6.42	2.80	229%
23	0.94	7.36	3.22	228%
24	0.36	7.72	3.34	231%
25	0.03	7.75	3.72	208%
26	0.00	7.75	3.79	205%
27	0.94	8.69	3.83	227%
28	0.00	8.69	4.00	217%
29	0.08	8.77	4.11	213%
30	0.00	8.77	4.52	194%
31	0.05	8.82	4.68	189%
32	0.21	9.03	4.80	188%
33	0.07	9.10	5.11	178%
34	0.00	9.10	5.42	168%
35	0.00	9.10	5.95	153%
36	0.00	9.10	6.06	150%
37	0.00	9.10	6.09	149%
38	0.04	9.14	6.17	148%
39	0.00	9.14	6.71	136%

West Nile Virus 2010

Background

West Nile Virus was first identified in Uganda in 1937. Since that time, activity has been documented throughout Africa, Europe, West and Central Asia, and areas of the Middle East. The virus made its first appearance to North America in 1999 when it was documented in New York City. WNV comes from a family of viruses known as Flaviviridae and is closely related to other encephalitis-causing viruses that can have severe effects on both humans and animals, including Western Equine Encephalitis and St. Louis encephalitis in our region.

WNV has a wide range of symptoms which can range from mild flu-like symptoms to death. Of humans affected, nearly 80% will show no symptoms at all. The majority of people who do show symptoms will usually suffer from high fevers, muscle soreness, and overall fatigue. However, approximately 1% of people will develop much more severe symptoms including meningitis (inflammation of the linings surrounding the brain and spinal cord), encephalitis (inflammation of the brain), or very rarely poliomyelitis, which can cause paralysis in parts of the body.

Since the introduction of WNV to the United States in New York City in 1999, the virus has made a complete westward expansion to the West Coast. Starting in the Northeastern parts of the United States, the virus steadily spread through the South, the Midwest, the Rocky Mountain region, and more recently the Western States. Although many states have shown decreased case counts since epidemic years, the Colorado Front Range presents the ideal combination of abundant habitat and weather conditions during some years for *Culex tarsalis* mosquitoes to amplify West Nile Virus.

Past Years

Colorado first saw activity of the virus late in the summer of 2002. In 2003, Colorado was the hardest hit state, recording 2,947 human cases and 63 deaths, most of which occurred along the Front Range. In 2004, the majority of the cases shifted to the Western Slope and the state totaled 291 cases with 4 deaths occurring in Mesa County. In 2005, WNV activity was spread throughout the state of Colorado with no particular clustering in any one region. In 2006, early season hot and dry conditions kept initial adult mosquito populations low, but rainfall in early August caused resurgence in the *Culex* mosquito densities. WNV infection in mosquitoes presented the greatest risk in the months of August and September, as hundreds of positive-tested mosquito pools and over 269 human WNV cases were recorded along the northern Front Range. Seven deaths occurred in 2006 across Colorado. Early season warm and wet weather conditions in 2007 were perfect for the rapid development of *Culex tarsalis* mosquitoes and ramping of West Nile Virus during May and June. Also, early positive mosquito sample pool tests indicated potential trouble from the onset in 2007. The first three positive mosquito sample pools collected from Larimer County mosquito surveillance traps were obtained earlier than normal that season (June 19th). The 2007 season was the second most active season for West Nile Virus cases in Colorado, second only to the 2003 epidemic year. In 2008 *Culex* mosquito densities remained low, as did the amount of West Nile Virus activity across the State. Colorado reported 71 human cases with 1 death. Of the total cases with clinical diagnoses, 13 cases occurred in Larimer County, 19 cases were reported in Weld County, and 13 cases were reported from Boulder County in 2008. In 2009 West Nile Virus infections totaled 103 documented cases statewide and 3 deaths. Of the total cases with clinical diagnoses, 25 cases occurred in Larimer County, 15 cases were reported in Weld County, and 12 cases were reported from Boulder County.

Colorado Perspective

Much of the water diverted from the mountain regions is used for flood irrigation of pastures, crops, and our own residential yards along the Northern Front Range. Fluctuation in water levels greater than one-half inch can result in floodwater mosquito larvae hatching in fields, cattail marshes, riparian areas and grasses. These sites typically do not drain quickly, dependent on levels of the ground water table, thereby causing multiple generations of *Culex* mosquito larvae to result as the water remains.

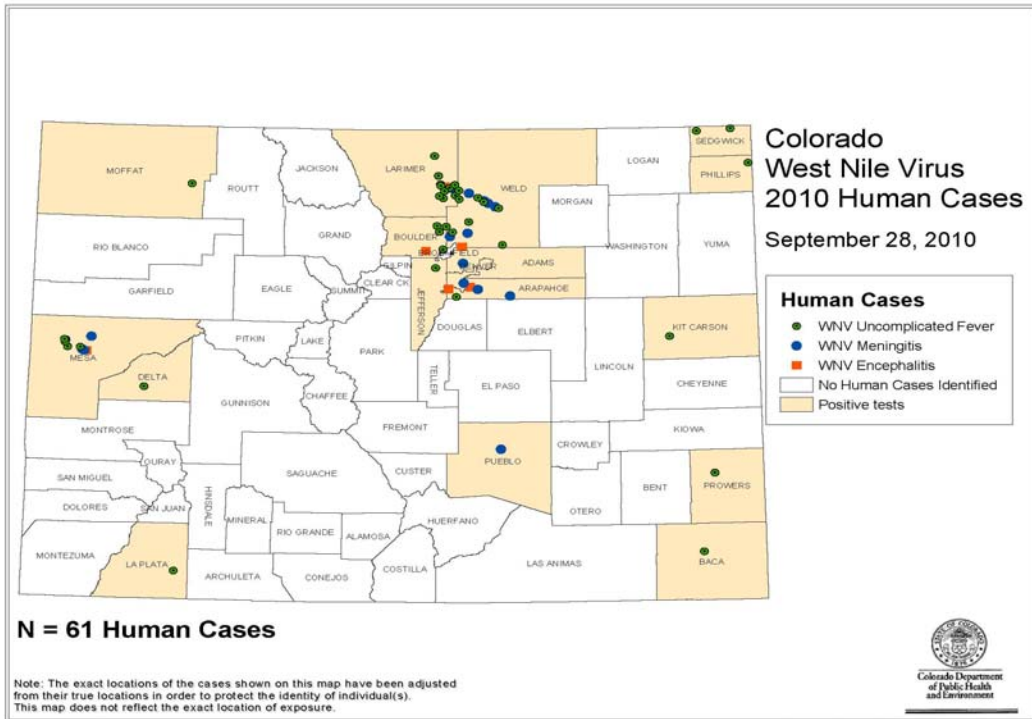
Larimer, Boulder and Weld counties have in multiple years reported the greatest number of human West Nile Virus infections in the state when compared to other counties. This trend is likely due to a combination of the topography for drainage, intermingled with the greatest proportion of the state's population residing along the Front Range. Exposure to *Culex tarsalis* mosquitoes along the Front Range increases as residents enjoy summertime BBQ's and the numerous recreational activities our state has to offer. Given the amount of vector mosquitoes in our area and WNV risk, it becomes increasingly important that residents apply mosquito repellents each time they venture outdoors during the mosquito season.

Colorado 2010

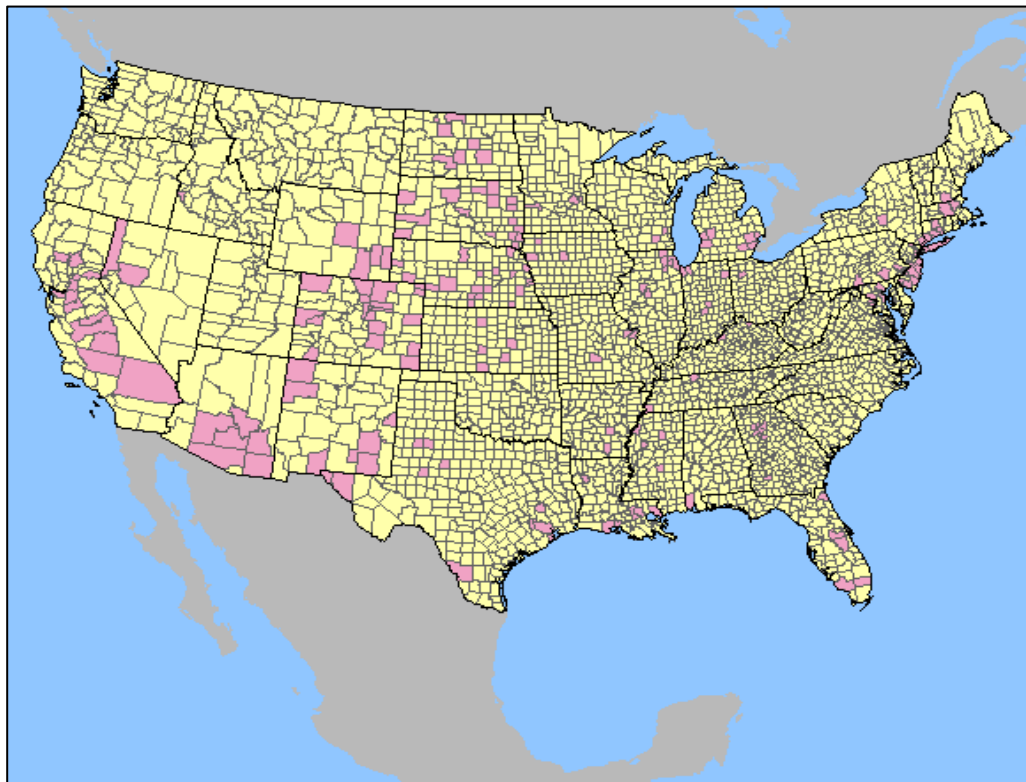
As of October 5th there are 68 confirmed cases of Human WNV statewide. This places Colorado third in the nation in terms of total diagnosed cases. As of October 12th Arizona leads the country in clinical diagnosis of WNV infections (125), followed by New York (114 cases) and California (65 cases). The first WN positive mosquito pool in Colorado was identified from Otero County on June 30th. A mosquito sample from Weld County tested positive on July 7th, and positive samples were identified from Larimer and Boulder counties on July 19th and 20th, respectively. There have been 2,226 mosquito samples tested statewide. Of these, 47 samples returned positive for West Nile.

Human West Nile Virus Infections: Colorado, 2010						
Updated October 5th, 2010						
County of Residence	New cases	Clinical diagnosis			Total cases	Total deaths
		Fever	Meningitis	Encephalitis		
Adams			1		1	
Arapahoe		2	2	2	6	
Baca		1			1	
Boulder		4	1	1	6	
Delta		1		.	1	
Denver			1		1	
Douglas		1			1	
El Paso		1			1	
Jefferson		1			1	
Kit Carson		1			1	
La Plata	1	1		1	2	
Larimer	1	10	2	1	13	
Mesa		6	3	1	10	1
Moffat		1			1	
Phillips		1			1	1
Prowers		1		1	2	1
Pueblo			1		1	
Sedgwick		2			2	
Weld		10	5	1	16	1
COLORADO	2	44	16	8	68	4

Counties not listed have no verified human cases of WNV



U.S. Department of the Interior /U.S. Geological Survey
Cumulative 2010 Data as of October 12th, 2010
National Cumulative Human Disease Cases: 713



2010 Field Operations

Field activities began in early April for the 2010 season. The earliest activity of the season was taking GIS maps which were updated and revised over the fall and winter and cross referencing sites via ground inspections. Mapping of larval sites is an ongoing process, as citizen reports of new larval sites over the course of the season resulted in many new sites being added to the existing larval inspection routes. In addition, CMC Inspection and Larviciding (I&L) Technicians applied larvicides at known early season larval mosquito sites that are affected by snow melt and groundwater seepage from mountain runoff. Early season larviciding enables reduction of early season floodwater hatches and successive egg laying with subsequent rainfall.

Hiring of seasonal technicians began in March and was completed by the end of April. CMC's Annual Field Technician Classroom Training Day took place on May 17th with over 50 new and returning field technicians in attendance. Daily field training by CMC management and veteran employees was performed throughout May and routine field inspections were in full swing from May 24th through August 21st. The final day for larval inspections was September 17th.

The 2010 Windsor Mosquito Management staff consisted of 5 Full-time Equivalent employees (FTE). Specifically, we had 1 Manager, 3 Field Technicians, .5 Surveillance Technician and .5 Office Staff personnel. The Windsor mosquito control area increased in 2010 to encompass approximately 32 square miles of existing and new town limits. To date 309 larval mosquito habitats are included in the regular inspection and larviciding program for the Town of Windsor Mosquito Management Program. There were 12 new larval sites identified and added to the routine inspection program in 2010.



LARVAL MOSQUITO CONTROL OPERATIONS

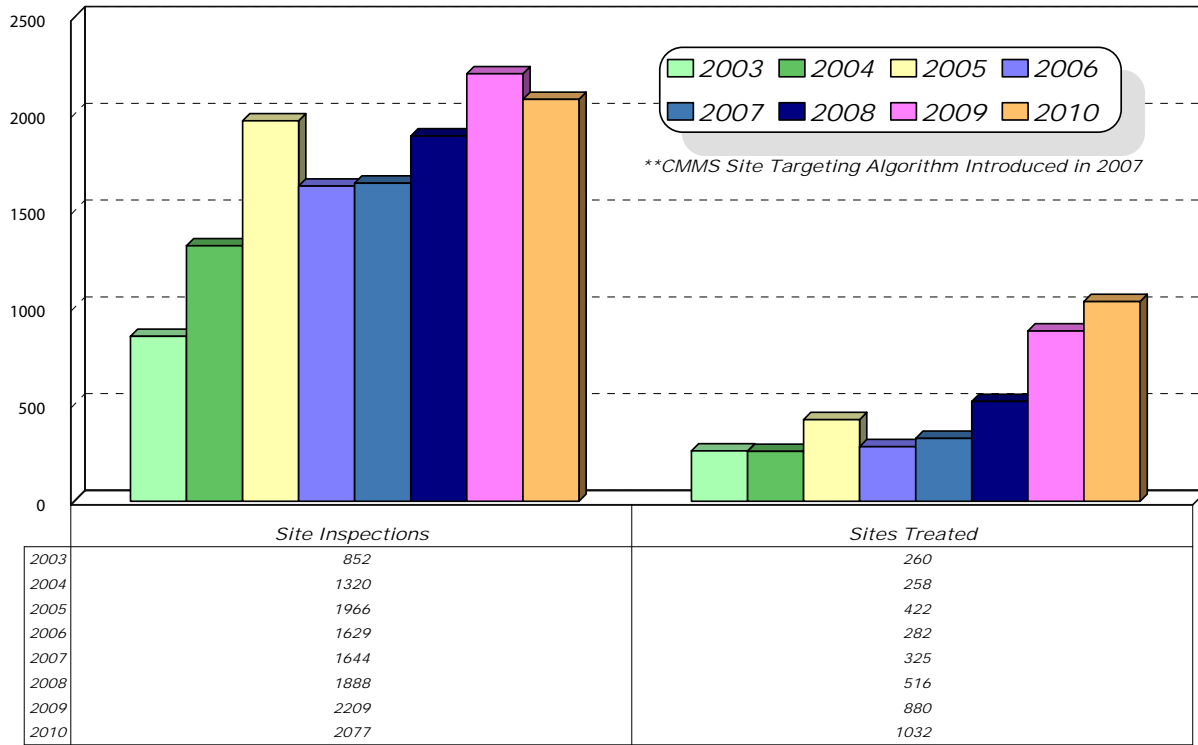
Practical experience and scientific research have shown that the most effective way to control mosquito populations is through an aggressive Integrated Pest Management (IPM) approach. IPM aims at using a variety of concepts, tools, and products to reduce a pest population to tolerable levels. Translating these ideas to mosquito control, CMC has found the most environmentally and economically-sound approach is through targeting the aquatic larval stage of the mosquito. Targeting this stage prevents the emergence of the adult mosquito and thus, reduces disease transmission and nuisance.

In 2010, 90.1% of the total inspected sites were found to be wet and 55.1% were producing mosquito larvae. An estimated 2.8 million larvae were eliminated with larval control products in 2010. In 2009, 91.7% of total site inspections consisted of wet sites with larval production at 43.4% of those sites. An estimated 2.4 million larvae were eliminated before emerging due to larval control operations in 2009. In 2008, 77% of total site inspections consisted of wet sites with larval production at 27% of those sites. An estimated 1.7 million larvae were eliminated before emerging due to larval control operations in 2008. In 2007, 69% of the total site inspections consisted of wet sites with larval production at 20% of these sites. An estimated 982.4 million larvae were eliminated due to larval control operations in 2007.

Larval Site Inspections vs. Sites Treated

Town of Windsor Mosquito Management Program

*2010 Service Area Expansion



2010 Colorado Mosquito Control, Inc.

This chart is the confidential work product of Colorado Mosquito Control, Inc and is protected by state and federal statutes.

Larval mosquito control can be achieved in several ways, including biological, biochemical, chemical, and mechanical means. Although there are a variety of methods for reducing larval populations, some options may have greater consequences than benefit. Mechanical or habitat modification is a technique which may be used, but the area to be modified and the extent to which the work will affect the surrounding area must be carefully assessed. Permanent ecological damage may occur if extensive habitat change has taken place. True biological controls may also have non-target affects that outweigh the benefits of their control capacity. The biological control agent, if not carefully selected and evaluated, may cause and imbalance in the natural ecological community, as well as threaten population levels of other organisms. This was the case with the introduced mosquito fish, no longer widely utilized in Colorado as they readily preyed upon young amphibians and other fish species in addition to controlling mosquitoes.

CMC's favored method of larval mosquito control is through bacterial bio-rational products. The main product used by CMC is a variety of bacteria (*Bacillus thuringiensis var. israeliensis*). *Bti*, as it is known, has become the cornerstone of most mosquito control programs throughout the world. Almost all Mosquito Abatement Districts have incorporated *Bti* applications into their management practices, given the specificity of these products on larval mosquitoes causing almost no mortality among other non-target organisms. The benefits of applications using *Bti* include its efficacy and lack of environmental impacts, as well as its cost efficiency. When used properly, successful mosquito control without impact to aquatic invertebrates, birds, mammals, fish, amphibians, reptiles, or humans can be achieved. A broad label allows for the use of the product in the majority of the habitats throughout the service area. Another bacterial product closely related to *Bti* is *Bacillus sphaericus (Bs)*. In addition to all

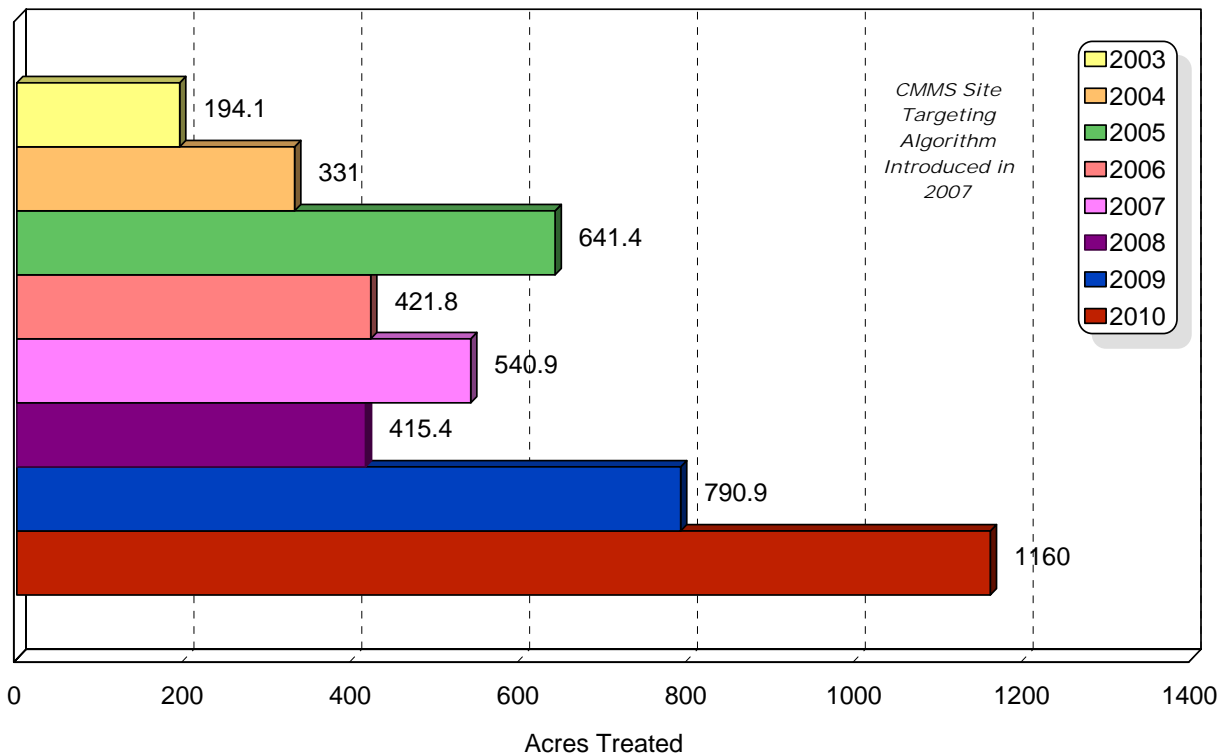
of the benefits of *Bti*, *Bs* is by definition a true biological control agent in that it remains in the system through multiple broods, or generations, of mosquitoes. Unfortunately, the residual benefit of the control comes at a cost in price at approximately three times that of *Bti*.

Other larval control products include a growth regulator (methoprene), a mineral oil, and an organophosphate (Abate). Methoprene is a synthetic copy of a juvenile growth hormone found in larval mosquitoes. The hormone prevents normal development of the adult mosquito in the pupal stage, eventually causing death. While a good control product, the cost is prohibitive to be the predominant product in a large scale program. The benefits of these products are the availability of 30 and 150 day formulations. Abate, the one chemical larval control product CMC uses, serves as an effective product, but label restrictions limit its use in many areas. CMC limits the use of chemical larvicides to areas with little biodiversity, such as gravel pits, or areas which chronically produce large amounts of mosquitoes, but only as a last resort when other solutions are not present. Mineral oil is the only product effective on the pupal stage and therefore is an essential tool when pupae are found.

Larval Acreage Treated by Service Area

Town of Windsor Mosquito Management Program

*2010 Service Area Expansion



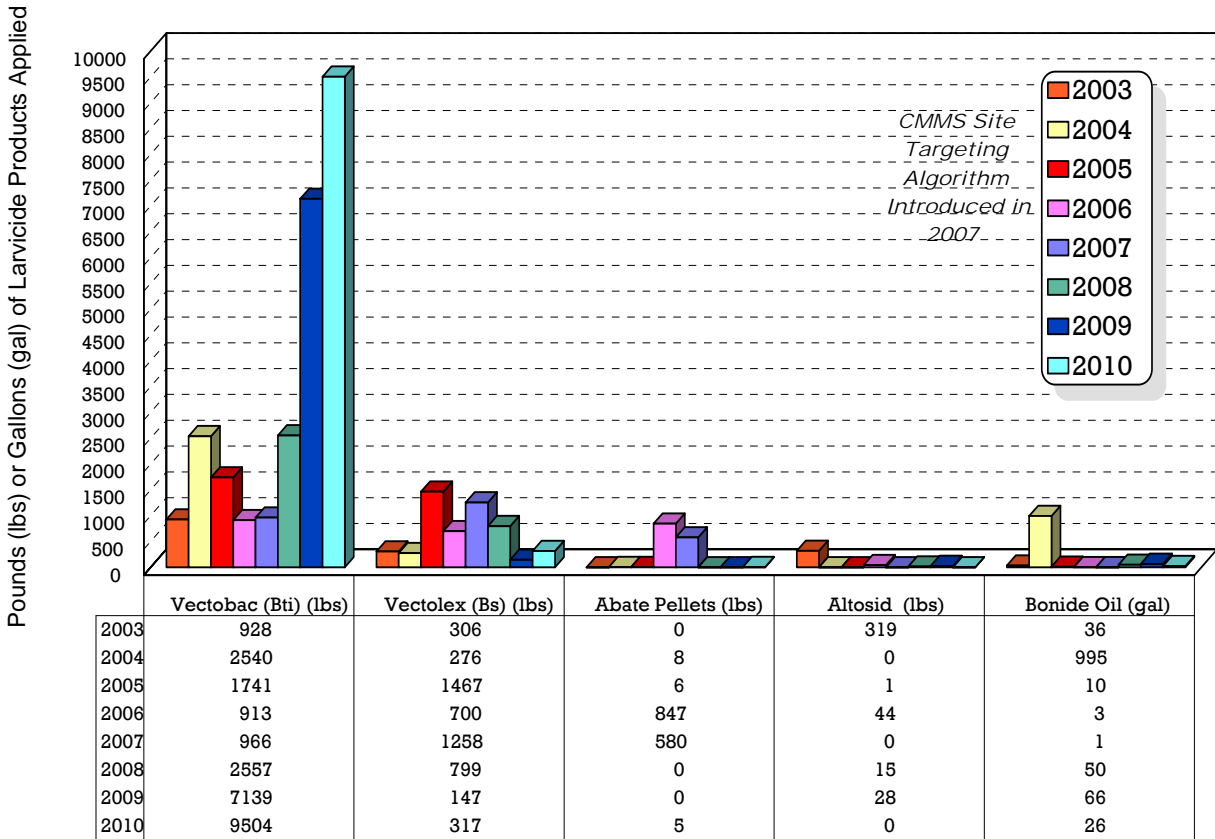
2010 Colorado Mosquito Control, Inc.

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Larval Control Agents Comparison

Town of Windsor Mosquito Management Program

*2010 Service Area Expansion



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All of the aforementioned methods and products represent the essential ingredients of Integrated Pest Management. Mosquitoes are very well adapted insects and can be found in many different habitat types from a cattail marsh to a cup littered on the side of the road. A variety of tools must be used to prevent resistance and ensure the best method will be available for any given situation.

CMC Surveillance Laboratory

Data on mosquito abundance and species identity is critical in the operation of a successful mosquito control program. Over the past few years, identifying, packaging, and sending *Culex* mosquito pool samples off to the CDPHE or CSU Labs for West Nile Virus testing has also become critically important in the battle against West Nile Virus and other mosquito-borne diseases. The Colorado Mosquito Control Surveillance Laboratory, managed by Dr. Michael "Doc" Weissmann, has become the largest single source of adult and larval mosquito surveillance data in the state of Colorado.

In 2010, Colorado Mosquito Control monitored a statewide network of over 250 trap sites, with over 3,200 trap nights set, collecting more than 425,000 adult mosquitoes that were counted and identified to species by the CMC Surveillance Laboratory. While individual traps provide only limited information, trap data is interpreted in the context of historical records for the same surveillance location, going back in time more than a decade in some locations. Individual traps are also compared to other traps from around the region that were set on the same night and therefore exposed to similar weather conditions.



Technicians working in the Surveillance Laboratory at Colorado Mosquito Control, Inc. are trained to provide accurate species identification of mosquito specimens for both adults and larval mosquitoes. More than 50 mosquito species are believed to occur in Colorado with 32 of those identified from samples processed during the 2010 season from across the state.

CMC employs two kinds of traps to monitor mosquito populations. The CDC light trap uses carbon-dioxide from dry ice as bait to attract female mosquitoes seeking a blood meal from a respiring animal. Once attracted by the CO₂, the mosquitoes are lured by a small light to a fan that pulls them into a net for collection. The gravid trap uses a tub of highly-organic water as bait to attract female mosquitoes that are looking for a place to lay their eggs. A fan placed close to the water surface forces mosquitoes that come to the water into a collection net. Once back in the laboratory, the contents of the trap nets are sorted by species and counted by laboratory technicians trained to identify Colorado mosquito species.



Additionally, the CMC Surveillance Laboratory conducts an intensive larval identification program with over 5,000 larval mosquito samples collected by I&L technicians. Collections are made prior to larvicide applications and identification of species information is retained in our database. This information is now invaluable in targeting mosquito control efforts as we gain a greater understanding of the habitat types preferred by mosquito species of Colorado and the seasonality of these habitats as sites for mosquito development.

Specimens and data collected from these traps and larval identification are used in:

- ✈ Determining effectiveness of larval control efforts. Each mosquito species prefers specific kinds of habitats for larval development. If a trap includes large numbers, it could indicate the presence of an unknown larval habitat and, based on the species identification and known habitat preference for that species, direct field technicians as to possible sources of the mosquitoes collected.
- ✈ Determining larval and adult mosquito species. This helps to illustrate the threat of mosquito-borne disease amplification and transmission.
- ✈ Determining where adult control efforts were necessary. While mosquito eradication is impossible, significant population reduction is achievable. In places where larval control was insufficient, especially in neighborhoods where adult mosquitoes migrated in from larval sources outside of the control area, it may be necessary to use adulticide methods, such as ULV truck fogging or barrier sprays of nearby harborage areas. Trap counts that exceeded an acceptable threshold for an area would trigger adult control measures.
- ✈ Surveillance for Mosquito-borne Disease. Historically, CMC efforts were targeted primarily at controlling mosquito nuisance problems with limited disease surveillance. However, since the arrival of the West Nile Virus in Colorado in August of 2002, the paradigm has shifted toward disease prevention and control. Accurate species identification of the mosquitoes in the traps is important when monitoring species population trends. It also is necessary for evaluating whether a population spike represents an actual increase in disease transmission potential or only an increased nuisance level.



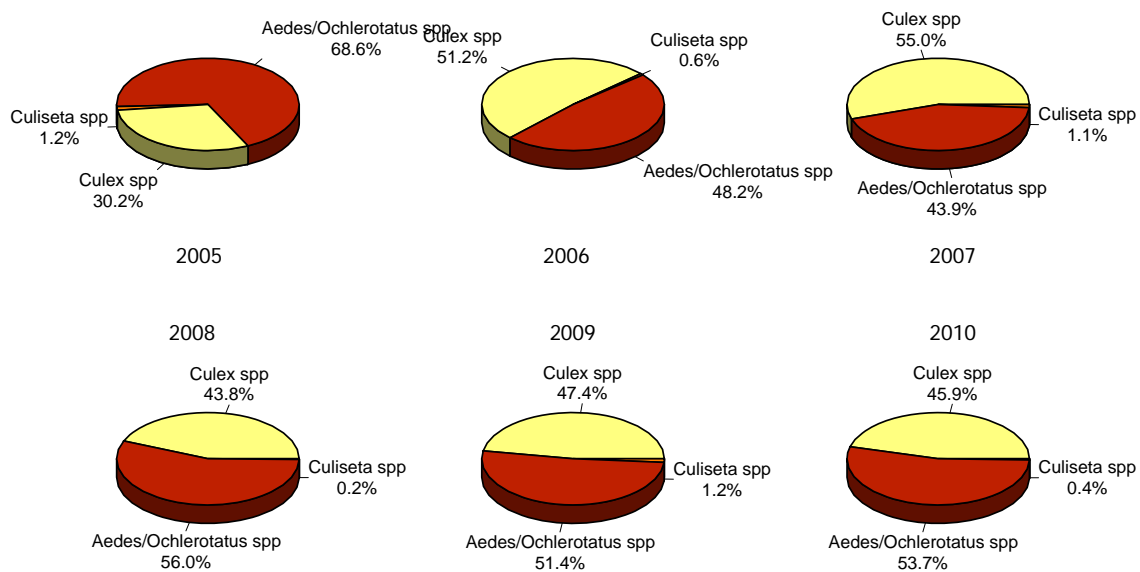
CDC Surveillance Light Trap Data Comparison

In 2010, an average of 11 surveillance light trap locations monitored adult mosquito populations within Windsor. CDC battery-operated "light traps" were set weekly in each location to provide adult mosquito population data for seasonal comparison. The Town of Windsor added two new surveillance locations to the Mosquito Management Program in 2010. A surveillance location was established in the Steeplechase subdivision (WR-16) to monitor mosquito populations in the Steeplechase, Belmont Ridge, and High Pointe communities. A second location was established in the North Shores community (WR-15) to monitor mosquito populations in the Ventana, North Shores, and Windsor Estates communities. CMC also expanded surveillance monitoring in the Water Valley/ Pelican Lakes communities through a cooperative effort between Windsor, Pelican Lakes Golf Course and Water Valley. CMC established locations in Water Valley North (WR-17) and Water Valley South (WR-18) to monitor mosquito abundance within the residential communities.

There were 134 surveillance traps set in 2010 which collected a total of 31,922 mosquitoes from within the Town of Windsor. The average number of mosquitoes caught per trap per night was 238 and the average *Culex spp.* mosquitoes caught per trap per night was 74. The composition of mosquitoes trapped was 30.6% (9,772) *Culex tarsalis*, .4% (135) *Culex pipiens*, 68.7% (21,927) *Aedes/ Ochlerotatus spp.*, and .3% (82) *Culiseta spp.* mosquitoes.

Annual CDC Light Trap Species Abundance Comparison

Historical Trends for Collections from WR-03, WR-05, WR-06, & WR-11



Data includes: WR-02 (Lake Osterhout), WR-03 (Kiva Circle), WR-05 (Chestnut Street), and WR-06 (Lee Lake). These traps have been in place seasonally since 2005.

2010: Total 11,785 mosquitoes from 54 trap nights (avg. 218 mosquitoes per trap/night)
 2009: Total 11,598 mosquitoes from 60 trap nights (avg. 193 mosquitoes per trap/night)
 2008: Total 14,888 mosquitoes from 59 trap nights (avg. 252 mosquitoes per trap/night)
 2007: Total 13,352 mosquitoes from 59 trap nights (avg. 226 mosquitoes per trap/night)
 2006: Total 2,796 mosquitoes from 60 trap nights (avg. 47 mosquitoes per trap/night)
 2005: Total 8,838 mosquitoes from 63 trap nights (avg. 140 mosquitoes per trap/night)

2010 Colorado Mosquito Control, Inc.

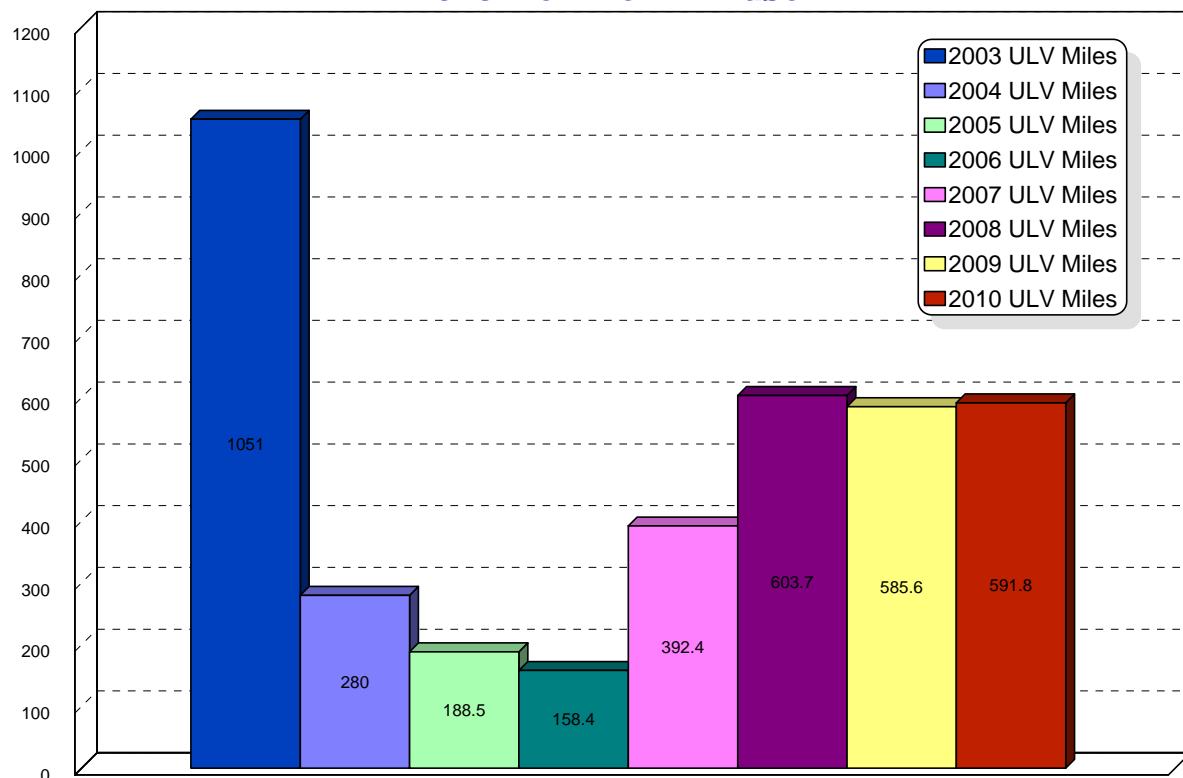
This chart is the confidential work product of Colorado Mosquito Control, Inc and is protected by state and federal statutes.

2010 ADULT CONTROL

The goal of Colorado Mosquito Control, Inc. is to provide all residents of Windsor with the best options for safe, effective, modern mosquito management. The primary emphasis of our mosquito management program is to control mosquitoes in the larval stage, using safe biological control products. This environmentally focused program maintains adulticiding applications as a final resort when mosquito populations surpass nuisance or risk thresholds. Mosquito surveillance trapping results are used to make data-driven decisions regarding areas that need to be sprayed for adult mosquito control. Adult mosquito control spraying is targeted to specific sectors determined by this trap data, thereby reducing the area sprayed and the frequency of spraying in each sector.

CMC uses all available data from CDC light traps, gravid traps, Mosquito Hotline annoyance calls, and field technician reports to focus adult mosquito control efforts on specific, very limited "targeted" areas. In parts of the community where high numbers of mosquito annoyance calls are received, "floater" CDC light traps are set to evaluate adult population levels and species make-up. In many cases, a direct correlation is evident between areas with high complaint calls and high trap counts. While this correlation allows us to focus adult control in these areas, the emphasis is placed on finding the larval habitat sources of the trapped adults and continued larval control measures.

Mileage Comparison of Truck ULV Adulticide Applications in the Town of Windsor



2010 Colorado Mosquito Control, Inc.

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CMC uses state of the art technology, calibrated application timing, and least-toxic products to minimize non-target impacts. All adult mosquito control is accomplished using Ultra Low Volume (ULV) fogging equipment and performed after dusk when the majority of mosquito species are most active. This type of equipment produces droplets averaging 12 microns in diameter and allows for a minimal amount of product to be put into the environment. These treatments take place in the evening when mosquitoes are flying in greater numbers and non-target insect activity (for example, day-flying pollinators like bees) is greatly reduced. Using this application technique, the overall goal of minimal environmental impact and effective adult control is achieved in the targeted area.

CMC continued to use the water-based adulticide AquaLuer 20/20 for ULV adult mosquito control in 2010. Its active ingredient, permethrin, is highly effective against mosquitoes, while the water-base provides a much more environmentally sound solution to traditional oil-based adulticides.



Environmental Responsibility

Colorado Mosquito Control strives to minimize environmental impacts while maximizing efficiency and efficacy in our programs. Using the Integrated Pest Management (IPM) framework, in combination with implementation of new and existing technologies, CMC has raised the bar in developing sustainable mosquito control programs with minimal impact to human health and the environment.

INTEGRATED PEST MANAGEMENT (IPM)

INTEGRATED MOSQUITO MANAGEMENT (IMM)

CMC has always strived to create the most comprehensive mosquito control programs using the principles of Integrated Pest Management (IPM). IPM allows for management of pests only after careful analysis of the pest population and thoughtful selection of methods that will have the greatest targeted control and the least environmental, economic, and health impacts. With this, CMC uses only products and application methods that target mosquitoes with minimal risk to non-target organisms or human health. For our Integrated Mosquito Management (IMM) programs, the staple product is *Bacillus thuringiensis israeliensis* (Bti). Bti is the most favorable mosquito control product on the market



today and has found favor with both traditional mosquito control programs as well as with environmental advocates for its efficacy in controlling mosquitoes while maintaining target specificity and lack of adverse health effects. Over 90% of CMC's operational applications continue to be with Bti.

However, a true IPM or IMM program cannot rely on the use of a single control method and does not exist without the use of all available tools to control mosquitoes at specific locations or life stages. CMC utilizes a number of techniques to control mosquitoes site

specifically through the additional use of native fish as biological controls, biological/bio-rational products such as Bti and *Bacillus sphaericus* (Bs), target specific Insect Growth Regulators (IGR) and mineral oil. Additionally, adult mosquito control continues to be a very small, but integral part of a true IMM program. While adult control is at times necessary in any mosquito control program, CMC recognizes the inherent risks of any pesticide application and through implementation of our Comprehensive Mosquito Management System (CMMS) database, extensive adult and larval surveillance, and input from field personnel we have been able to reduce adult control applications throughout our program areas to target those areas where only necessary.

TECHNOLOGY

CMC has strived to improve the programs offered to its customers with novel and progressive advancements, continually evaluating and implementing new products and new technologies, not only with regard to control efforts but also for data processing and information reporting. CMC shares the belief that timely information should be available to our customers and residents, so that the people who fund the programs can access the work that is being performed. CMC also believes that the ability to access the data will improve both the resident's and municipality's ability to stay informed about West Nile Virus risk in their community.

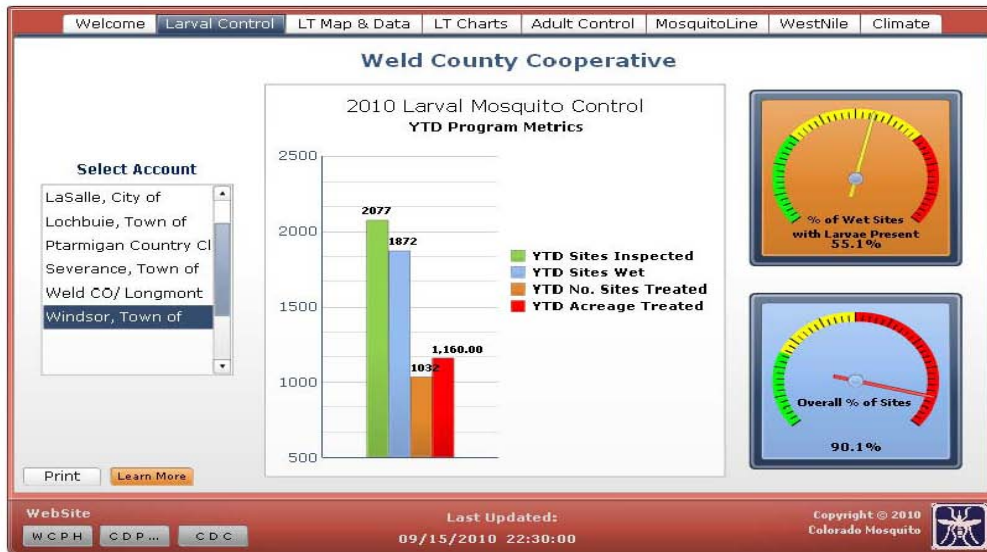
CMC WEBSITE

Our website, www.comosquitocontrol.com, is the leading website in the State of Colorado when it comes to providing up-to-date, factual, and comprehensive information on, and links to, mosquito biology and control, mosquito-borne diseases, pesticide toxicology information, and a wealth of topics relating to mosquitoes. Our website continues to be an integral tool for dissemination of operational data to the citizens we serve, minimizing the resources and time required by the city and its employees for answering for fielding public inquiries.



LINKS FROM WEBSITE

- ✈ CMC was one of the first mosquito control organizations anywhere to publish adult mosquito control spray schedules on the web. Adult mosquito spray schedules are posted daily by 3PM.
- ✈ CMC updated the 2010 client website pages which contain program information and goals, product information, larval control areas, and annual reports in easily accessible and downloadable PDF formats.
- ✈ CMC has led the industry with dissemination of data via our online dashboard. Over the past year CMC introduced a radical departure from traditional reporting methods: *Digital Interactive Reporting*. No other mosquito control company anywhere has DIGITAL INTERACTIVE REPORTING. These CMC exclusive technologies allows our customers to quickly and easily analyze thousand of data points, simply create and instantly view charts and graphs that can visually compare years of data and show trends not easily detected from traditional data analysis.
- ✈ Visit the Dashboard at: <http://www.comosquitocontrol.com/weldco.html>



Some features on this website require [current](#) Adobe Acrobat Reader, Flash Player or Quicktime Player. Download free versions here:



Mosquito Control is All We Do !
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FUTURE

The spring 2010 edition of Wingbeats featured an article about the Departments of Defense and Agriculture are working together to develop new insecticides for mosquito control. The Mosquito and Fly Research Unit (MFRU) chemists are also collaborating with chemists at the University of Florida to examine the USDA historical archives of insecticide data by quantitative structure-activity relationship (QSAR) modeling to predict and synthesize new insecticides. In early 2009, 19 registered insecticides with different modes of action were tested against mosquito larvae and adults. Results have indicated that 3 relatively new insecticides; fipronil, spinosad, and imidacloprid show good larvicidal and adulticidal activity, compared with that of permethrin. The final registration of these products with the EPA will be dependent upon the successful completion of EPA-mandated tests. Hoel, D., Pridgeon, J.W., Bernier, U.R., Chauhan, K., Meepagala, K., Cantrell, C. 2010. Departments of Defense and Agriculture team up to develop new insecticides for mosquito control. Wing Beats. 21(1):29-34

If and when registered, CMC will evaluate if and how these new products may be incorporated into the programs we offer. CMC remains committed to improved environmentally sound mosquito control through the use technology.

2010 PUBLIC RELATIONS AND EDUCATION

For 23 years CMC has believed in and demonstrated that a strong Public Outreach and Education Program is one of the keys to success in providing large-scale municipal mosquito control programs. Citizen complaints, inquiry, information and satisfaction surveys can aid in evaluating the effectiveness of a program. CMC constantly looks for ways to better serve the communities we work with and appreciates the citizen involvement in the betterment of the programs we offer. We have clearly demonstrated that commitment and belief by proactively serving the community (and all of our contracted communities) with numerous innovative programs, activities and services.

Customer Service

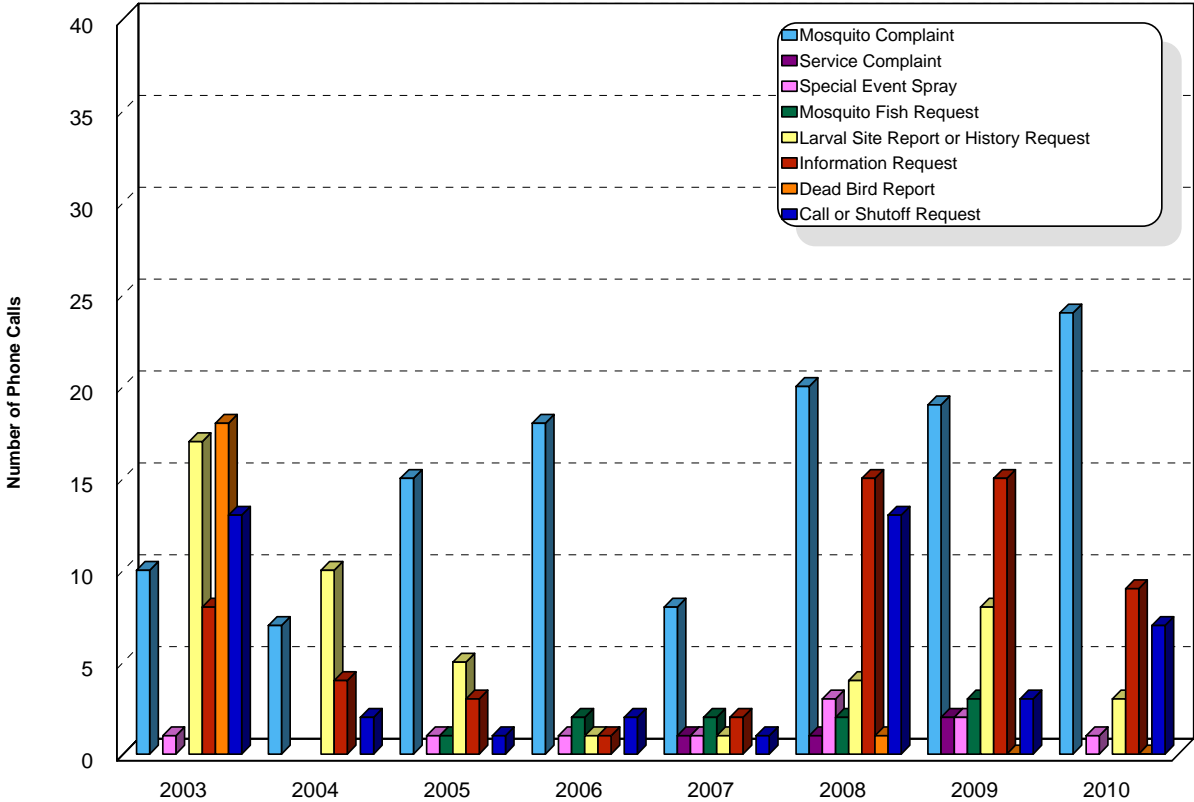
Customer service was again a very high priority for CMC in 2010. We take pride in training each and every technician so that they have the confidence and information to provide residents with the correct answers to sometimes difficult questions. Each field technician spends part of their day responding to resident concerns in their work area. This in-field customer service personalizes the mosquito control program, provides us with local information on mosquito activity and provides the valuable opportunity to truly communicate face-to-face with the residents we serve.

Residents are always encouraged to call the Mosquito Hotline to report areas with high mosquito annoyance and potential standing water breeding habitat. These calls compliment CDC light trap data, allow us to pinpoint problem areas, and ultimately provide another valuable resource for our control efforts. CMC can address the following concerns through a telephone call or email correspondence with residents,

- Opt a property out of any adulticide spraying via a “shut-off list” which is updated annually and as new requests are received
- Request a call notification when adulticide spraying is planned in and around their neighborhood
- Report mosquito annoyance areas and request floater traps at a residence
- Report standing, stagnant water that may indicate the presence of larval sites or harborage
- Request fish to control mosquito larvae (where applicable and appropriate)
- Request information on how to control and/or prevent mosquitoes on their property
- Request health and safety information about mosquito control operations and pesticide products used in the control program

CMC maintains a log of calls received including date, name, address, type of call, response, resolution, and resolution date. In 2010 CMC fielded 44 phone calls from Town of Windsor residents. Of these; there were 7 requests for call notification of mosquito spraying. There were 9 requests for information regarding the town’s mosquito spray program, West Nile Virus risk, and ways to reduce mosquitoes. There were 3 new larval site reports, in which a CMC technician inspected the area for standing water. If the habitat posed potential for mosquito larvae, then CMC treated the site and added it into the routine inspection program. There was 1 request for a special event mosquito spray application on a private property. There were 24 mosquito annoyance calls received in 2010. CMC responded to these mosquito annoyances by either providing trap data for the local area, setting floater traps, or inspecting the area for new sites that may be producing mosquitoes causing the annoyance. CMC set 2 floater traps on resident properties in Windsor. If local trap data or floater trap data was below the threshold the town uses to assess the need for mosquito spraying, then CMC provided information about mosquito sprays that could repel mosquitoes in their own residential yards.

Annual Comparison of MosquitoLine Calls 2003 - 2010 Windsor Resident Phone Calls by Type



2010 Colorado Mosquito Control, Inc. This chart is the confidential work product of Colorado Mosquito Control, Inc and is protected by state and federal statutes.

CALL NOTIFICATION & SHUTOFF SYSTEM

CMC will continue to maintain a comprehensive Call Notification & Shutoff database and will notify residents on the list when conducting ULV adulticide spray applications within 2 blocks of their property or within the effective ULV spray drift distance (300-500 ft depending on wind speed and direction). All Shutoff locations are mapped in ArcView GIS. Call & Shutoff forms are available online and may be submitted via CMC website or by mail.

In 2010 there were 33 residents on the call notification program offered by CMC for the Town of Windsor. There were 23 residents requesting a phone call notification and 10 requests for shutoff of mosquito adulticides near and around homeowners' residences.

FREE FISH STOCKING PROGRAM

CMC will continue to work with residents to supply larvivorous fish to those residents with ornamental and closed-system ponds that are not currently stocked with fish and that may be producing mosquito problems in their neighborhoods. CMC technicians will physically visit the resident's homes to distribute fish.

"PREVENTION & PROTECTION" PRESENTATIONS

CMC will continue to offer presentations to "at risk" municipal employees in the Parks & Recreation Dept., Utility Workers, and the local senior populations with information about personal protection, repellents, West Nile Virus activity and ways to reduce mosquitoes by dumping/ draining standing water.

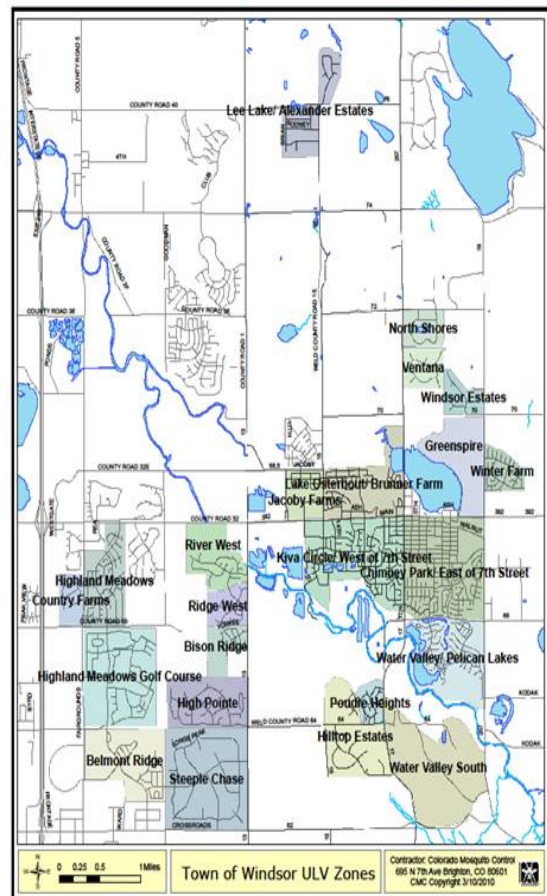
BACKYARD INSPECTION PROGRAM

CMC will continue to employ a full time technician solely assigned to inspecting residential backyards and educating residents about the Fight the Bite campaign. Backyard inspections will reduce container breeding WNV vector mosquitoes and increase public contact and program involvement.

FLOATER TRAP PLACEMENT for annoyance reports at resident homes at locations away from standard trapping zones.

DAILY POSTING OF ULV SPRAY ZONES posted by 3 pm for resident notification at www.comosquitocontrol.com

MAP OF ULV ZONES at www.comosquitocontrol.com for resident reference. Denotes labeled zones and approximate trap locations.



Community Outreach and Education

In 2010, CMC further increased our community outreach programs to provide residents and visitors with a better understanding of the value and scope of their mosquito control program. Outreach has proven to have a very positive impact on the community. Throughout the summer, outreach events were attended at select city council meetings, television/ radio interviews, and fairs. The feedback we received was extremely positive, not only from residents, but from local government attendees as well.

These outreach programs provided information and education on all areas of mosquito control and WNV risk. Individual program services were discussed, but an emphasis was also placed on what individuals can do to eliminate standing water on and around their property, how to reach us via phone and website, and even the proper application of mosquito repellents.



In 2010 CMC participated in a Fort Collins City Expo on June 29. This was an excellent opportunity to reach out to employees and community members who are involved in city programs and operations. CMC was able to address questions about West Nile Risk, provide information about trapping operations and answered numerous questions about what the City of Fort Collins does to mitigate West Nile risk.

CMC also participated in the 1st Annual Regional Fight the Bite Night on August 6th. Jessica Schurich (Operations Manager) and one of CMC's Public Outreach employees, Abigail Williamson answered residents questions and distributed mosquito repellents at Fairgrounds Park in Loveland. CMC was able to reach out to about 30 residents and distributed almost all of the DEET wipe supplies on hand that evening. There were numerous questions about the effectiveness of alternative repellents besides DEET. Staff informed residents about the wealth of information on the CDC's website which recommends other approved repellents, in addition to DEET. CMC also had on hand a mosquito trap, examples of larvicides and numerous alternatives to DEET products for family use.

In addition to the Fairgrounds Park location there were information stations in Fort Collins at Lee Martinez Park and along the Poudre River trail in Riverbend Ponds. There were also stations in Weld County at Eastman Park in Windsor and at the Poudre Learning Center in Greeley. This event was a great way to educate the community. CMC fully supports and hopes to be involved with the local health and city departments that sponsored this event in future years.

NEW FOR 2010! NATURAL AREAS CLEANUP

CMC has adopted a new program to cleanup natural areas and open space within the communities we work. CMC employees volunteered two Saturdays to cleanup local landscapes. We removed 15 bags of trash and debris from the Colina Mariposa Natural Area through the Volunteer Program with Fort Collins Natural Areas. CMC hopes to expand this outreach program and team building experience to other communities in the future.



SUMMARY

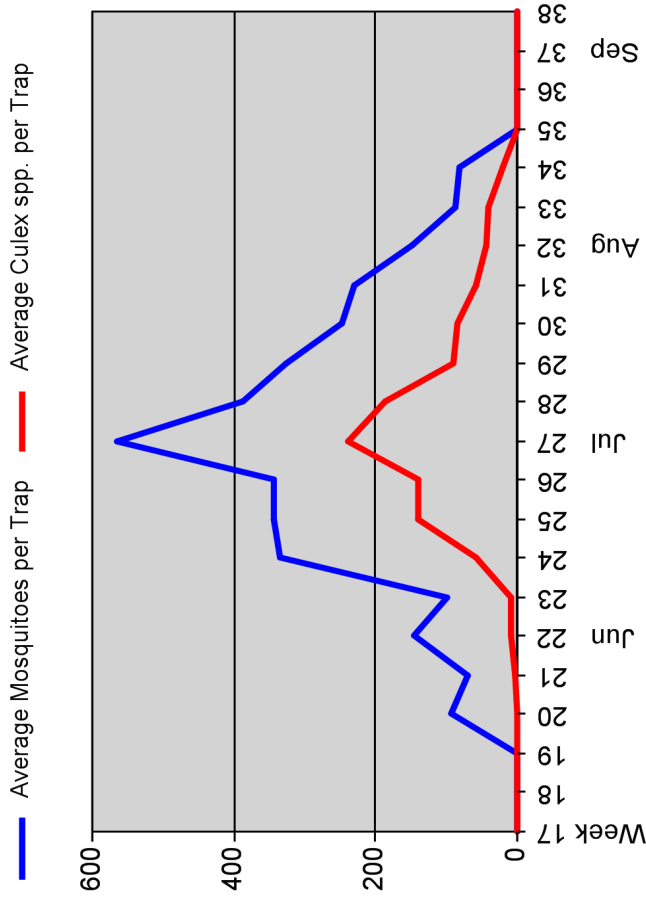
CMC recognizes that the vector *Culex tarsalis* will continue to use the irrigation tail waters and cattail marshes along the Front Range as the primary habitat for offspring development, thereby continuing to pose risk for West Nile Virus infections. The variable resurgence in mosquito-borne pathogens clearly illustrates the continued need for on-going mosquito control, mosquito surveillance, vigilant action and response.

Colorado Mosquito Control, Inc. continues to effectively serve the residents of Windsor using integrated mosquito management methods and state of the art technology to reduce mosquito nuisance and the related potential for disease transmission, including West Nile Virus. CMC has been able to develop both a cost-effective and efficient program for Windsor over the past seasons and looks forward to continued service in 2011 and beyond. We also know that there is always room for improvement and have high expectations for program improvements and new successes in future seasons.

2010 Windsor CDC Trap Composite Data

Total number of trap/nights set: 134
Total number of mosquitoes collected: 31,922
Average mosquitoes per trap/night: 238
Average Culex per trap/night: 74

Seasonality

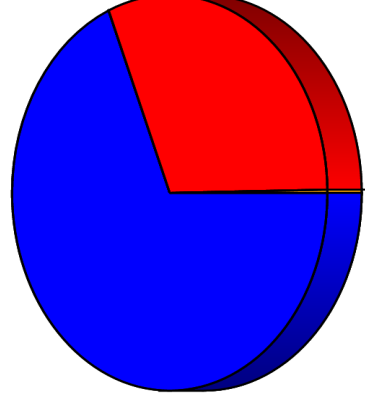


Species collected and abundance:

<i>Aedes (Oc.) dorsalis</i>	1685	5.3 %
<i>Aedes (Oc.) increpitus</i>	151	0.5 %
<i>Aedes (Oc.) melaninon</i>	595	1.9 %
<i>Aedes (Oc.) nigromaculis</i>	34	0.1 %
<i>Aedes (Oc.) trivittatus</i>	88	0.3 %
<i>Aedes vexans</i>	19362	60.7 %
<i>Anopheles franciscanus</i>	1	0.0 %
<i>Culex pipiens</i>	135	0.4 %
<i>Culex salinarius</i>	17	0.1 %
<i>Culex tarsalis</i>	9772	30.6 %
<i>Culiseta inornata</i>	82	0.3 %

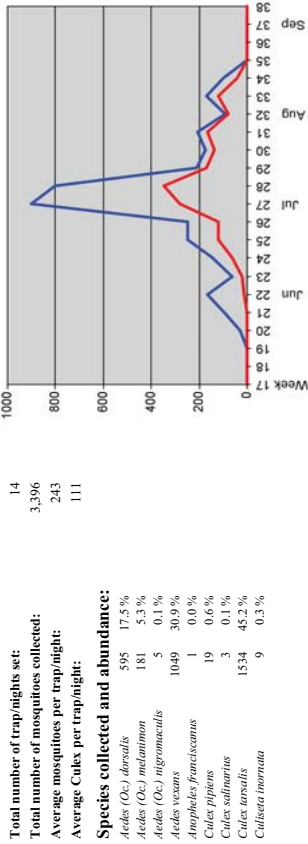
Genus proportions:

Genus	Number	Percent of Total
<i>Aedes/Ochlerotatus</i>	21,927	68.7 %
<i>Anopheles</i>	1	0.0 %
<i>Culex</i>	9,925	31.1 %
<i>Culiseta</i>	82	0.3 %
Other	0	0.0 %



WR-02: Windsor - Lake Osterhout

Season: 2010
 Trap Type: Light/CO2
 Location: west side of Lake Osterhout
 GPS: N40° 29.330', W104° 54.680'



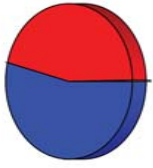
Total number of trap/nights set: 14
 Total number of mosquitoes collected: 3,396
 Average mosquitoes per trap/night: 243
 Average Culex per trap/night: 111

Species collected and abundance:

Species	Number	Percent of Total
<i>Aedes (Oc.) dorsalis</i>	595	17.5 %
<i>Aedes (Oc.) inaequalis</i>	181	5.3 %
<i>Aedes (Oc.) melanotarsus</i>	5	0.1 %
<i>Aedes (Oc.) nigromaculis</i>	1049	30.9 %
<i>Aedes vexans</i>	1	0.0 %
<i>Anopheles punctipennis</i>	19	0.6 %
<i>Culex pipiens</i>	3	0.1 %
<i>Culex salinarius</i>	1534	45.2 %
<i>Culiseta inornata</i>	9	0.3 %

Genus Proportions:

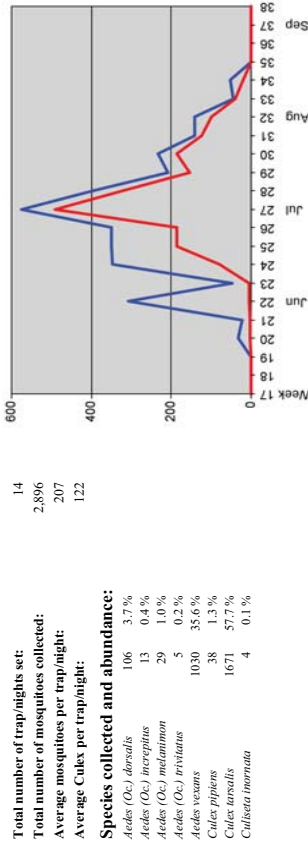
Genus	Number	Percent of Total
<i>Aedes/Ochlerotatus</i>	1,830	53.9 %
<i>Anopheles</i>	1	0.0 %
<i>Culex</i>	1,556	45.8 %
<i>Culiseta</i>	9	0.3 %
Other	0	0.0 %



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WR-05: Windsor - Chestnut Street Alley

Season: 2010
 Trap Type: Light/CO2
 Location: Alley north of Chestnut street and east of 1st Street
 GPS: N40° 28.435', W104° 53.815'



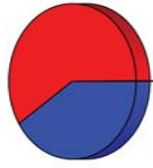
Total number of trap/nights set: 14
 Total number of mosquitoes collected: 2,896
 Average mosquitoes per trap/night: 207
 Average Culex per trap/night: 122

Species collected and abundance:

Species	Number	Percent of Total
<i>Aedes (Oc.) dorsalis</i>	106	3.7 %
<i>Aedes (Oc.) inaequalis</i>	13	0.4 %
<i>Aedes (Oc.) melanotarsus</i>	29	1.0 %
<i>Aedes (Oc.) nigromaculis</i>	5	0.2 %
<i>Aedes vexans</i>	1030	35.6 %
<i>Culex pipiens</i>	38	1.3 %
<i>Culex salinarius</i>	1671	57.7 %
<i>Culiseta inornata</i>	4	0.1 %

Genus Proportions:

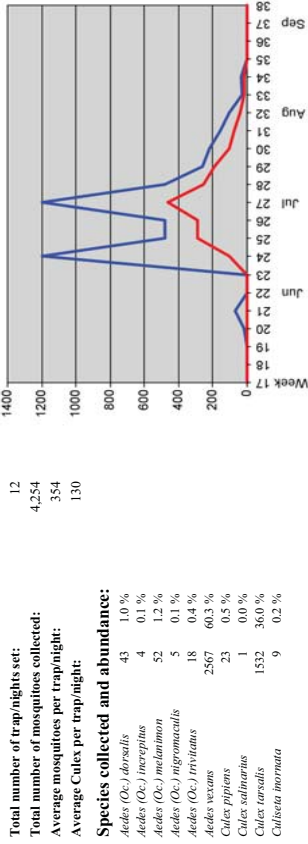
Genus	Number	Percent of Total
<i>Aedes/Ochlerotatus</i>	1,183	40.8 %
<i>Anopheles</i>	0	0.0 %
<i>Culex</i>	1,709	59.0 %
<i>Culiseta</i>	4	0.1 %
Other	0	0.0 %



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WR-03: Windsor - Kiva Circle

Season: 2010
 Trap Type: Light/CO2
 Location: Windsor along river behind 1094 Kiva Circle
 GPS: N40° 28.185', W104° 55.045'



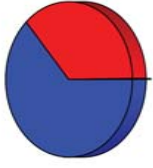
Total number of trap/nights set: 12
 Total number of mosquitoes collected: 4,254
 Average mosquitoes per trap/night: 354
 Average Culex per trap/night: 130

Species collected and abundance:

Species	Number	Percent of Total
<i>Aedes (Oc.) dorsalis</i>	43	1.0 %
<i>Aedes (Oc.) inaequalis</i>	4	0.1 %
<i>Aedes (Oc.) melanotarsus</i>	52	1.2 %
<i>Aedes (Oc.) nigromaculis</i>	5	0.1 %
<i>Aedes (Oc.) trivittatus</i>	18	0.4 %
<i>Aedes vexans</i>	2567	60.3 %
<i>Culex pipiens</i>	23	0.5 %
<i>Culex salinarius</i>	1352	36.0 %
<i>Culiseta inornata</i>	9	0.2 %

Genus Proportions:

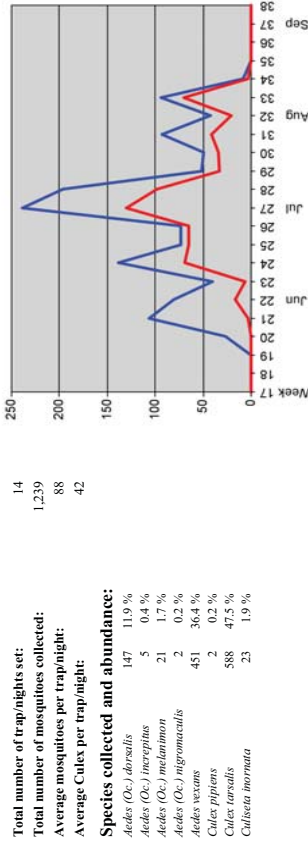
Genus	Number	Percent of Total
<i>Aedes/Ochlerotatus</i>	2,691	63.3 %
<i>Anopheles</i>	0	0.0 %
<i>Culex</i>	1,556	36.6 %
<i>Culiseta</i>	9	0.2 %
Other	0	0.0 %



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WR-06: Windsor Lee Lake Area

Season: 2010
 Trap Type: Light/CO2
 Location: 6771 Stevens Street in North Windsor
 GPS: N40° 32.165', W104° 55.835'



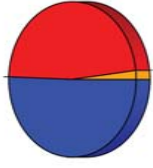
Total number of trap/nights set: 14
 Total number of mosquitoes collected: 1,239
 Average mosquitoes per trap/night: 88
 Average Culex per trap/night: 42

Species collected and abundance:

Species	Number	Percent of Total
<i>Aedes (Oc.) dorsalis</i>	147	11.9 %
<i>Aedes (Oc.) inaequalis</i>	5	0.4 %
<i>Aedes (Oc.) melanotarsus</i>	21	1.7 %
<i>Aedes (Oc.) nigromaculis</i>	2	0.2 %
<i>Aedes vexans</i>	451	36.4 %
<i>Culex pipiens</i>	2	0.2 %
<i>Culex salinarius</i>	588	47.5 %
<i>Culiseta inornata</i>	23	1.9 %

Genus Proportions:

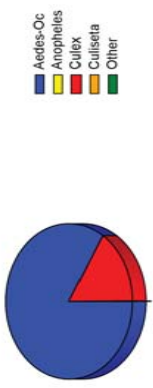
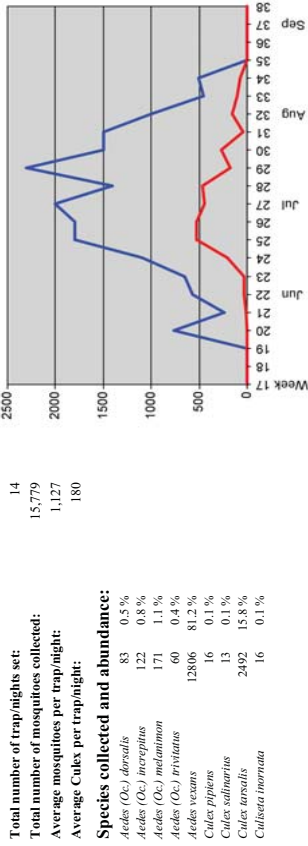
Genus	Number	Percent of Total
<i>Aedes/Ochlerotatus</i>	626	50.5 %
<i>Anopheles</i>	0	0.0 %
<i>Culex</i>	590	47.6 %
<i>Culiseta</i>	23	1.9 %
Other	0	0.0 %



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WR-11: Windsor River Ridge

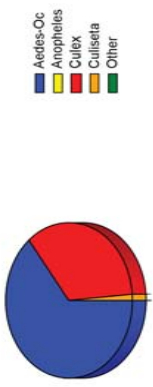
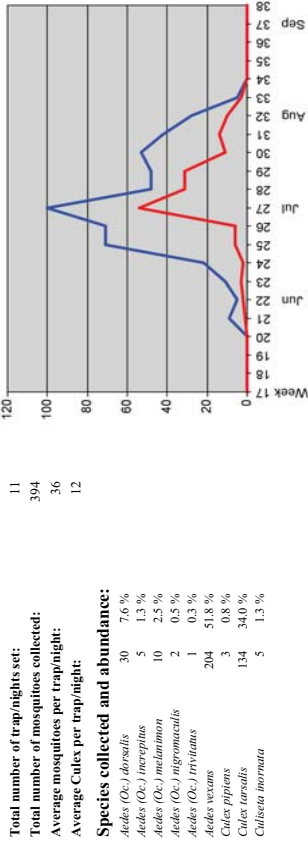
Season: 2010
 Trap Type: Light/CO2
 Location: off River Ridge Drive along drainage in River West
 GPS: N40° 28.470', W104° 56.795'



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WR-14: Windsor Highland Meadows

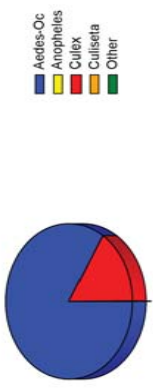
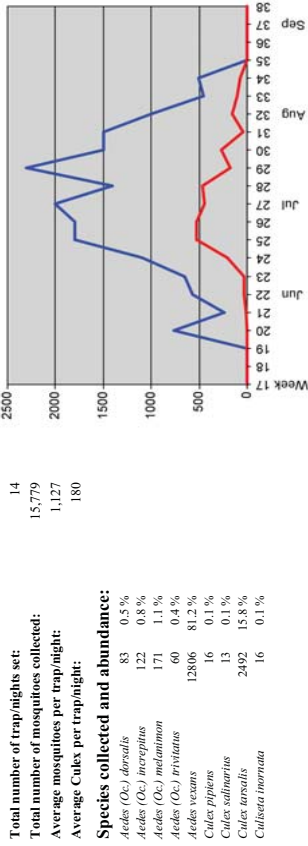
Season: 2010
 Trap Type: Light/CO2
 Location: 8377 Casaway Drive
 GPS: N40° 28.055', W104° 58.855'



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WR-15: Windsor North Shore

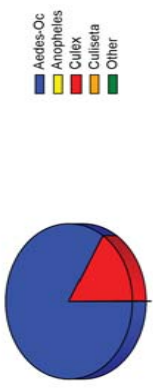
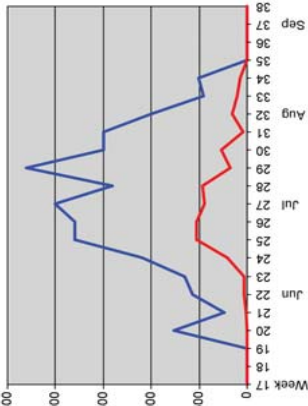
Season: 2010
 Trap Type: Light/CO2
 Location: 314 North Shores Circle
 GPS: N40° 30.265', W104° 53.960'



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WR-16: Steeplechase

Season: 2010
 Trap Type: Light/CO2
 Location: Drainage So. of 8632 Steeplechase Dr.
 GPS: N40° 26.715', W104° 56.895'



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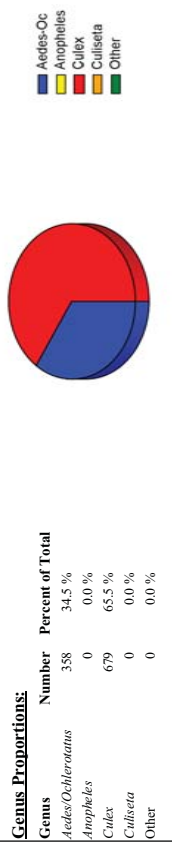
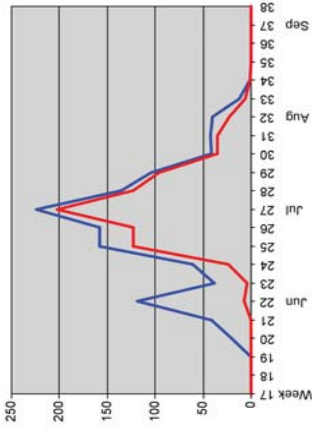
WR-17: Windsor Water Valley North

Season: 2010
 Trap Type: Light/CO2
 Location: drainage west of BaySide Circle townhomes
 GPS: N40° 27.625', W104° 53.870'

Total number of trap/nights set: 14
 Total number of mosquitoes collected: 1,037
 Average mosquitoes per trap/night: 74
 Average Culex per trap/night: 48

Species collected and abundance:

Aedes (Oz) dorsalis 31 3.0 %
Aedes (Oz) incrucipus 2 0.2 %
Aedes (Oz) melanotarsus 10 1.0 %
Aedes (Oz) rivulatus 1 0.1 %
Aedes vexans 314 30.3 %
Culex pipiens 17 1.6 %
Culex tarsalis 662 63.8 %



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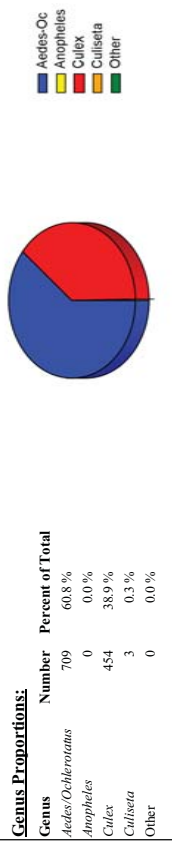
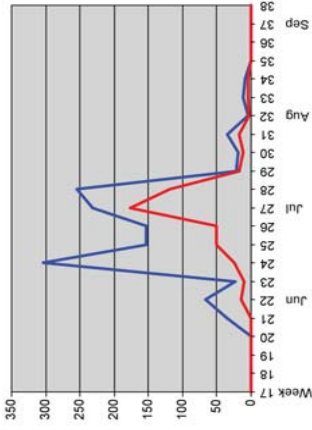
WR-18: Windsor Water Valley South

Season: 2010
 Trap Type: Light/CO2
 Location: playground near 1859 Seadrift Dr.
 GPS: N40° 26.835', W104° 53.715'

Total number of trap/nights set: 13
 Total number of mosquitoes collected: 1,166
 Average mosquitoes per trap/night: 90
 Average Culex per trap/night: 35

Species collected and abundance:

Aedes (Oz) dorsalis 378 32.4 %
Aedes (Oz) melanotarsus 55 4.7 %
Aedes (Oz) nigromaculis 10 0.9 %
Aedes vexans 266 22.8 %
Culex pipiens 4 0.3 %
Culex tarsalis 450 38.6 %
Culiseta inornata 3 0.3 %



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Adult Trap Data - Genus Summary

Trap #	Type	County	Date		Ae/Oc	An	Cx	Cs	Other	TOTAL
WR-02	LIGHT	Weld	05/27/2010	Windsor - Lake Osterhout	28	0	1	0	0	29
WR-02	LIGHT	Weld	06/03/2010	Windsor - Lake Osterhout	94	0	2	0	0	96
WR-02	LIGHT	Weld	06/10/2010	Windsor - Lake Osterhout	153	0	12	2	0	167
WR-02	LIGHT	Weld	06/17/2010	Windsor - Lake Osterhout	40	0	22	1	0	63
WR-02	LIGHT	Weld	06/24/2010	Windsor - Lake Osterhout	85	0	61	0	0	146
WR-02	LIGHT	Weld	07/01/2010	Windsor - Lake Osterhout	129	0	118	0	0	247
WR-02	LIGHT	Weld	07/15/2010	Windsor - Lake Osterhout	621	0	279	0	0	900
WR-02	LIGHT	Weld	07/22/2010	Windsor - Lake Osterhout	446	0	349	5	0	800
WR-02	LIGHT	Weld	07/29/2010	Windsor - Lake Osterhout	39	0	171	0	0	210
WR-02	LIGHT	Weld	08/05/2010	Windsor - Lake Osterhout	34	0	138	0	0	172
WR-02	LIGHT	Weld	08/12/2010	Windsor - Lake Osterhout	42	0	164	0	0	206
WR-02	LIGHT	Weld	08/19/2010	Windsor - Lake Osterhout	13	0	78	0	0	91
WR-02	LIGHT	Weld	08/26/2010	Windsor - Lake Osterhout	51	0	118	1	0	170
WR-02	LIGHT	Weld	09/02/2010	Windsor - Lake Osterhout	55	1	43	0	0	99
WR-03	LIGHT	Weld	05/27/2010	Windsor - Kiva Circle	19	0	1	0	0	20
WR-03	LIGHT	Weld	06/03/2010	Windsor - Kiva Circle	64	0	2	1	0	67
WR-03	LIGHT	Weld	06/10/2010	Windsor - Kiva Circle	0	0	0	0	0	0
WR-03	LIGHT	Weld	06/17/2010	Windsor - Kiva Circle	0	0	0	0	0	0
WR-03	LIGHT	Weld	06/24/2010	Windsor - Kiva Circle	1092	0	104	4	0	1,200
WR-03	LIGHT	Weld	07/01/2010	Windsor - Kiva Circle	192	0	287	0	0	479
WR-03	LIGHT	Weld	07/15/2010	Windsor - Kiva Circle	740	0	460	0	0	1,200
WR-03	LIGHT	Weld	07/22/2010	Windsor - Kiva Circle	224	0	255	0	0	479
WR-03	LIGHT	Weld	07/29/2010	Windsor - Kiva Circle	72	0	190	0	0	262
WR-03	LIGHT	Weld	08/05/2010	Windsor - Kiva Circle	112	0	104	3	0	219
WR-03	LIGHT	Weld	08/12/2010	Windsor - Kiva Circle	80	0	78	0	0	158
WR-03	LIGHT	Weld	08/19/2010	Windsor - Kiva Circle	64	0	38	1	0	103
WR-03	LIGHT	Weld	08/26/2010	Windsor - Kiva Circle	11	0	20	0	0	31
WR-03	LIGHT	Weld	09/02/2010	Windsor - Kiva Circle	19	0	17	0	0	36
WR-05	LIGHT	Weld	05/27/2010	Windsor - Chestnut Street	31	0	2	0	0	33
WR-05	LIGHT	Weld	06/03/2010	Windsor - Chestnut Street	22	0	0	0	0	22
WR-05	LIGHT	Weld	06/10/2010	Windsor - Chestnut Street	302	0	6	0	0	308
WR-05	LIGHT	Weld	06/17/2010	Windsor - Chestnut Street	43	0	4	0	0	47
WR-05	LIGHT	Weld	06/24/2010	Windsor - Chestnut Street	267	0	80	0	0	347
WR-05	LIGHT	Weld	07/01/2010	Windsor - Chestnut Street	162	0	186	2	0	350
WR-05	LIGHT	Weld	07/15/2010	Windsor - Chestnut Street	84	0	491	0	0	575
WR-05	LIGHT	Weld	07/22/2010	Windsor - Chestnut Street	74	0	321	0	0	395
WR-05	LIGHT	Weld	07/29/2010	Windsor - Chestnut Street	52	0	154	2	0	208
WR-05	LIGHT	Weld	08/05/2010	Windsor - Chestnut Street	46	0	186	0	0	232
WR-05	LIGHT	Weld	08/12/2010	Windsor - Chestnut Street	19	0	123	0	0	142
WR-05	LIGHT	Weld	08/19/2010	Windsor - Chestnut Street	43	0	98	0	0	141
WR-05	LIGHT	Weld	08/26/2010	Windsor - Chestnut Street	5	0	39	0	0	44
WR-05	LIGHT	Weld	09/02/2010	Windsor - Chestnut Street	33	0	19	0	0	52



Adult Trap Data - Genus Summary

Trap #	Type	County	Date		Ae/Oc	An	Cx	Cs	Other	TOTAL
WR-06	LIGHT	Weld	05/27/2010	Windsor Lee Lake Area	24	0	0	3	0	27
WR-06	LIGHT	Weld	06/03/2010	Windsor Lee Lake Area	99	0	3	4	0	106
WR-06	LIGHT	Weld	06/10/2010	Windsor Lee Lake Area	62	0	17	2	0	81
WR-06	LIGHT	Weld	06/17/2010	Windsor Lee Lake Area	31	0	6	3	0	40
WR-06	LIGHT	Weld	06/24/2010	Windsor Lee Lake Area	67	0	69	2	0	138
WR-06	LIGHT	Weld	07/01/2010	Windsor Lee Lake Area	8	0	65	0	0	73
WR-06	LIGHT	Weld	07/15/2010	Windsor Lee Lake Area	103	0	130	6	0	239
WR-06	LIGHT	Weld	07/22/2010	Windsor Lee Lake Area	96	0	98	2	0	196
WR-06	LIGHT	Weld	07/29/2010	Windsor Lee Lake Area	19	0	33	0	0	52
WR-06	LIGHT	Weld	08/05/2010	Windsor Lee Lake Area	16	0	34	0	0	50
WR-06	LIGHT	Weld	08/12/2010	Windsor Lee Lake Area	52	0	41	0	0	93
WR-06	LIGHT	Weld	08/19/2010	Windsor Lee Lake Area	20	0	21	1	0	42
WR-06	LIGHT	Weld	08/26/2010	Windsor Lee Lake Area	24	0	70	0	0	94
WR-06	LIGHT	Weld	09/02/2010	Windsor Lee Lake Area	5	0	3	0	0	8
WR-11	LIGHT	Larimer	05/27/2010	Windsor River Ridge	760	0	1	1	0	762
WR-11	LIGHT	Larimer	06/03/2010	Windsor River Ridge	236	0	7	0	0	243
WR-11	LIGHT	Larimer	06/10/2010	Windsor River Ridge	538	0	30	0	0	568
WR-11	LIGHT	Larimer	06/17/2010	Windsor River Ridge	618	0	28	1	0	647
WR-11	LIGHT	Larimer	06/24/2010	Windsor River Ridge	894	0	202	4	0	1,100
WR-11	LIGHT	Larimer	07/01/2010	Windsor River Ridge	1272	0	528	0	0	1,800
WR-11	LIGHT	Larimer	07/15/2010	Windsor River Ridge	1560	0	440	0	0	2,000
WR-11	LIGHT	Larimer	07/22/2010	Windsor River Ridge	938	0	462	0	0	1,400
WR-11	LIGHT	Larimer	07/29/2010	Windsor River Ridge	2124	0	176	0	0	2,300
WR-11	LIGHT	Larimer	08/05/2010	Windsor River Ridge	1230	0	270	0	0	1,500
WR-11	LIGHT	Larimer	08/12/2010	Windsor River Ridge	1445	0	45	10	0	1,500
WR-11	LIGHT	Larimer	08/19/2010	Windsor River Ridge	840	0	160	0	0	1,000
WR-11	LIGHT	Larimer	08/26/2010	Windsor River Ridge	351	0	103	0	0	454
WR-11	LIGHT	Larimer	09/02/2010	Windsor River Ridge	436	0	69	0	0	505
WR-14	LIGHT	Larimer	05/27/2010	Windsor Highland Meado	0	0	0	0	0	0
WR-14	LIGHT	Larimer	06/03/2010	Windsor Highland Meado	7	0	1	1	0	9
WR-14	LIGHT	Larimer	06/10/2010	Windsor Highland Meado	2	0	2	1	0	5
WR-14	LIGHT	Larimer	06/17/2010	Windsor Highland Meado	8	0	3	0	0	11
WR-14	LIGHT	Larimer	06/24/2010	Windsor Highland Meado	20	0	2	0	0	22
WR-14	LIGHT	Larimer	07/01/2010	Windsor Highland Meado	64	0	6	1	0	71
WR-14	LIGHT	Larimer	07/15/2010	Windsor Highland Meado	45	0	54	1	0	100
WR-14	LIGHT	Larimer	07/22/2010	Windsor Highland Meado	17	0	31	0	0	48
WR-14	LIGHT	Larimer	07/29/2010	Windsor Highland Meado	0	0	0	0	0	0
WR-14	LIGHT	Larimer	08/05/2010	Windsor Highland Meado	42	0	11	0	0	53
WR-14	LIGHT	Larimer	08/12/2010	Windsor Highland Meado	28	0	14	0	0	42
WR-14	LIGHT	Larimer	08/19/2010	Windsor Highland Meado	17	0	10	1	0	28
WR-14	LIGHT	Larimer	08/26/2010	Windsor Highland Meado	2	0	3	0	0	5
WR-15	LIGHT	Weld	05/27/2010	Windsor North Shore	2	0	0	0	0	2



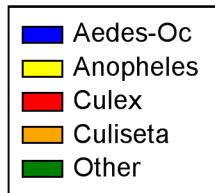
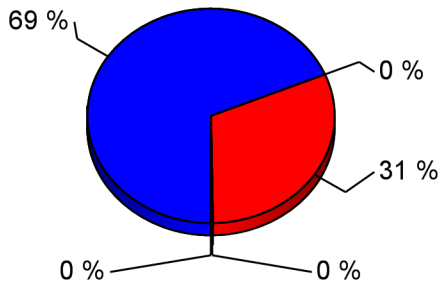
Adult Trap Data - Genus Summary

Trap #	Type	County	Date		Ae/Oc	An	Cx	Cs	Other	TOTAL
WR-15	LIGHT	Weld	06/03/2010	Windsor North Shore	12	0	0	0	0	12
WR-15	LIGHT	Weld	06/10/2010	Windsor North Shore	5	0	1	0	0	6
WR-15	LIGHT	Weld	06/17/2010	Windsor North Shore	8	0	4	1	0	13
WR-15	LIGHT	Weld	06/24/2010	Windsor North Shore	0	0	0	0	0	0
WR-15	LIGHT	Weld	07/01/2010	Windsor North Shore	43	0	13	0	0	56
WR-15	LIGHT	Weld	07/15/2010	Windsor North Shore	250	0	117	3	0	370
WR-15	LIGHT	Weld	07/22/2010	Windsor North Shore	48	0	65	0	0	113
WR-15	LIGHT	Weld	07/29/2010	Windsor North Shore	38	0	39	0	0	77
WR-15	LIGHT	Weld	08/05/2010	Windsor North Shore	125	0	48	2	0	175
WR-15	LIGHT	Weld	08/12/2010	Windsor North Shore	7	0	58	0	0	65
WR-15	LIGHT	Weld	08/19/2010	Windsor North Shore	11	0	9	0	0	20
WR-15	LIGHT	Weld	08/26/2010	Windsor North Shore	6	0	25	0	0	31
WR-15	LIGHT	Weld	09/02/2010	Windsor North Shore	1	0	4	0	0	5
WR-16	LIGHT	Larimer	05/27/2010	Steeplechase	24	0	0	0	0	24
WR-16	LIGHT	Larimer	06/03/2010	Steeplechase	54	0	0	1	0	55
WR-16	LIGHT	Larimer	06/10/2010	Steeplechase	113	0	2	1	0	116
WR-16	LIGHT	Larimer	06/17/2010	Steeplechase	86	0	2	4	0	92
WR-16	LIGHT	Larimer	06/24/2010	Steeplechase	9	0	3	0	0	12
WR-16	LIGHT	Larimer	07/01/2010	Steeplechase	39	0	5	0	0	44
WR-16	LIGHT	Larimer	07/15/2010	Steeplechase	77	0	221	1	0	299
WR-16	LIGHT	Larimer	07/22/2010	Steeplechase	9	0	29	0	0	38
WR-16	LIGHT	Larimer	07/29/2010	Steeplechase	1	0	16	0	0	17
WR-16	LIGHT	Larimer	08/05/2010	Steeplechase	2	0	7	0	0	9
WR-16	LIGHT	Larimer	08/12/2010	Steeplechase	3	0	2	0	0	5
WR-16	LIGHT	Larimer	08/19/2010	Steeplechase	2	0	4	0	0	6
WR-16	LIGHT	Larimer	08/26/2010	Steeplechase	3	0	9	0	0	12
WR-16	LIGHT	Larimer	09/02/2010	Steeplechase	11	0	7	0	0	18
WR-17	LIGHT	Weld	05/27/2010	Windsor Water Valley Nort	21	0	0	0	0	21
WR-17	LIGHT	Weld	06/03/2010	Windsor Water Valley Nort	41	0	0	0	0	41
WR-17	LIGHT	Weld	06/10/2010	Windsor Water Valley Nort	112	0	7	0	0	119
WR-17	LIGHT	Weld	06/17/2010	Windsor Water Valley Nort	34	0	4	0	0	38
WR-17	LIGHT	Weld	06/24/2010	Windsor Water Valley Nort	37	0	24	0	0	61
WR-17	LIGHT	Weld	07/01/2010	Windsor Water Valley Nort	35	0	123	0	0	158
WR-17	LIGHT	Weld	07/15/2010	Windsor Water Valley Nort	22	0	202	0	0	224
WR-17	LIGHT	Weld	07/22/2010	Windsor Water Valley Nort	12	0	123	0	0	135
WR-17	LIGHT	Weld	07/29/2010	Windsor Water Valley Nort	8	0	96	0	0	104
WR-17	LIGHT	Weld	08/05/2010	Windsor Water Valley Nort	6	0	35	0	0	41
WR-17	LIGHT	Weld	08/12/2010	Windsor Water Valley Nort	7	0	35	0	0	42
WR-17	LIGHT	Weld	08/19/2010	Windsor Water Valley Nort	17	0	23	0	0	40
WR-17	LIGHT	Weld	08/26/2010	Windsor Water Valley Nort	6	0	6	0	0	12
WR-17	LIGHT	Weld	09/02/2010	Windsor Water Valley Nort	0	0	1	0	0	1
WR-18	LIGHT	Weld	05/27/2010	Windsor Water Valley Sou	0	0	0	0	0	0



Adult Trap Data - Genus Summary

Trap #	Type	County	Date		Ae/Oc	An	Cx	Cs	Other	TOTAL
WR-18	LIGHT	Weld	06/03/2010	Windsor Water Valley Sou	34	0	0	1	0	35
WR-18	LIGHT	Weld	06/10/2010	Windsor Water Valley Sou	50	0	15	1	0	66
WR-18	LIGHT	Weld	06/17/2010	Windsor Water Valley Sou	13	0	10	0	0	23
WR-18	LIGHT	Weld	06/24/2010	Windsor Water Valley Sou	279	0	25	0	0	304
WR-18	LIGHT	Weld	07/01/2010	Windsor Water Valley Sou	101	0	51	1	0	153
WR-18	LIGHT	Weld	07/15/2010	Windsor Water Valley Sou	54	0	177	0	0	231
WR-18	LIGHT	Weld	07/22/2010	Windsor Water Valley Sou	136	0	118	0	0	254
WR-18	LIGHT	Weld	07/29/2010	Windsor Water Valley Sou	4	0	18	0	0	22
WR-18	LIGHT	Weld	08/05/2010	Windsor Water Valley Sou	7	0	12	0	0	19
WR-18	LIGHT	Weld	08/12/2010	Windsor Water Valley Sou	18	0	17	0	0	35
WR-18	LIGHT	Weld	08/19/2010	Windsor Water Valley Sou	2	0	3	0	0	5
WR-18	LIGHT	Weld	08/26/2010	Windsor Water Valley Sou	7	0	4	0	0	11
WR-18	LIGHT	Weld	09/02/2010	Windsor Water Valley Sou	4	0	4	0	0	8
					21,878		9,892		0	
						1		82		31,853



TOTAL	%
21,878	69 %
1	0 %
9,892	31 %
82	0 %
0	0 %



Customer	Subdiv/Area	Material	Start Time	End Time	Miles	
Windsor, Town of						
Backpack Barrier						
06/10/2010	BOARDWALK PARK	Talstar One	09:30:00	10:14:00	0.8	
06/17/2010	BOARDWALK PARK	Talstar One	09:21:00	09:56:00	0.0	
06/24/2010	BOARDWALK PARK	Talstar One	14:13:00	14:32:00	0.5	
07/08/2010	BOARDWALK PARK	Talstar One	16:00:00	16:00:00	0.0	
07/29/2010	BOARDWALK PARK	Talstar One	14:30:00	15:12:00	0.6	
08/05/2010	BOARDWALK PARK	Talstar One	15:38:00	16:13:00	0.6	
08/12/2010	BOARDWALK PARK	Talstar One	15:45:00	16:20:00	0.6	
Backpack Barrier					Sum	3.1
					Avg	0.4
					Min	0.0
					Max	0.8
Truck ULV						
05/26/2010	RIVER RIDGE	AquaLuer ULV	20:42:00	21:23:00	7.0	
06/03/2010	RIVER RIDGE	Biomist 3+15	20:46:00	21:24:00	7.0	
06/03/2010	LEE LAKE	Biomist 3+15	20:15:00	20:30:00	3.0	
06/04/2010	LAKE OSTERHOUT	AquaLuer 20-20	20:13:00	21:07:00	11.0	
06/10/2010	WATER VALLEY NORTH	AquaLuer 20-20	20:20:00	21:10:00	7.3	
06/10/2010	STEEPLECHASE	AquaLuer 20-20	22:04:00	22:32:00	4.0	
06/10/2010	RIVER RIDGE	AquaLuer 20-20	21:05:00	21:50:00	7.0	
06/10/2010	BELMONT RIDGE	AquaLuer 20-20	22:36:00	23:00:00	3.5	
06/10/2010	WATER VALLEY SOUTH	AquaLuer ULV	21:27:00	21:56:00	3.4	
06/10/2010	LAKE OSTERHOUT	Biomist 3+15	20:15:00	21:10:00	9.0	
06/10/2010	EAST OF 7TH	Biomist 3+15	21:22:00	22:25:00	11.0	
06/10/2010	WEST OF 7TH	Biomist 3+15	22:33:00	23:20:00	9.0	
06/17/2010	RIVER RIDGE	Biomist 3+15	21:18:00	22:10:00	6.5	
06/24/2010	WATER VALLEY SOUTH	AquaLuer 20-20	22:25:00	22:50:00	6.2	
06/24/2010	RIVER RIDGE	Biomist 3+15	00:00:00	00:50:00	8.0	
06/24/2010	PELICAN LAKES GOLF	AquaLuer 20-20	22:52:00	23:49:00	4.2	
06/24/2010	LEE LAKE	Biomist 3+15	20:20:00	20:37:00	4.0	
06/24/2010	LAKE OSTERHOUT	AquaLuer 20-20	21:35:00	22:46:00	15.0	
06/24/2010	EAST OF 7TH	Biomist 3+15	20:55:00	22:20:00	14.0	
06/24/2010	WEST OF 7TH	Biomist 3+15	22:40:00	23:48:00	10.0	
06/25/2010	EASTMAN PARK	AquaLuer 20-20	20:15:00	20:39:00	5.2	
07/01/2010	WATER VALLEY SOUTH	Biomist 3+15	23:10:00	23:39:00	6.3	
07/01/2010	WATER VALLEY NORTH	Biomist 3+15	20:16:00	20:50:00	6.0	
07/01/2010	WEST OF 7TH	Biomist 3+15	22:32:00	23:02:00	7.7	
07/01/2010	EAST OF 7TH	Biomist 3+15	20:53:00	21:52:00	17.1	
07/01/2010	BOARDWALK PARK	Talstar One	16:35:00	17:15:00	0.5	
07/02/2010	RIVER RIDGE	Biomist 3+15	20:10:00	20:44:00	7.0	
07/02/2010	LAKE OSTERHOUT	Biomist 3+15	20:55:00	21:55:00	10.0	



Adulticide Data

Customer	Subdiv/Area	Material	Start Time	End Time	Miles
07/15/2010	WINTER FARM	AquaLuer 20-20	12:00:00	12:00:00	0.0
07/15/2010	WEST OF 7TH	AquaLuer 20-20	22:40:00	23:42:00	11.7
07/15/2010	WATER VALLEY SOUTH	AquaLuer ULV	12:00:00	12:00:00	0.0
07/15/2010	WATER VALLEY NORTH	AquaLuer ULV	12:00:00	12:00:00	0.0
07/15/2010	NORTH SHORE/VENTANA	AquaLuer ULV	12:00:00	12:00:00	0.0
07/15/2010	STEEPLECHASE	AquaLuer ULV	12:00:00	12:00:00	0.0
07/15/2010	RIVER RIDGE	AquaLuer 20-20	21:58:00	22:34:00	7.4
07/15/2010	LEE LAKE	AquaLuer ULV	12:00:00	12:00:00	0.0
07/15/2010	LAKE OSTERHOUT	AquaLuer ULV	12:00:00	12:00:00	0.0
07/15/2010	HILLTOP ESTATES	AquaLuer ULV	12:00:00	12:00:00	0.0
07/15/2010	HIGHLAND MEADOWS	AquaLuer 20-20	23:54:00	00:32:00	9.1
07/15/2010	HIGH POINT ESTATES	AquaLuer ULV	12:00:00	12:00:00	0.0
07/15/2010	EAST OF 7TH	AquaLuer 20-20	20:35:00	21:46:00	14.6
07/15/2010	BOARDWALK PARK	AquaLuer 20-20	15:31:00	16:00:00	0.9
07/15/2010	RIVER RIDGE	AquaLuer ULV	20:14:00	20:20:00	0.0
07/15/2010	NORTH SHORES	AquaLuer ULV	00:00:00	00:00:00	0.0
07/15/2010	BELMONT RIDGE	AquaLuer ULV	00:00:00	00:00:00	0.0
07/16/2010	NORTH SHORE/VENTANA	AquaLuer ULV	12:00:00	12:00:00	0.0
07/16/2010	NORTHSHORES/VENTANA	AquaLuer ULV	23:01:00	23:32:00	7.8
07/16/2010	HIGHLAND MEADOWS	AquaLuer ULV	20:37:00	21:06:00	7.0
07/16/2010	HIGH POINT ESTATES	AquaLuer ULV	22:21:00	22:46:00	4.0
07/16/2010	BELMONT RIDGE	AquaLuer ULV	21:21:00	21:39:00	3.0
07/16/2010	WINTER FARM	AquaLuer ULV	23:40:00	23:56:00	3.5
07/16/2010	STEEPLECHASE	AquaLuer ULV	21:52:00	22:16:00	4.5
07/16/2010	WATER VALLEY NORTH	AquaLuer ULV	20:32:00	21:09:00	6.3
07/16/2010	POUDRE HEIGHTS	AquaLuer ULV	21:47:00	22:11:00	4.2
07/16/2010	LEE LAKE	AquaLuer ULV	22:59:00	23:17:00	3.6
07/16/2010	LAKE OSTERHOUT	AquaLuer ULV	23:26:00	00:12:00	8.7
07/16/2010	EASTMAN PARK	AquaLuer ULV	22:25:00	22:44:00	2.8
07/16/2010	WATER VALLEY SOUTH	AquaLuer ULV	21:15:00	21:44:00	4.1
07/19/2010	RIVER RIDGE	AquaLuer 20-20	20:16:00	20:50:00	7.0
07/21/2010	BOARDWALK PARK	AquaLuer ULV	21:30:00	21:37:00	0.5
07/22/2010	WATER VALLEY NORTH	AquaLuer ULV	23:15:00	23:51:00	6.1
07/22/2010	NORTH SHORE/VENTANA	AquaLuer ULV	22:03:00	22:34:00	9.3
07/22/2010	LEE LAKE	AquaLuer ULV	20:13:00	20:37:00	4.5
07/22/2010	LAKE OSTERHOUT	AquaLuer ULV	20:48:00	21:53:00	10.9
07/22/2010	EASTMAN PARK	AquaLuer ULV	23:53:00	12:11:00	3.0
07/22/2010	WATER VALLEY SOUTH	AquaLuer ULV	22:42:00	23:10:00	5.7
07/22/2010	EAST OF 7TH	Biomist 3+15	22:57:00	23:43:00	9.0
07/22/2010	RIVER RIDGE	Biomist 3+15	22:10:00	22:45:00	8.0
07/22/2010	WEST OF 7TH	Biomist 3+15	23:57:00	00:50:00	10.0
07/29/2010	LAKE OSTERHOUT	Biomist 3+15	21:58:00	22:46:00	11.0



Adulticide Data

Customer	Subdiv/Area	Material	Start Time	End Time	Miles
07/29/2010	HIGHLAND MEADOWS	AquaLuer ULV	21:30:00	22:06:00	5.8
07/29/2010	EAST OF 7TH	AquaLuer ULV	22:16:00	23:35:00	14.4
07/29/2010	RIVER RIDGE	Biomist 3+15	22:53:00	23:27:00	7.0
07/29/2010	WEST OF 7TH	AquaLuer ULV	23:36:00	00:28:00	10.3
08/05/2010	RIVER RIDGE	AquaLuer ULV	22:30:00	23:15:00	8.0
08/05/2010	NORTH SHORE/VENTANA	Biomist 3+15	22:29:00	22:44:00	3.8
08/05/2010	LAKE OSTERHOUT	AquaLuer ULV	21:55:00	22:15:00	4.0
08/05/2010	EASTMAN PARK	Biomist 3+15	22:51:00	23:12:00	4.2
08/05/2010	EAST OF 7TH	Biomist 3+15	21:28:00	22:22:00	11.2
08/05/2010	WEST OF 7TH	Biomist 3+15	20:39:00	21:26:00	10.4
08/12/2010	RIVER RIDGE	AquaLuer ULV	20:53:00	21:28:00	7.0
08/12/2010	LAKE OSTERHOUT	AquaLuer ULV	22:24:00	23:11:00	11.0
08/12/2010	EAST OF 7TH	Biomist 3+15	22:58:00	23:58:00	11.6
08/12/2010	WEST OF 7TH	Biomist 3+15	22:00:00	22:51:00	10.0
08/13/2010	LEE LAKE	AquaLuer ULV	23:13:00	23:32:00	3.0
08/19/2010	RIVER RIDGE	Biomist 3+15	19:50:00	20:23:00	7.0
08/19/2010	LAKE OSTERHOUT	Biomist 3+15	22:41:00	23:21:00	9.0
08/19/2010	EASTMAN PARK	Biomist 3+15	21:34:00	21:40:00	1.0
08/19/2010	EAST OF 7TH	Biomist 3+15	21:49:00	22:30:00	8.0
08/19/2010	WEST OF 7TH	Biomist 3+15	20:28:00	21:08:00	9.0
08/26/2010	RIVER RIDGE	AquaLuer ULV	22:19:00	22:50:00	6.0
08/27/2010	LAKE OSTERHOUT	AquaLuer ULV	23:45:00	00:25:00	7.0
08/27/2010	LEE LAKE	AquaLuer ULV	23:15:00	23:30:00	3.0
08/27/2010	LAKE OSTERHOUT	Biomist 3+15	22:38:00	23:01:00	4.0
09/02/2010	LAKE OSTERHOUT	AquaLuer ULV	21:20:00	22:10:00	10.0
09/02/2010	RIVER RIDGE	AquaLuer ULV	20:30:00	21:10:00	8.0
Truck ULV				Sum	591.8
				Avg	6.2
				Min	0.0
				Max	17.1
				Grand Total	594.9



COLORADO MOSQUITO CONTROL, INC.
Protecting Colorado From Annoyance & Disease Since 1986