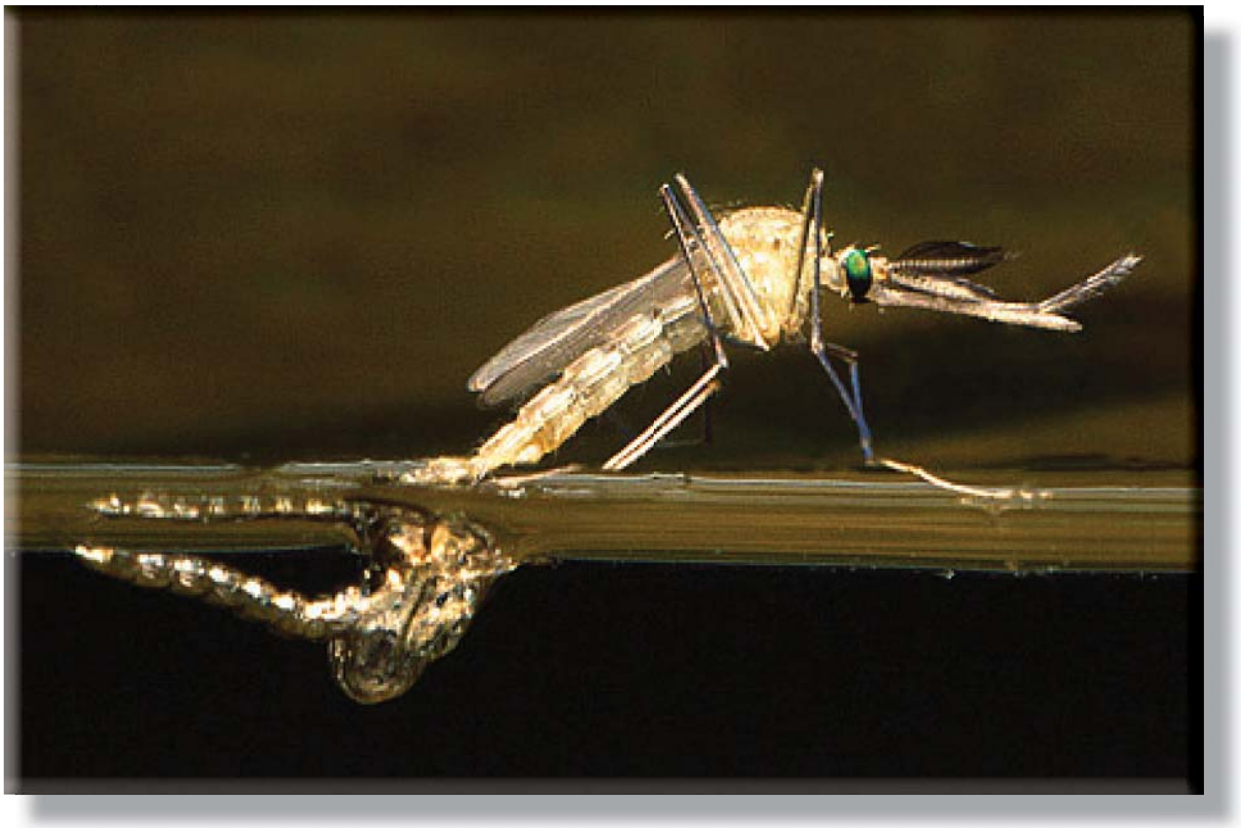
2007 Annual Report
Larimer County Cooperative Mosquito Control Program
City of Fort Collins



October 2007

Colorado Mosquito Control, Inc.

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On The Cover:

A *Culex pipiens* **female emerges from pupal case at** water surface. This disease-vector mosquito will soon mature and take a blood meal and be capable of transmitting West Nile Virus and other mosquito-borne encephalitides primarily to birds. Birds serve as the primary reservoir for the virus. Culex tarsalis will bite birds and humans thus vectoring the virus to the human dead-end host. West Nile Virus is here to stay. Hundreds of human cases have been reported in Colorado so far this year.

Colorado Mosquito Control, Inc.

CITY OF FORT COLLINS
MOSQUITO MANAGEMENT PROGRAM OPERATIONS

ANNUAL REPORT 2007

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City of Fort Collins Mosquito Management Program
Mission Statement

The City of Fort Collins Mosquito Management Program completed its 4th year of cost effective biorational integrated mosquito control operations in 2007. The need to protect residents and visitors to the City of Fort Collins from the health risks, severe annoyance and discomfort associated with biting mosquitoes is a chronic annual problem. On March 30, 2007, CMC was awarded the bid for P931 Integrated Pest Management for the 2007 season. The contract was awarded upon comparison of the services offered, cost proposals and a review of qualifications in an open bid process.

The primary objective of the City of Fort Collins Mosquito Management Program is to employ trained field biologists to suppress the development of larval mosquitoes in the aquatic habitats. Surveillance monitoring of adult mosquito populations is performed to determine the need to reduce the adult populations via adulticiding materials. This goal enables a reduction in the overall mosquito population to an acceptable "annoyance level", while reducing the threat of mosquito borne disease transmission at the least possible cost and with the least possible impact on the people and natural environment.

The Mosquito Management Program, under the operation of CMC, has developed into one of the foremost environmentally sensitive and technologically advanced integrated mosquito management programs in the United States. Additionally, CMC has fostered the cooperative efforts for mosquito control and epizootic response management between the City of Fort Collins, Larimer County Department of Health and Environment, the City of Loveland, other local municipalities, and The Centers for Disease Control (CDC) Vector-Borne Disease unit here in Fort Collins, to respond to West Nile Virus (WNV) risk on a need basis determined by the Public Health and Prevention Departments. 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 City of Fort Collins 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.

Integrated Pest Management:

"A process consisting of the balanced use of cultural, biological, and least-toxic chemical procedures that are environmentally compatible and economically feasible to reduce pest and vector populations to a tolerable level"

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.

Since its establishment in 1986, CMC has become the largest private company specializing in mosquito control in Colorado and is the only company in Colorado offering complete IPM mosquito control services. CMC currently has programs across the state of Colorado, providing services for: homeowners associations, incorporated cities and towns, mosquito control districts, Native American reservations, and encephalitis surveillance monitoring 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.

Cooperative Programs

Five counties and many communities along the Colorado Front Range again participated in an extensive cooperative mosquito control effort in 2007. Beginning in 2004, the efficacy of established programs has been improved with the addition of mosquito management to areas adjacent to or surrounding previously participating areas. CMC has continued to provide top quality mosquito control programs in several Front Range communities for over 21 years. In addition, CMC has rapidly expanded to provide service to other municipalities as new mosquito control programs were implemented. CMC will maintain its commitment to provide top quality service, in an effort to minimize the threat of West Nile Virus infection in citizens and to reduce mosquito annoyance.

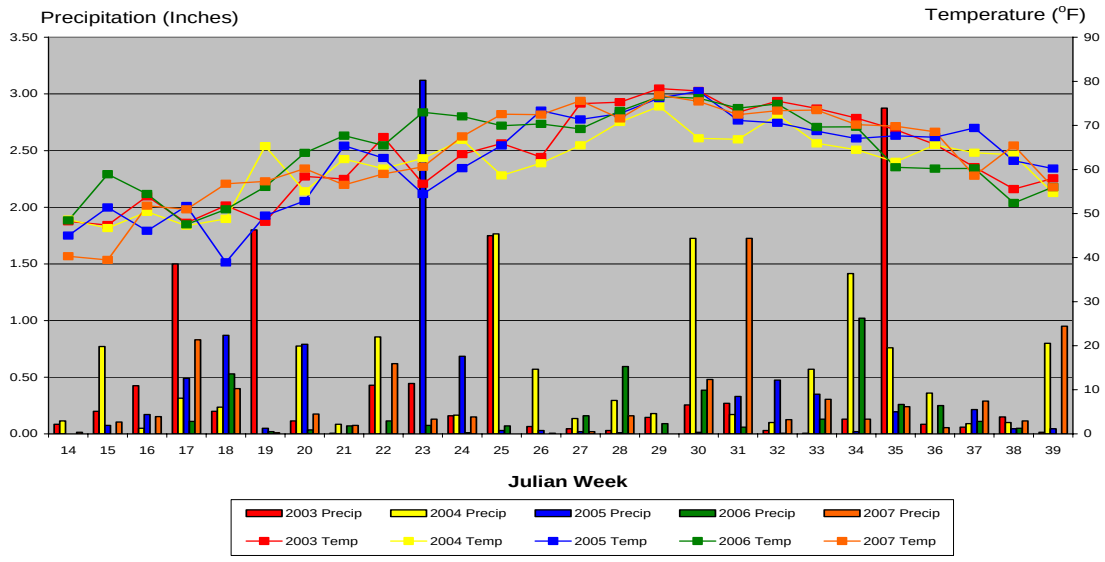
Along the Colorado Front Range, currently participating counties include: Adams, Boulder, Broomfield, Larimer and Weld. Individual cities managed by the Colorado Mosquito Control Denver Metro office include: Brighton, Columbine Valley (in Arapahoe County), Commerce City, Federal Heights, Lakewood, Northglenn, Thornton, and Westminster. Individual municipalities managed by the Loveland office for Colorado Mosquito Control include: Fort Collins, Loveland, Town of Timnath, several HOA's in unincorporated Larimer County and Encephalitis monitoring for the Larimer County Department of Health and Environment.

2007 Season Perspective

With over 21 years of experience, we have come to expect the unexpected. We know that each Colorado summer will present a unique set of temperature, precipitation, irrigation patterns, and human interactions variable that combine to create new and different challenges in both mosquito control and mosquito-borne disease management. The 2007 season presented environmental variables that fostered WNV vector mosquito populations and disease transmission, thereby posing the potential to produce the worst epidemic of arthropod-borne human disease in Colorado history.

Temperatures were hot early in the season (March was +5.4 degrees above normal) and still above normal late in the season. Temperature departures from the norm (^{o}F) obtained from the CSU Foothills Campus were +.6 in April, +1.6 in May, +2.4 in June, +4.5 in July and +3.6 in August. Data obtained from the Northern Colorado Water Conservancy District weather stations at Rolland Moore Park (FC) and the Olde Course (LV), indicated that rainfall averaged at least 1 inch below normal in May, June, and July. Cumulative rainfall in March was 31% above normal (average 1.02 inches) in Fort Collins (1.34 inches) and 28% above normal in Loveland (1.3 inches). Rainfall in April (average 1.58 inches) was 45% below normal in Fort Collins (.87 inches) and 10% below normal in Loveland (1.42 inches). Rainfall in May (average 2.67 inches) was 55% below normal in Fort Collins (1.21inches) and 52% below normal in Loveland (1.27inches). In June (average 2.1 inches), rainfall was 79% below normal in Fort Collins (.45 inches) and 90% below normal (.21 inches) in Loveland. In July (average 1.8 inches), rainfall was 73% below average in Fort Collins (.49 inches) and 54% below average in Loveland (.83 inches). The month of August brought rainfall that had not been received since 2005. Rainfall was 177% above normal in Fort Collins (3.85 inches) and 6% above normal in Loveland (.83 inches) during August (average 1.39 inches). The month of September (average 1.27 inches) was 16% above normal in Fort Collins (1.47 inches) and 6% above normal in Loveland (1.35 inches). March and August saw significant mosquito producing rains, with the effects of rainfall evident in acreage treated and adult mosquito species composition data.

Figure 1. Fort Collins/ Loveland Area Climate Comparison Data for Median Precipitation & Temperature by Julian Week (April-September)



Early season weather conditions were perfect for the rapid development and sustainability of elevated *Culex tarsalis* and *Culex pipiens* mosquito populations. Also, early positive mosquito sample pool tests indicated trouble from the onset. The first three positive mosquito sample pools were obtained from Larimer County mosquito surveillance traps on June 19th. Weld County mosquito surveillance traps detected WNV positive sample pools on July 6th. Boulder County mosquito surveillance traps detected the first WNV mosquito sample pool on July 9th. Adams, JeffCo and Denver Counties all showed positive mosquito sample pools within the preceding weeks. West Nile Virus infection in mosquitoes during 2007 was very wide-spread and present earlier than in 2003. Early detection of WNV activity in mosquitoes was a result of established surveillance programs in areas that had not been prepared for the infection density in 2003.

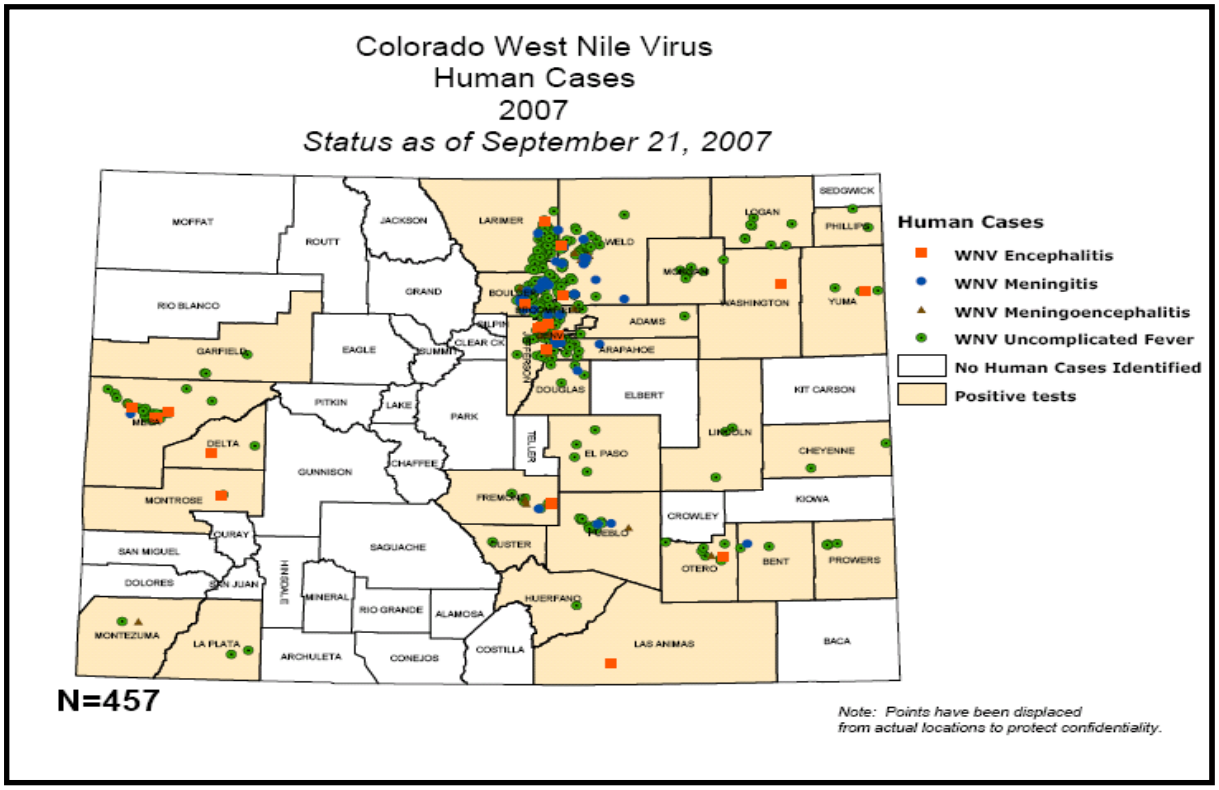
By mid July, WNV positive mosquito pools had been reported nearly everywhere in the state that was performing surveillance operations and human case counts had begun to escalate. In some areas with historic data, the season began to present WNV mosquito infection rates that were more severe than in 2003. Fortunately with the lessons learned over the past four years, CMC, county health departments and the Colorado Department of Public Health and Environment (CDPHE) recognized these patterns and were able to sound the alarm and make recommendations for emergency actions much earlier than in previous years. With the understanding and cooperation of many municipalities, emergency preemptive spray applications were performed in a timely and more effective manner than past seasons. In a 7 day period between July 17th and July 24th, CMC was contracted by these entities and completed adult mosquito applications along nearly 4,800 miles of streets, alleys, bike paths, and roadways in Larimer County, Loveland, Fort Collins, Boulder County, Longmont, Weld County, Greeley, Evans, Johnstown, Milliken and the City & County of Broomfield. These applications were performed following CDC recommendations with 2 rounds of spraying back-to-back 3 days apart. Excellent control results were seen in most areas, and by the beginning of August, dramatic reductions in the *Culex* Vector Indices were evident in all municipalities that performed Emergency Response Spray Applications. Subsequent data showed a correlated decline in human infection in these areas as well, however the real effects remain to be seen in the end of season data.

The first phase of spraying in July 2007 was nearly a month earlier than in 2006 and nearly six weeks earlier than in 2003. In 2003 and 2006, human WNV cases triggered mosquito spraying response measures, which we have learned is much too late to have substantial effectiveness in preventing subsequent human infection.

The decline in mosquito populations in July was short lived as CMC watched 3.85 inches of rain fall in Fort Collins and 1.25 inches of rain fall in Loveland at the beginning of August. As the water levels at many larval mosquito habitats increased with rainfall, so did the mosquito populations. *Culex* mosquitoes have multiple broods in their life cycle, therefore rainfall promoted egg laying and successive mosquito populations. CMC prepared for a second vector (*Culex*) spike that occurred in Loveland during the third week of August. Fort Collins shortly followed with a spike in vector mosquitoes and WNV infection rates in mosquito populations a week later. This lull, then resurgence in *Culex* mosquitoes with associated rainfall caused the Vector Index to jump again, necessitating a second round of emergency spray applications in select areas of both cities.

Rainfall along the Front Range also affected the Vector Indices in Adams County, which prompted Tri-County Health Department to recommend some select emergency spray applications in the Cities of Thornton and Northglenn. During the period August 20th-28th, over 550 miles of roads were sprayed by CMC in these cities. Subsequent data reflected a correlated decline in human infection in these areas as well; however the real effects remain to be seen in the end of season data.

Although over 440 human cases and 5 deaths have been reported to date (September 21, 2007) in Colorado, these emergency spray applications undoubtedly precluded significant human disease, suffering and death.



Between the hot weather racing larval mosquitoes through their development stages, normal surveillance protocol, adult control operations, and risk response via public health emergency spray applications, CMC was pushed into over-drive for the longest period in recent history during the 2007 season along the Front Range.

West Nile Virus 2007

Background

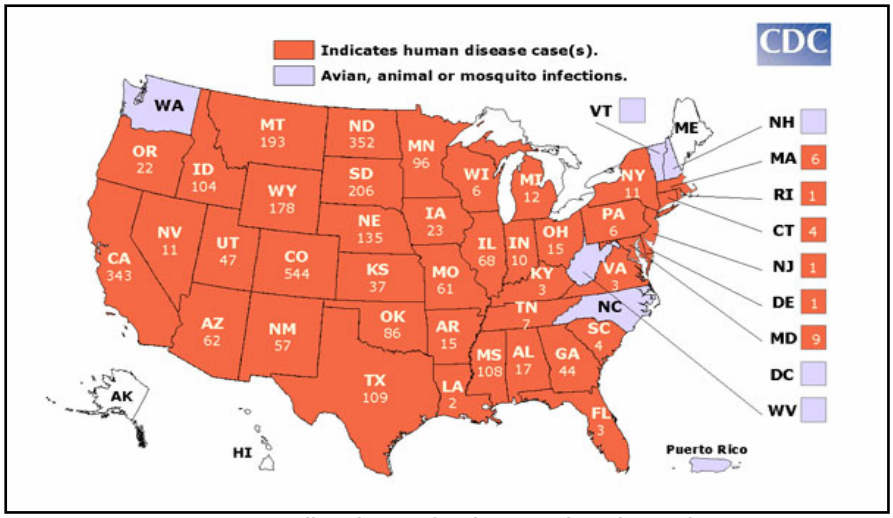
West Nile Virus (WNV) was first identified in Uganda in 1937. Since that time, activity has been documented throughout Africa, Europe, West and Central Asia, and areas of the Middle East. The virus made its first appearance to North America in 1999 when it was documented in New York City. WNV comes from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

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 flu like symptoms. 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 progressed through the South, the Midwest, the Rocky Mountain region, and now the Western States.

Colorado first saw activity of the virus late in the summer of 2002. In 2003, Colorado was the hardest hit state compiling 2,947 human cases and 63 deaths most of which occurred along the Front Range. By 2004, the majority of the cases shifted to the Western Slope and the state totaled 291 cases with 4 deaths (Mesa County).

In 2004 and 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 caused a surge in *Culex* mosquitoes, which initiated early season viral amplification. In August 2006, viral amplification was increased in mosquito populations which resulted from August rainfall. WNV infection in mosquitoes showed up in August and September, as hundreds of positive mosquito pools resulted and over 269 human WNV cases were reported along the northern Front Range and in spotty areas across the state. Seven deaths occurred in 2006 in Colorado.



2007 Human West Nile Virus Infection, Updated October 16, 2007

Human West Nile Virus Infections, Colorado 2007
Updated on October 12, 2007

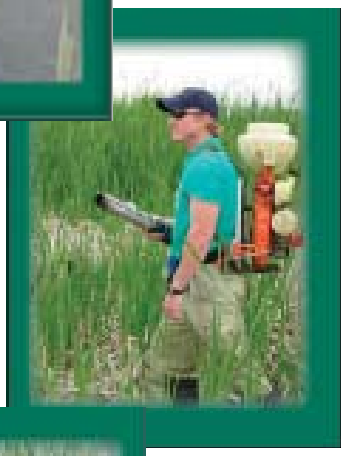
**Please note Counties not listed have no verified human cases of WNV*

County of Residence	Clinical Diagnosis			Total Cases	Total Deaths
	Fever	Meningitis	Encephalitis		
Adams	24	1	3	28	.
Arapahoe	15	2	1	18	.
Baca	.	.	1	1	.
Bent	2	1	1	4	.
Boulder	78	12	5	95	2
Broomfield	8	1	.	9	.
Cheyenne	2	.	.	2	.
Crowley	.	1	.	1	.
Custer	1	.	.	1	.
Delta	3	.	2	5	.
Denver	12	4	7	23	2
Douglas	5	1	.	6	.
El Paso	4	.	.	4	.
Fremont	8	1	4	13	.
Garfield	3	.	.	3	.
Huerfano	1	.	.	1	.
Jefferson	28	.	3	31	.
La Plata	3	.	.	3	.
Larimer	88	2	1	91	.
Las Animas	1	.	1	2	.
Lincoln	3	.	.	3	.
Logan	9	.	.	9	.
Mesa	28	1	7	36	1
Montezuma	3	.	1	4	.
Montrose	1	1	1	3	.
Morgan	8	1	2	11	.
Otero	7	.	3	10	.
Phillips	2	.	.	2	.
Prowers	5	.	.	5	.
Pueblo	15	2	2	19	1
Washington	1	.	1	2	.
Weld	78	12	5	95	.
Yuma	3	.	1	4	.
COLORADO	**449**	**43**	**52**	**544**	**6**

2007 Field Activities

Field activities began in early April for the 2007 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 14th with over 75 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 21st through August 24th. The final day for larval inspections was September 17th.



The 2007 Fort Collins mosquito management staff consisted of 15.5 Full-time Equivalent employees (FTE). Specifically, we had 1 Manager, 1 Field Supervisor, 9 Field Technicians, 1 Fish Program Manager, 1 Urban Program Technician (i.e., for the Backyard Program, Storm Drain Program, and Public Education Program), 0.5 Surveillance Supervisor, 1 Surveillance Technician, 0.5 Maintenance Technician, and .5 Office Staff personnel.

The Larval Mosquito Control Area encompasses approximately 109 square miles. Although many of the mosquito production sites are outside the city limits, all are well within the flight range of most mosquitoes. Larval control work outside the city will continue to remain a critical part of the overall operation of CMC. Studies have indicated that adult mosquitoes can travel several miles in search of a blood meal and new habitat for offspring. Mosquito reduction by Colorado Mosquito Control throughout homeowner's associations and cities within the county greatly reduces transient mosquito populations.

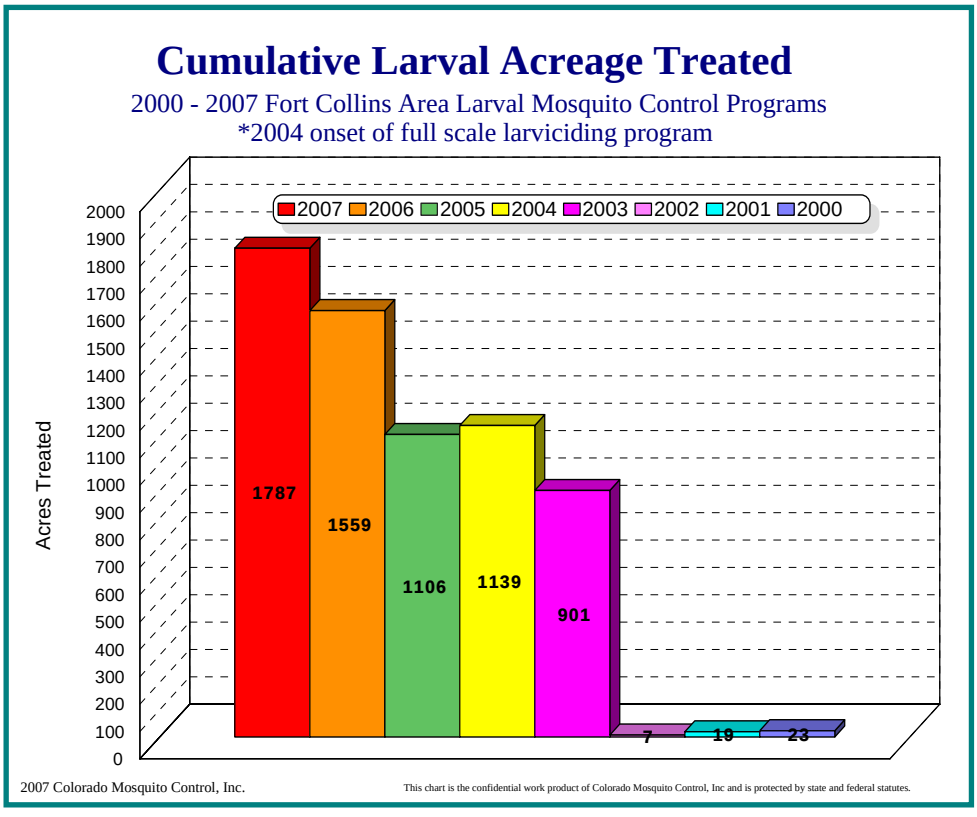
Mosquito surveillance trapping was planned through September 21st, however windy, cold and wet weather conditions eliminated much of the final week of mosquito trapping and associated adult spraying operations. Although small populations of adult mosquitoes remained through the end of September, mosquito annoyance calls declined to zero during the final weeks of September.

To date 1,221 larval mosquito habitats are included in the regular inspection and larviciding program for the City of Fort Collins Mosquito Management Program. There were 43 new larval sites identified and added to the routine inspection program in 2007. In 2006 there were 1,196 active larval sites inspected by technicians as part of the regular inspection and larvciding program. A total of 85 new larval sites were found in 2006. In 2005 there were 1,057 active larval sites with 190 new larval sites located. In 2004 867 active larval sites were inspected regularly for larval presence. The values listed do not include the Urban Mosquito Control Program. A total of 97 larval sites have been destroyed since the end of season in 2004. These sites were either physically demolished or the water source was removed.

LARVAL MOSQUITO CONTROL

The vast majority of the mosquitoes with which we must normally contend with are associated with alternating floodwater levels via rain or irrigation. These mosquitoes belong either to the genera *Aedes/Ochlerotatus* or *Culex* which are found in standing stagnant water. Thus, mosquito population trends along the northern Front Range are almost always dependent on heavy rains (over 0.5 in.), residential over watering, the agricultural flooding of fields for irrigation, and soil permeability.

In 2007, the northern Front Range did not receive heavy rains in May, June or July, thereby keeping floodwater mosquito species below normal in some areas. Exceptions to this occurred in areas that saw heavy flood irrigation or spring snow melt runoff along the river basins of the Big Thompson and Poudre River. Most of the significant mosquito populations early in the season were *Culex* species, since the prominent source of water for breeding was existing as stagnant water in marshes and over watered detention basins from resident irrigation. The early season prominence of *Culex* mosquitoes that occurred with rainfall in late April (much like March snowmelt in 2003) heightened the threat and likelihood of West Nile Virus human disease transmission later in the season.

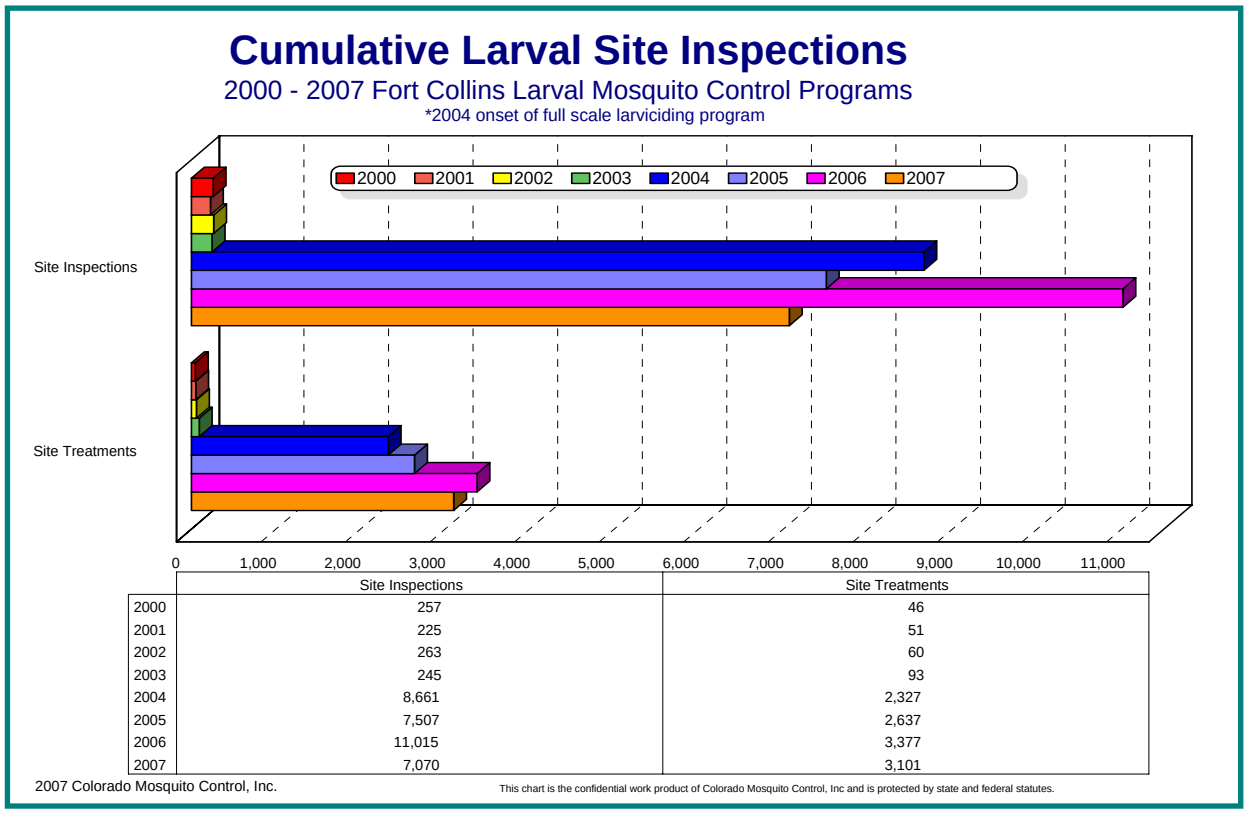


In 2007, 84% of the total site inspections consisted of wet sites with larval production at 51% of these sites. In 2006, 76% of the total site inspections consisted of wet sites with larval production at 41% of the total sites. In 2005, 84% of the total inspected sites were found wet, with larval production at 42% of the sites. In 2004, 80% of the total inspected sites were found wet, with 34% larval production at these sites. The percentages detailed include storm drains, backyard inspections, and sites within larval routes.

In summary, larval production at sites that were wet upon inspection required larvicide application 10.7% to 17.6% of the time versus previous seasons, since the inception and application of Comprehensive Mosquito Management System (C.M.M.S). Targeting of sites via C.M.M.S increased our ability to prioritize sites that have the highest potential to produce mosquitoes and limit time spent on low potential sites. This has led to overall fewer site inspections, but greater site acreage treatments as seen in the 2007 season.

Practical experience and research have shown that the most effective way to control mosquito populations is through an aggressive Integrated Pest Management (IPM) approach. This approach 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 the inevitable result of disease and nuisance.

Over 93% of Colorado Mosquito Control, Inc. (CMC) operational efforts are focused on larval control.



	Site Inspections	Site Treatments
2000	257	46
2001	225	51
2002	263	60
2003	245	93
2004	8,661	2,327
2005	7,507	2,637
2006	11,015	3,377
2007	7,070	3,101

Backyard Inspection Program

Culex pipiens is a known vector of WNV, and is primarily found in artificial containers associated with residential settings and in areas of polluted water. The backyard inspection program began in 2004, with 34 larval sites included in routine inspections. As of 2007, this program consists of 129 backyard or unmaintained sites. Development of this program has resulted in significant reductions in *Culex pipiens*, and numerous opportunities to educate residents about source reduction within their backyards. Resident compliance to correct the larval mosquito habitat has again provided support for the public relations and education that is associated with the Urban Backyard Inspection Program.

An estimated 2.1 million larvae were eliminated before hatching in 2007. In 2007, there were 240 total sites inspections with larvicide application at 48 (32.9%) sites. The total acreage treated was .5 acres with 3.3lbs of VectoBac (*Bti*), 2.3 lbs of Altosid, and .2 gallons of mineral oil. In 2006 there were 436 total sites inspections with larvicide application at 236 (54.1%) sites. The total acreage treated in 2006 was .9 acres with 12.4 lbs of Altosid. In 2005 there were 301 sites inspections with 172 sites treatments. In 2004, there were 70 site inspections with larvicide application at 29 sites.

Storm Drain Program

The storm drain program completed its 3rd year. Priority for storm drain inspections were made in those areas of downtown Fort Collins. In 2007, the storm drain technician inspected 2,391 storm drains and treated 125 drains (5.2%) for potential to produce larvae due to accumulation of debris reducing drainage or larval production during inspections. An estimated 300,000 larvae were eliminated before hatching from application of 1.47 lbs of Altosid and .11 gallons of mineral oil. Site inspections in 2007 were lower than previous seasons, as a result of the relatively little rain in June and July. In June 2007, 1,545 storm drains were inspected and 94 drains were treated, with the priority drains documented for re-inspection during rainfall events. In July 214 drains were inspected with larvae found at only 5 drains. In August, 632 drains were inspected due to rainfall, with 26 drains producing mosquitoes.

In 2006, 3,960 storm drains were inspected and 3,240 were treated for larval presence or organic material/ debris causing drain blockage. In 2005, CMC staff monitored 3,353 individual storm drains throughout the city. There were 4,924 visits to these drains. During 458 of these visits, the technician manually sampled the drain for mosquito larvae (the remainder were only visually inspected and treated if there was water collecting in the drain at the time of the visit). The 4,924 visits resulted in 698 treatments.

Larval Control Agent Comparison

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 may have greater consequence 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, too, have costs which outweigh the benefits or competency of their control capacity. Predatory fish serve as a good example of this.

The mosquito fish (*Gambusia affinis*), while an effective predator on mosquito larvae, is an introduced species, and may have a larger impact on native fish of Colorado waters. A very aggressive feeder and rapid reproducer, *Gambusia* often out-compete their native counterparts. As a result of this, the Colorado Division of Wildlife (CDOW) has placed restrictions on the stocking and use of this species. This year CMC obtained, stocked and distributed a supply of fathead minnows (*Pimephales promelas*), a native Colorado species.

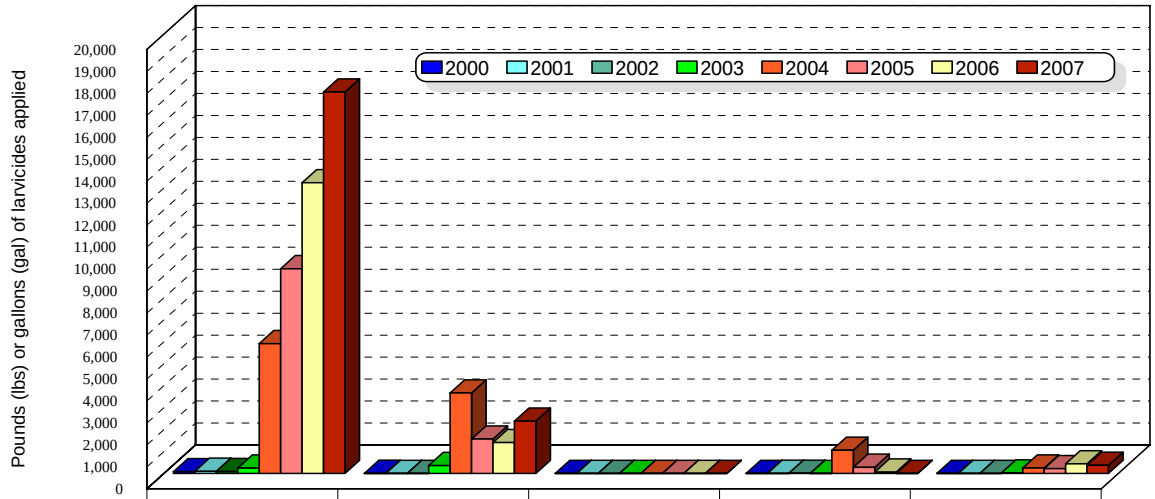
Fish were made available to residents for placement in ornamental ponds to promote larval reduction within residential backyards. In general, however, predatory fish and other biological controls such as birds and bats do not provide sufficient enough control of mosquito populations to be used as the primary mechanism. Other methods must be used to gain adequate larval mosquito population reductions.

CMC's 3rd annual fish give away was held on June 23rd, at two separate Ace Hardware locations in Fort Collins and Loveland. This season's giveaway was the greatest success CMC has observed since the establishment of this program. Approximately 3,600 fathead minnows were distributed to residents from both cities. All fish were distributed at both locations by 11:30 am. Residents who were not provided fish during the giveaway were offered the option to have their ponds stocked by a CMC technician. The fathead minnow program continues to be an excellent success for providing residents information about West Nile Virus and personal protection, with the 2007 season ranking highest in resident turnout and fish dispersal. Both Ace Hardware locations have cooperated in providing residents personal protection options and supporting the *Fight the Bite* campaign by offering discounts on mosquito repellents during the giveaways.

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 mosquito control programs throughout the world. The benefits include its efficacy and lack of environmental impacts. When used properly, successful 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.

Larval Control Product Application

2000-2007 Fort Collins Larval Mosquito Managment Program



	Vectobac (Bti) (lbs)	Vectolex (Bs) (lbs)	Abate Pellets (lbs)	Altosid (lbs)	Bonide Oil (gal)
2000	83	7	0	0	0
2001	100	0	0	6	0
2002	88	0	0	12	0
2003	248	365	3	0	22
2004	5,914	3,666	5	1,057	249
2005	9,321	1,572	0	285	222
2006	13,235	1,409	0	64	442
2007	17,364	2,385	0	2	375

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 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. This product is not used in the City of Fort Collins Mosquito Management Program. Mineral oil is the only product effective on the pupal stage and therefore is an essential tool when pupae are found.

All of the fore mentioned 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 CDC 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 2007, Colorado Mosquito Control monitored a statewide network with more than 3,640 trap nights set, collecting 632,692 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 and 29 of those were identified from samples processed during the 2007 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 CO_2, 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 8,000 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. Additionally, a majority of the *Culex* specimens collected in the CMC traps during the 2007 season were sent to the CO State Health Department laboratory or CDC-Fort Collins to be tested for West Nile Virus. The infection rates of West Nile Virus in *Culex* mosquitoes in 2007 was comparable to the unprecedented high rates in 2003 season, the only real difference between 2007 and 2003 seems to be in the actual overall number of *Culex* mosquitoes at the end of the season, not in the percentage of mosquitoes that were infected with the virus.

CDC Surveillance Light Trap Data Comparison

In 2007, an average of 41 surveillance light trap locations (approximately 1 trap per square mile) monitored adult mosquito populations within the city limits of Fort Collins. CDC battery-operated "light traps" were set weekly in each location to provide adult mosquito population data for seasonal comparison. CMC also operated four of the five Colorado Department of Health and Environment sentinel surveillance traps for the Larimer County Department of Health and Environment Sentinel Encephalitis Surveillance Program within the City of Fort Collins. All of the graphs contained within this report include mosquito population data collected from sentinel surveillance trapping.

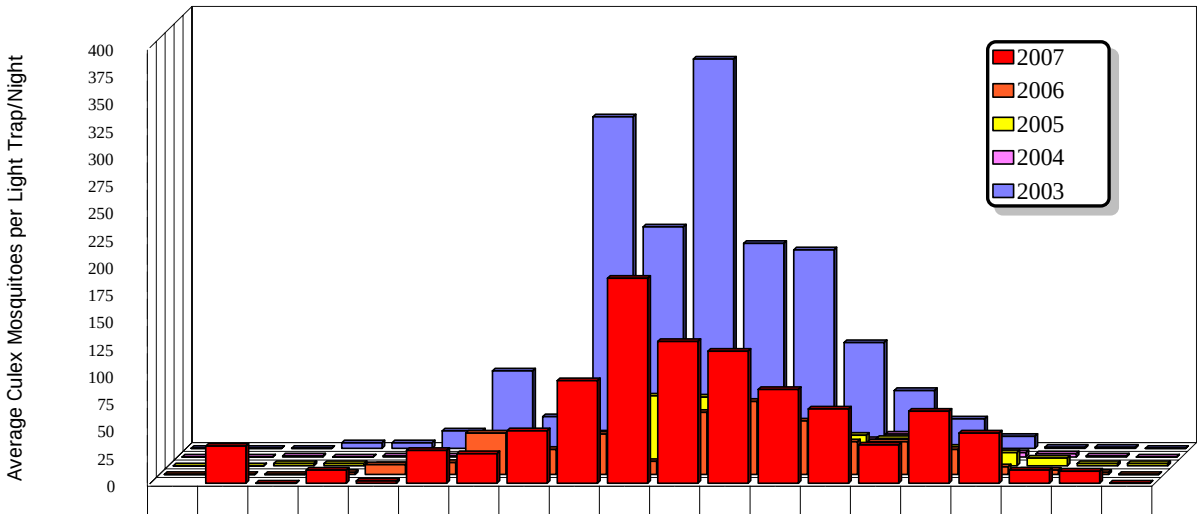
There were 642 surveillance traps set which collected a total of 147,424 mosquitoes from within the City of Fort Collins. The average number of mosquitoes caught per trap per night was 229 and the average *Culex* mosquitoes caught per trap per night was 60. The composition of mosquitoes trapped was 28.4% *Culex spp*., 69.4% *Aedes/ Ochlerotatus spp*. and 1.5% *Culiseta spp*. Please refer to Figures 2-5 for Seasonal Comparison of *Culex* Mosquito Population Data for the City of Fort Collins and Loveland.

Note that on July 3rd, FC-67 (a FC sentinel surveillance location) collected 26,104 *Aedes/Ochlerotatus* mosquitoes in one trapping evening. This spike in adult mosquito populations resulted after the Poudre River water levels dropped thereby, speeding up the larval mosquito development in depressions along the river when the daily temperatures ranged in the 80's. This greatly increased the amount of acres CMC technicians needed to inspect and treat. CMC focused inspection and larviciding applications on *Culex* mosquito habitats given the WNV infection rate in mosquitoes.

The 2007 season saw a sweeping change in the sentinel program funded by the Colorado Department of Public Health and Environment (CDPHE) and Larimer County Department of Health and Environment (LCDHE). Traditionally, there was one sentinel trap site with two light traps and one gravid trap set. This year, however, there were five trap locations within a five mile radius (the radius center point was at Fossil Ridge High School 5400 Ziegler Road) with one light trap set at each location. Through the cooperative effort with Larimer County Department of Health and Environment (LCDHE), the City of Fort Collins, and the City of Loveland, the five traps sites included FC-04, FC-14, FC-53, FC-67, and LV-095. The sentinel light traps were set once a week from June 1st to June 18th (week 25), set twice a week until August 6th (week 32) and then set once a week until September 15th. All *Culex* mosquitoes were sent to the CDPHE for WNV testing.

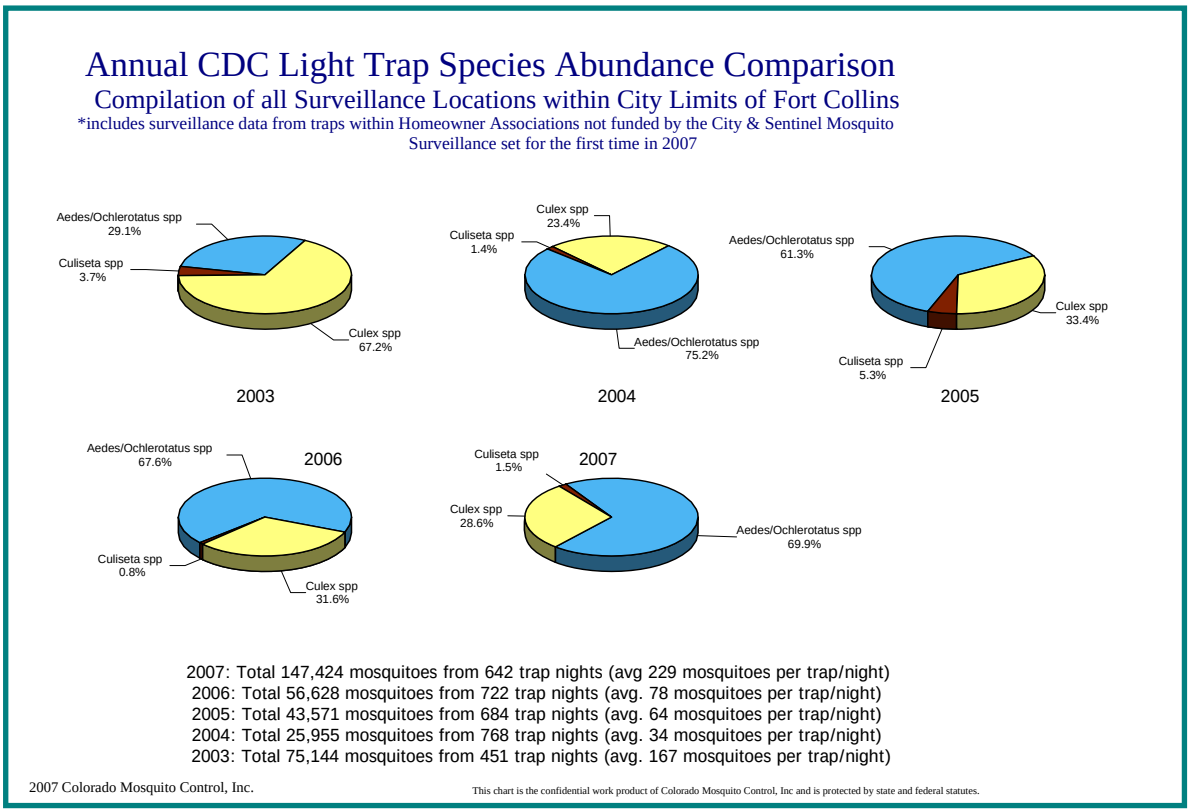
Annual *Culex* Mosquito Comparison per Light Trap/ Night within the City of Fort Collins Limits

*Note: Graph includes Surveillance Data from Sentinel Mosquito traps not set prioir to 2007



	5/1-5/7	5/8-5/14	5/16-5/21	5/22-5/31	6/1-6/7	6/8-6/14	6/16-6/21	6/22-6/30	7/1-7/7	7/8-7/14	7/16-7/21	7/22-7/31	8/1-8/7	8/8-8/14	8/16-8/21	8/22-8/31	9/1-9/7	9/8-9/14	9/16-9/21	9/22-9/30
2007		34	0	12	2	30	27	48	94	188	130	121	86	68	35	66	46	12	11	0
2006	0	0	0	2	9	11	38	23	37	12	57	67	49	30	30	23	7	4	2	0
2005	0	0	2	2	1	1	4	8	30	64	63	30	27	28	25	17	12	7	2	2
2004	0	0	1	0	1	1	1	3	6	19	14	16	23	16	21	5	4	3	1	0
2003	0	0	0	5	5	16	71	29	304	203	357	188	182	97	53	27	11	1	1	0

There were 102 sentinel surveillance traps set in 2007 for the Larimer County Sentinel Program, which collected a total of 45,079 mosquitoes (43,687 mosquitoes in the FC sentinel traps). The average number of mosquitoes caught per trap per night in 2007 for the Sentinel Encephalitis Surveillance Program was 442 and the average *Culex* mosquitoes caught per trap per night was 146 mosquitoes. The composition of mosquitoes trapped was 33% *Culex spp*., 66% *Aedes/ Ochlerotatus spp*. and 1% *Culiseta spp*. Please refer to 2007 Adult Trap Species Report for a detailed description of the mosquitoes obtained from sentinel surveillance trapping.



CDC Surveillance Gravid Trap Data Comparison

Last season, CMC established 5 permanent gravid trap locations generated from data obtained from surveillance gravid trapping history. Gravid traps were set at the 5 locations weekly to establish a permanent surveillance system for West Nile Virus activity. Gravid traps primarily attract *Culex pipiens*, which prefer avian hosts when seeking a blood meal. Trapping and testing of *Culex pipiens* mosquitoes provides indication for avian transmission activity. There were 61 gravid traps set in 2007, which collected a total of 1,018 mosquitoes. Please refer to 2007 Fort Collins Gravid Trap Composite Data Summary for 2007 season trends and gravid trapping species breakdown.

CDC/ CDPHE WN Virus Mosquito Confirmation Results

Since 2003, the Vector Index has been calculated and provided to CMC by the CDC/ CDPHE. The Vector Index is obtained from CMC surveillance trapping data is closely monitored by the CDC, CDPHE and LCDHE to evaluate the risk posed by a vector population.

As defined on the CDPHE website, The Vector Index (VI) is a measure of infection rate adjusted for *Culex* mosquito population size within a given area. The value is an estimate of the number of West Nile Virus infected mosquitoes collected per trap per night. The data on a vector index is still being collected and compared, but it suggests that a vector index of .75 or above is an indicator of high risk for West Nile Virus transmission to human in the area

(www.cdphe.state.co.us/dc/zoonosis/wnv/wnvsentinel.html)

In 2007, a total of 349 mosquito samples containing 18,829 mosquitoes were submitted to the Colorado Department of Health and Environment for West Nile Virus testing from traps within city limits of Fort Collins and Loveland, as well as, portions of unincorporated Larimer County. A total of 2,129 sample pools containing 47,933 *Culex* mosquitoes were submitted to the Centers for Disease Control. The samples submitted to the CDC were collected from mosquito surveillance traps within the city limits of Fort Collins and Loveland.

There were 134 mosquito sample pools obtained from surveillance traps within the City of Fort Collins, which were confirmed positive for WNV out of 1,210 pools submitted to the CDC/CDPHE in 2007. There were 105 mosquito sample pools obtained from the City of Loveland surveillance traps which were confirmed positive for WNV out of 1,185 pools submitted to the CDC/CDPHE in 2007. There were 9 WNV positive samples obtained from unincorporated areas of Larimer County in 2007.

The City of Fort Collins surveillance traps detected 53 WNV positive samples in 2006. The City of Loveland traps returned 49 positive mosquito sample pools in 2006. There were 10 mosquito samples found positive for WNV in Fort Collins 2005. There were 5 mosquito samples found positive for WNV in Loveland in 2005. In 2004, there were 2 mosquito sample pools obtained from surveillance traps in Fort Collins and no pools in Loveland. In 2003 both cities reported over 50 WNV positive mosquito sample pools, with variability in the number of surveillance traps set and scale of programs from 2007. This season has shown that it is critically important to continue mosquito surveillance and control operations in future years. The threat of West Nile Virus and other mosquito-borne diseases is here and is not going away.

2007 ADULT CONTROL

A fully Integrated Mosquito Management Program normally contains a small, as needed adult mosquito control component. Adult mosquito control was not contracted into the City of Fort Collins Mosquito Management Program upon approval in March 2007. Unfortunately, even though the primary focus of the City of Fort Collins Mosquito Management Program is larval mosquito control first and foremost, a large abundance of WNV infected *Culex* mosquitoes may from time to time force the need for large-scale Public Health Emergency adulticide applications, as in 2007. Adult mosquito surveillance efforts discussed above can help to pinpoint unidentified larval sites and target both larval and adult control efforts.

Colorado Mosquito Control uses state of the art technology, correct application timing, and least-toxic products to minimize all non-target impact. All adult mosquito control is accomplished using calibrated Ultra Low Volume (ULV) equipment and performed after dusk. 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 activity is greatly reduced. Using this application technique, the overall goal of minimal environmental impact and effective adult control is achieved in the targeted area.

In 2006, we introduced the water-based product AquaLuer for ULV adult mosquito control and continued its use in 2007. Its' active ingredient, permethrin, is highly effective against mosquitoes, while the water-base provides a much more environmentally sound solution to traditional petroleum oil-based adulticides. Results this year have again proven that this is the right choice for the adulticide portion of the Integrated Mosquito Management Program.

Ultra Low Volume (ULV) mosquito adulticide applications were performed by CMC in 2007 to offset human health risk, as requested and approved by the City Council, and based off of recommendations from the Larimer County Department of Health and Environment. The first phase of emergency spray recommendations made by Larimer County Department of Health and Environment occurred on July 13th, and City Council approval was given on July 17th. City Council approved a decision to contract with CMC to perform a city wide adult mosquito control application when the city wide Vector Indices reached 1.01(week 29) and .71 (week 30). The ground based truck ULV application totaling 1,242 miles within city limits was performed with AquaLuer mosquito adulticide. The goal of this decision was to reduce *Culex* mosquito abundance and rising Infection Rates in mosquito populations as confirmed by CDC testing (Vector Index).

Although controversial among city residents, the decision to apply adult mosquito insecticides was passed by the City Council based upon the adult mosquito population data, a formal recommendation from the Larimer County Department of Health and Environment (LCDHE), and the WNV infection rates of *Culex* mosquitoes obtained from surveillance trapping within Fort Collins. The response plan to suppress adult mosquitoes occurred on July 19th (week 29) and July 23rd (week 30) east of College Avenue and on the 20th and 24th west of College Avenue. These applications were performed following LCDHE & CDC recommendations with 2 rounds of spraying back-to-back 3 days apart. All spray zones within city limits of Fort Collins were successfully completed on the evening of the 24th.

Table 1. Surveillance Trap Data for Mosquito Mortality Pre/Post Mosquito Adulticide Application

Fort Collins	Julian Week	# of Light Traps	Total Females	Females/ trap/night	Total Culex spp. (% of total caught)	Culex Females/ trap/ night
July 1-7	Week 27	42	47314	1127	7905	188
Pre Spray #1					17%	
July 8-14	Week 28	47	12308	262	6088	130
Pre Spray #2					49%	
July 15-21	Week 29	46	10220	222	5118	111
Mid Spray					50%	
July 22-28	Week 30	48	5600	117	4134	86
Post Spray					74%	
Change in Mosquitoes (Week 30-Week 27)			**-41714**		**-3771**	
% Change from Pre Spray #1 to Post Spray				**-89.6%**		**-54.2%**
% Change from Pre Spray #2 to Post Spray				**-55.4%**		**-33.5%**

The cumulative data for all surveillance traps in the City of Fort Collins indicated a 55.4% overall decline in mosquito populations and 33.5% decline for *Culex* species. The city wide Vector Index in week 31 (post application) dropped to .44. The Larimer County Department of Health and Environment participated in this cooperative emergency application on the 19th and 24th with the inclusion of Larimer County unincorporated areas that abut city limits in Fort Collins. The total miles included in Larimer County spray zones was 252.2 miles.

It is important to note that the warmer seasonality of 2007 (hot days / very warm night-time temperatures) caused the mosquito life cycle to occur at a rapid pace during the pre and post application period. Thus, it is possible that newly emerged mosquitoes equaled the original pre spray population. Almost a full 48 hours had passed between trapping and the second adulticide application, allowing adequate time for the population to rebound. The second spray application was aimed at targeting rebounding populations of uninfected mosquitoes to increase the effectiveness of reducing the infection rates in following weeks.

Dr. LeBailly, Director of the Larimer County Department of Health & Environment made a second recommendation at the end of week 34 for adult mosquito control measures. This recommendation was made in response to the Vector Index (VI) for two areas surpassing the City Council WNV Response Plan Vector Index threshold of .75. WNV test results from the Centers for Disease Control (CDC-Fort Collins) presented a VI of 1.82 in week 34 from surveillance traps north of Vine (Zones 01, 04, 05, and 06). The second area included in this selected spray application was chosen because of increased vector population data, elevated WNV mosquito infection rates, and a susceptible human population participating in recreational activities over the Labor Day weekend. The area encompassed Southeast Drake and LeMay, with a VI of 1.23 in week 34 (Zones 40, 46, 47, 48, 54, 55, 56, 57, 60, 62- no areas west of Boardwalk/north of Drake).

City Council approved the select area spray recommendation, and the truck based ground ULV mosquito adulticide application was completed on August 28th (week 35) by CMC. A single spray recommendation was proposed by Dr. LeBailly to reduce the infection rates in the mosquito populations for these areas, in hopes of reducing the human transmission risk for the remainder of the 2007 season. Assessment of Vector Indices in week 35 by the CDC reported the following changes in WNV mosquito infection rates from surveillance traps within the application zones: a decline of 1.3 (VI) from week 34 (VI 1.82) for the sector north of Vine and a decline of .56 (VI) from week 34 (VI 1.23) for Southeast Drake & LeMay.

There were 179.8 miles of roads sprayed within the city limits of Fort Collins during the second phase of public health risk response mosquito adulticide applications. There were 25.4 miles of Larimer County unincorporated zones included in the August 28th application. Based on pre- and post- surveillance trapping data, there was an overall decline of 89.6% in mosquitoes and an 88.7% decline in *Culex* mosquito populations. The increase in mosquito mortality during this application versus the July application is largely due to the slower larval development at this point (6-7 day cycle) and reduced larval dip count from that observed during the height of the *Culex tarsalis* season in the first and second weeks of July. In effect, fewer rebounding populations are occurring as the season slows and more adult mosquitoes die off both naturally and with mosquito sprays, thereby reducing successive generations.

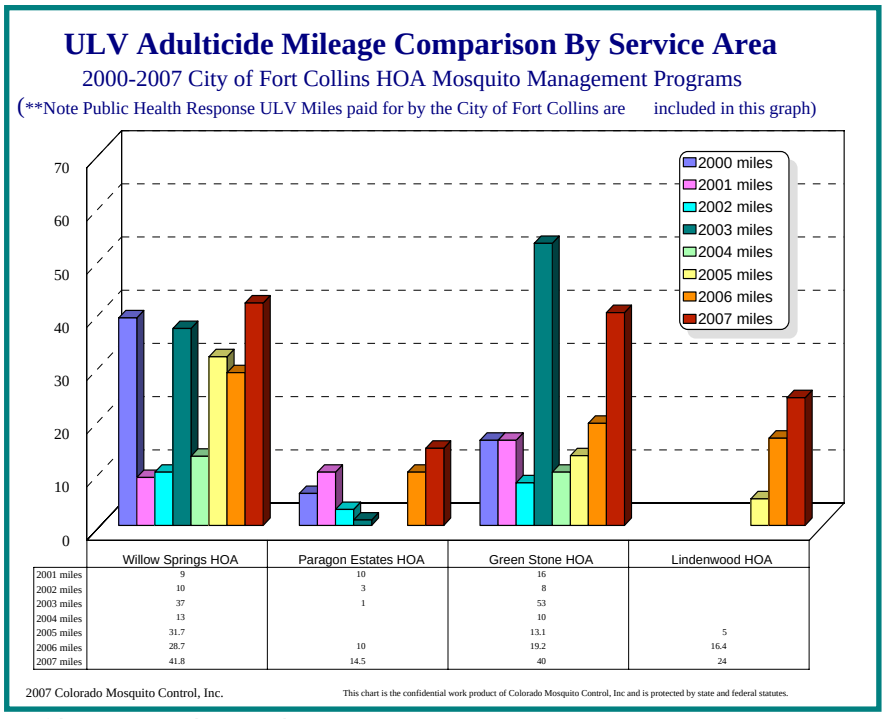
Table 2. Surveillance Trap Data for Mosquito Mortality Pre/Post Mosquito Adulticide Application

Larimer County Department of Health & Environment and City of Fort Collins Public Health Response Mosquito Spray				
Composite Data for August 22nd & August 31st	**COMBINED DATA FOR SURVEILLANCE TRAPS IN TAGRETED AREA (24 traps pre-spray) (23 traps post-spray/1 trap malfunction FC-53)**			
Trapping Date	8/21-8/22/2007	8/30-8/31/2007	Analysis	
	Pre-Spray	Post-Spray	Change in mosquito population data	% change
TOTAL Aedes	2711	273	-2438	89.9
*Culex pipiens**	157	30	-127	80.9
Culex tarsalis	737	71	-666	90.4
TOTAL Culex	894	101	-793	88.7%
TOTAL Culiseta	42	4	-38	90.5
TOTALS	3647	378	-3269	-89.6%

* *Culex pipiens* total may also include some *Culex erythrothorax* and/or *Culex salinarius* in some cases

Note: This data sheet is the confidential work product of Colorado Mosquito Control, Inc., and is protected by state and federal statutes.

It is important to note that CMC did adulticide on numerous occasions within the City of Fort Collins in 2007 at the request of several private homeowners' associations. It is also likely that adulticiding was done by other mosquito control contractors within city limits. The graph listed below provides a summary for adulticiding miles sprayed within CMC managed Homeowner's Associations in the city limits of Fort Collins.



As we look towards the 2008 season, we will continue to evaluate treatment areas, and any new control products coming to the market, and as always listen to the goals and needs of our customers so that we will again have an effective program with the least amount of impact to the environment.

Environmental Responsibility

Colorado Mosquito Control puts forth incessant effort to minimize environmental impacts while maximizing efficiency and efficacy of our programs. Using the framework of Integrated Pest Management (IPM) and implementing new and existing technologies has enabled CMC to develop the most sustainable mosquito control programs in the country while maintaining successful control of mosquito populations 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 at hand and thoughtful selection of methods that will have the greatest efficacy 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 applications throughout our program areas to target those areas only truly necessary.

Even through 2007 was a high mosquito population year, average adulticide applications have been reduced in most areas (excluding West Nile Virus emergency control applications) through implementation of inspection and larviciding methods.

TECHNOLOGY

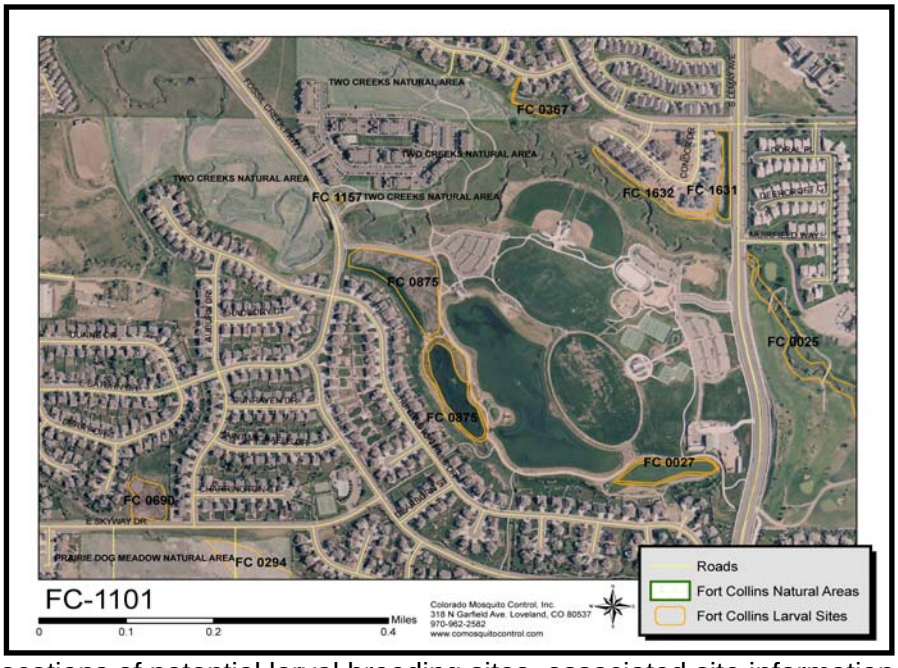
While the principles of IPM/IMM serve has a framework for control, CMC has always understood the importance of technology and its value in improving efficiency, accuracy, and efficacy of our field surveillance and larval and adult control operations. Years of program development and refinement have resulted in the creation of a vast array of geospatial, operational, and historical data.

Comprehensive Mosquito Management System (CMMS)

This year (2007) marks the first full year implementation of our Comprehensive Mosquito Management System (CMMS). CMMS has been built from the ground up over the past 14 years specifically to address the need of comprehensive data collection, storage analysis and reporting. With 300,000+ site inspection records, CMMS allows us to quickly analyze the history of individual sites to assess their potential for larval development based on a variety of factors such as time of year, number of inspections, history of water presence, larval presence and treatments. The end result is a targeted listing of sites for field technicians to inspect that has been specifically chosen based on a complex algorithmic analysis of historical data. Targeting sites increases our ability to prioritize sites that have the highest potential to produce mosquitoes and limit time spent on low potential sites. This has led to overall fewer site inspections, but greater site acreage treated through the 2007 season. Other environmentally oriented added benefits include reduced labor, fewer miles driven and less gasoline used (i.e. a smaller carbon footprint!). The true measure of our larval control efficiency is calculated by the average acreage treated per site visit. Further, CMMS provides for the quick composition of reports. These reports allow for more rapid data retrieval and analysis as well as faster customer service response.

Geographic Information Systems (GIS)

Geographic Information Systems (GIS) have become an invaluable tool in a variety of industries from business applications to disaster preparedness to biological and environmental applications. CMC was one of the first mosquito control organizations to understand its usefulness and make a commitment to and apply GIS to mosquito control starting in the mid-1990's. CMC maintains a large catalog of geospatial data detailing locations of potential larval breeding sites, associated site information such as habitat type, water source, and landowner information, adult mosquito surveillance data and resident contact information. All GIS work is performed in house by CMC personnel and is never subcontracted which can lead to increased turnaround time, better accuracy and a better understanding of the data.



Digital Interactive Reports

Another new addition to CMC's programs this year (2007) has been the introduction of a new interactive program data reporting system. Based on an informational "dashboard", this is a first for the mosquito control industry and allows users to access historical data from number of inspections and treatments to adult surveillance data and adulticide data in an easy to ready graphical format. Interactive reports are updated consistently to contain all current data throughout the season.

FUTURE

There are few new or novel larval or adult control products in development, and no "magic bullet" exists. Continued program evolution along an environmentally oriented path must come from the implementation of new technologies as they emerge to enhance and improve traditional mosquito control activities. CMC is currently exploring the possibility of utilizing "real-time" infrared satellite imagery to better locate and time larval development site inspections in conjunction with our CMMS database targeting system. CMC remains committed to improved environmentally sound mosquito control through the use technology.

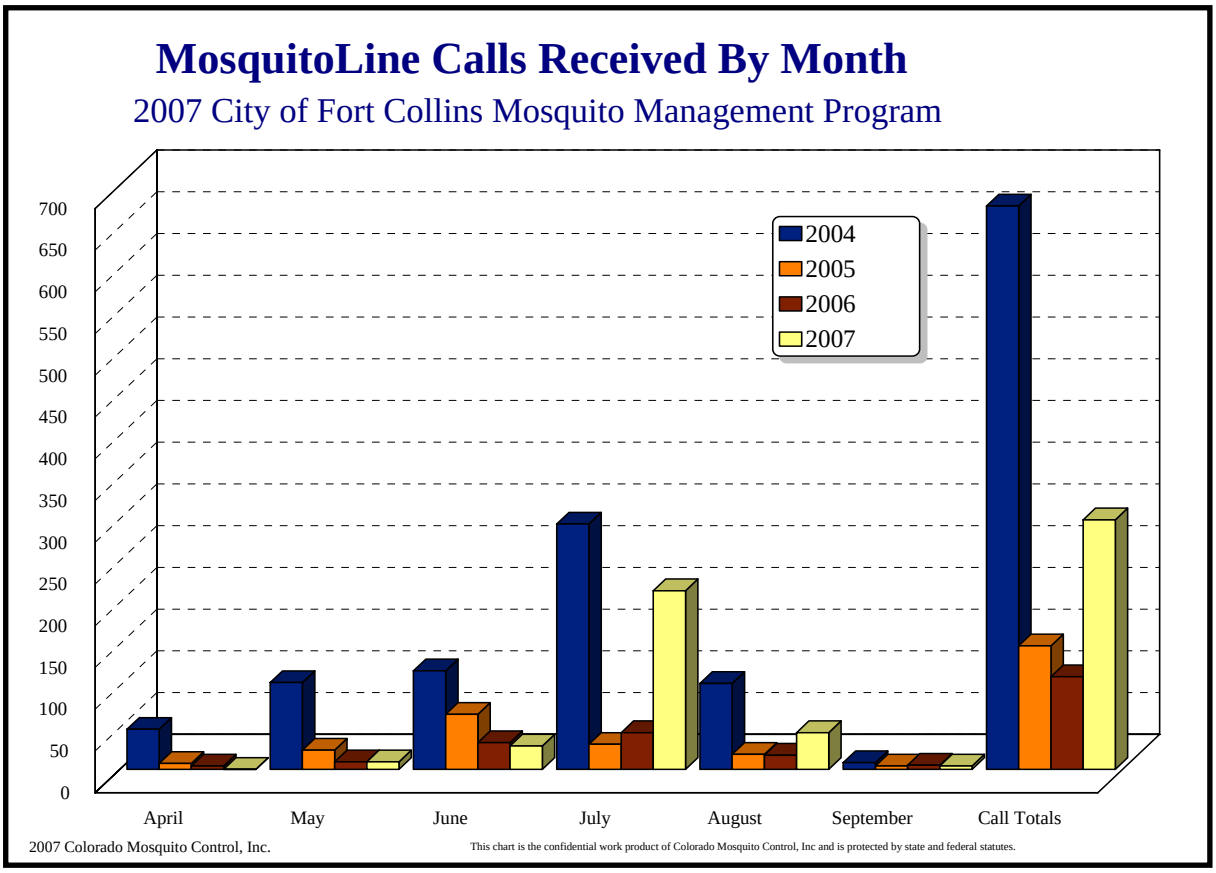
2007 Public Relations and Education

Colorado Mosquito Control places a heavy emphasis on public relations, customer service, and community education. With the introduction and continued media coverage of West Nile Virus, residents have become increasingly more involved with mosquito control operations. In 2007, our staff focused on providing area residents and visitors with information on the program, what they can do to help, and offered solutions to localized problems such as mosquito breeding habitats, localized annoyance and protection from West Nile viral disease.

Customer Service

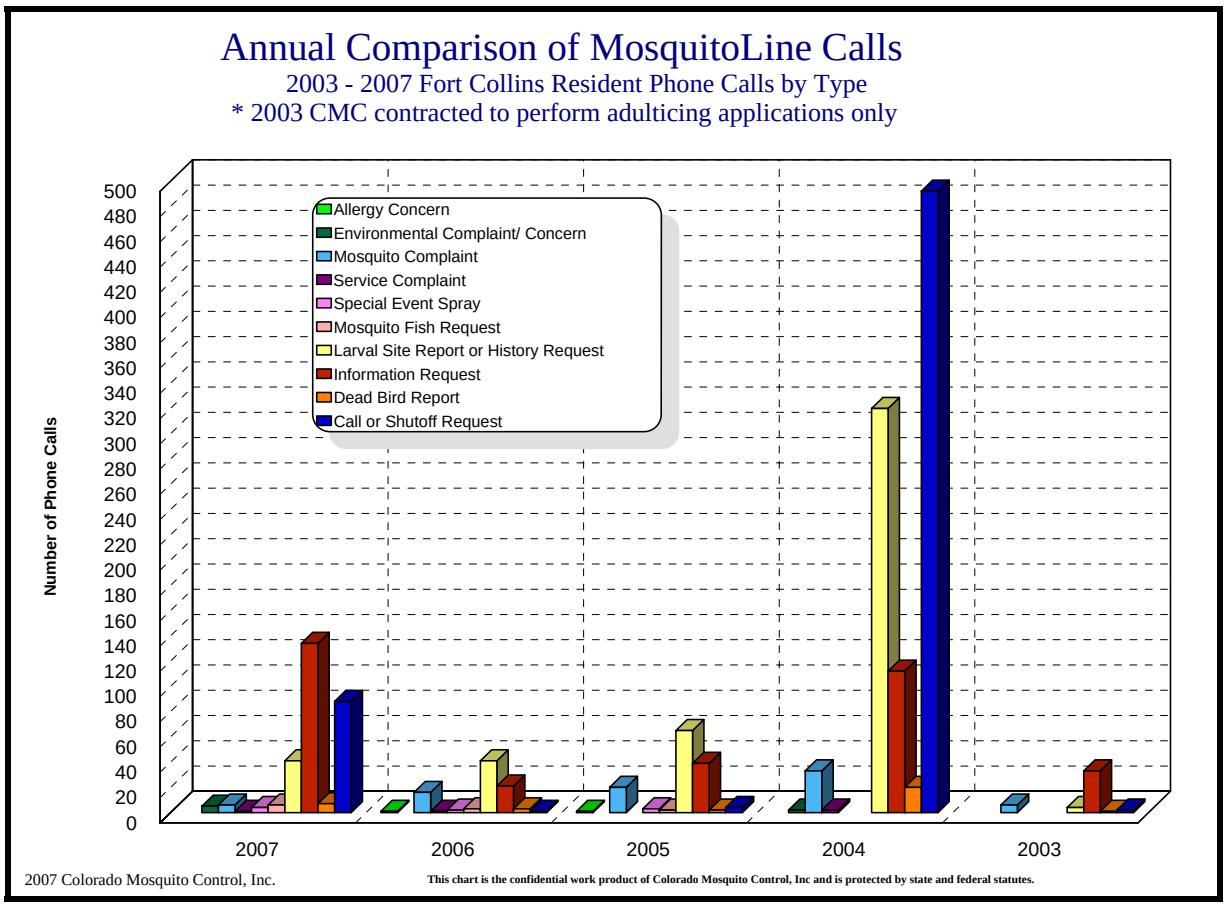
Customer service was again a very high priority for CMC. We take pride in training each and every technician so that they have the confidence and information to provide residents with the correct answers to sometimes difficult questions. Each field technician spends part of their day responding to resident 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. A majority of phone calls received by CMC continue to be information requests regarding mosquito spraying, ways to reduce mosquito production, and details about the City's program. These calls compliment CDC light trap data, allow us to pinpoint problem areas, and ultimately provide another valuable resource for our control efforts.



Another important component of CMC's customer service is the notification and shutoff database for adult mosquito control applications. Providing residents with this option has proven to be an effective tool in strengthening community relations. Our database is updated throughout the year to ensure that the names, phone numbers, and addresses are correct before any spraying is planned within a given community.

Since City Council review and approval of the West Nile Virus Response Plan in 2005, the City of Fort Collins does not provide residents with the shutoff service option, as any adult mosquito control application that is performed is done so in response to elevated West Nile Virus Risk. There were 88 requests for addition to the call notification program for the City of Fort Collins in 2007. In 2007, the option that was provided by CMC, under the direction of the City of Fort Collins, was an opt out program for those persons registered on the Colorado Department of Pesticide Sensitive Registry. According to the Colorado Department of Agriculture website, under the Plant Industry Section, Pesticide Sensitivity Registration does not prevent application of pesticides, but only requires that commercial applicators provide notification 24 hours prior to application is performed. The Plant Industry Laws & Regulations (35-10-112 of the Pesticide Applicators Act) outlines that the registry does not pertain to mosquito spraying, or applications to control pests of lawns, trees or shrubs. The opt out program was offered as an extension of customer service for those persons with applicable documentation and registry on the Pesticide Sensitive Registry. This service is seen as another way that community officials place an importance on understanding and meeting the different needs of residents.



Community Outreach and Education

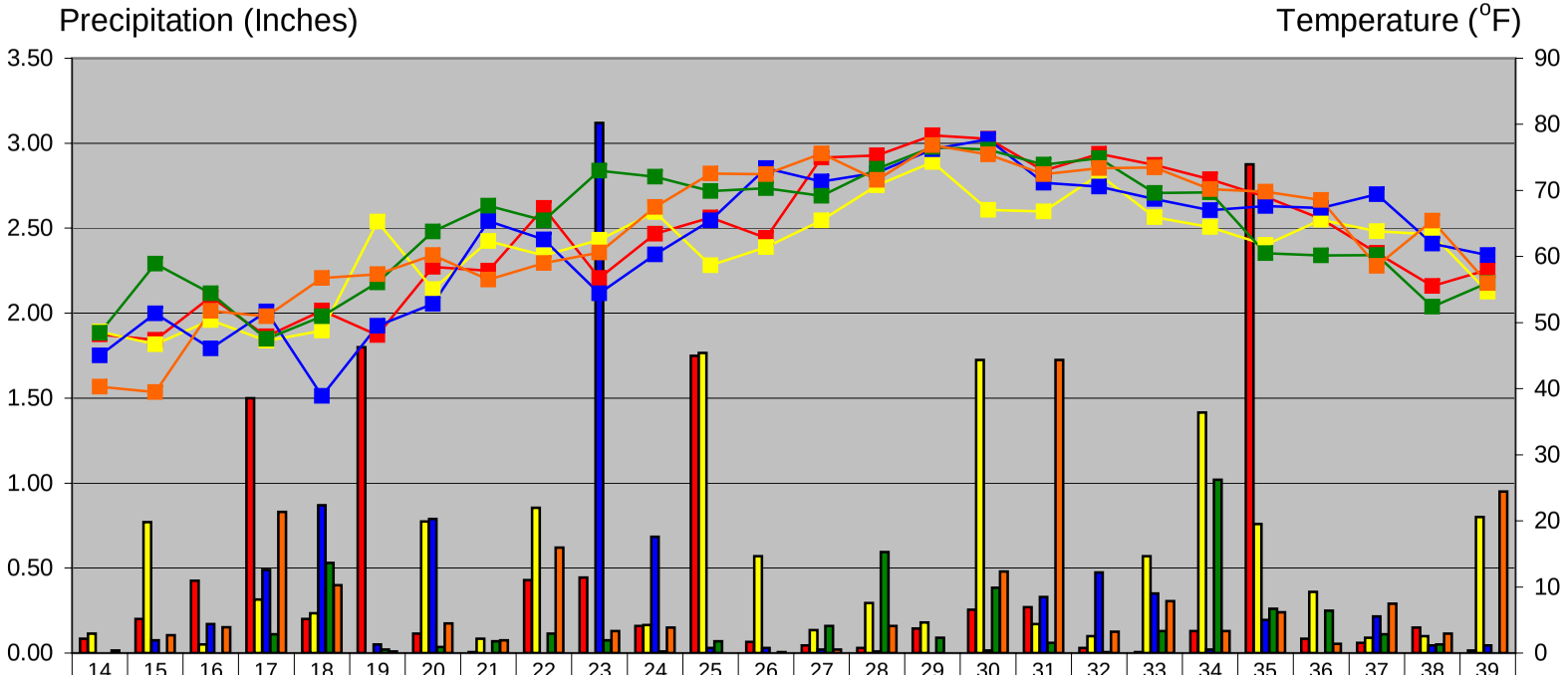
In 2007, CMC further increased our community outreach programs to provide residents and visitors with a better understanding of the value and scope of their mosquito control program. Outreach has proven to have a very positive impact on the community. Throughout the summer, outreach events were attended 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. However, one of the most important messages conveyed was the importance and minimal environmental impact of larviciding. Many residents often see mosquito control as only a spray truck driving down the street. Residents learned that over 93% of their program composition involves larval control, that there is no routine spraying in the City of Fort Collins Mosquito management program and that this provides lower environmental impacts and highly successful mosquito population reduction. Because of the positive feedback of these educational outreach programs, we will continue these throughout the upcoming 2008 mosquito control season.

SUMMARY

Unfortunately, we have been correct in our initial prognostication that in future years Colorado would see sustained West Nile Virus activity, particularly human cases and associated deaths. CMC recognizes that the vector *Culex tarsalis* will continue to use the irrigation tail waters and wetland rich marshes along the Front Range as the primary habitat for offspring development, thereby continuing to pose risk for West Nile Virus infection. The 2007 resurgence in mosquito-borne illness clearly illustrates the continued need for on-going mosquito control, mosquito surveillance, vigilant action and response. This season has required and utilized more labor hours, product, and accurate planning in the interest of public health than has been required in previous years.

Colorado Mosquito Control, Inc. continues to effectively serve the residents of the City of Fort Collins Mosquito Management Program 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. Despite pressure by some to abandon larval control and IPM in favor of large scale spraying, CMC continued to promote a responsible IPM approach to mosquito management, fully utilizing all available biological control techniques while minimizing the use of chemical pesticides. CMC has been able to develop both a cost-effective and efficient program in City of Fort Collins Mosquito Management Program over the past seasons and looks forward to continued service in 2008 and beyond. We also know that there is always room for improvement and have high expectations for program improvements and new successes in future years.

Figure 1. Fort Collins/ Loveland Area Climate Comparison Data for Median Precipitation & Temperature by Julian Week (April-September)



	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
2003 Precip	0.09	0.20	0.43	1.50	0.20	1.80	0.12	0.01	0.43	0.45	0.16	1.75	0.07	0.05	0.03	0.15	0.26	0.27	0.03	0.01	0.13	2.88	0.09	0.06	0.15	0.02
2004 Precip	0.12	0.77	0.05	0.32	0.24	0.00	0.78	0.09	0.86	0.00	0.17	1.77	0.57	0.14	0.30	0.18	1.73	0.17	0.10	0.57	1.42	0.76	0.36	0.09	0.10	0.80
2005 Precip	0.00	0.08	0.17	0.49	0.87	0.05	0.79	0.00	0.00	3.12	0.69	0.03	0.03	0.02	0.01	0.00	0.02	0.33	0.48	0.35	0.02	0.20	0.00	0.22	0.05	0.05
2006 Precip	0.00	0.00	0.00	0.11	0.53	0.02	0.04	0.07	0.12	0.08	0.01	0.07	0.00	0.16	0.60	0.09	0.39	0.06	0.01	0.13	1.02	0.26	0.25	0.11	0.05	0.00
2007 Precip	0.02	0.11	0.15	0.83	0.40	0.01	0.18	0.08	0.62	0.13	0.15	0.00	0.01	0.02	0.16	0.00	0.48	1.73	0.13	0.31	0.13	0.24	0.06	0.29	0.12	0.95
2003 Temp	48.2	47.4	53.9	47.9	51.8	48.1	58.4	57.8	67.4	56.8	63.5	65.9	62.8	75.0	75.3	78.4	77.8	73.0	75.5	73.8	71.7	69.0	65.7	60.5	55.5	58.0
2004 Temp	48.6	46.7	50.4	47.2	48.8	65.3	55.0	62.4	60.2	62.5	66.7	58.7	61.4	65.5	70.8	74.3	67.1	66.8	72.4	65.9	64.5	61.7	65.6	63.8	63.3	54.7
2005 Temp	45.0	51.4	46.1	51.7	38.9	49.5	52.9	65.4	62.6	54.4	60.3	65.5	73.4	71.3	72.7	76.2	77.7	71.1	70.6	68.7	67.0	67.7	67.3	69.4	62.0	60.2
2006 Temp	48.4	58.9	54.4	47.5	51.0	56.1	63.8	67.7	65.5	73.0	72.1	69.9	70.3	69.2	73.3	76.5	76.2	73.9	74.9	69.6	69.7	60.5	60.2	60.2	52.4	56.0
2007 Temp	40.3	39.5	51.8	51.0	56.8	57.3	60.2	56.5	59.0	60.6	67.5	72.6	72.4	75.6	71.6	76.8	75.4	72.5	73.4	73.5	70.2	69.8	68.5	58.6	65.4	56.0

Figure 2. *Culex* Mosquito Populations Trends by City

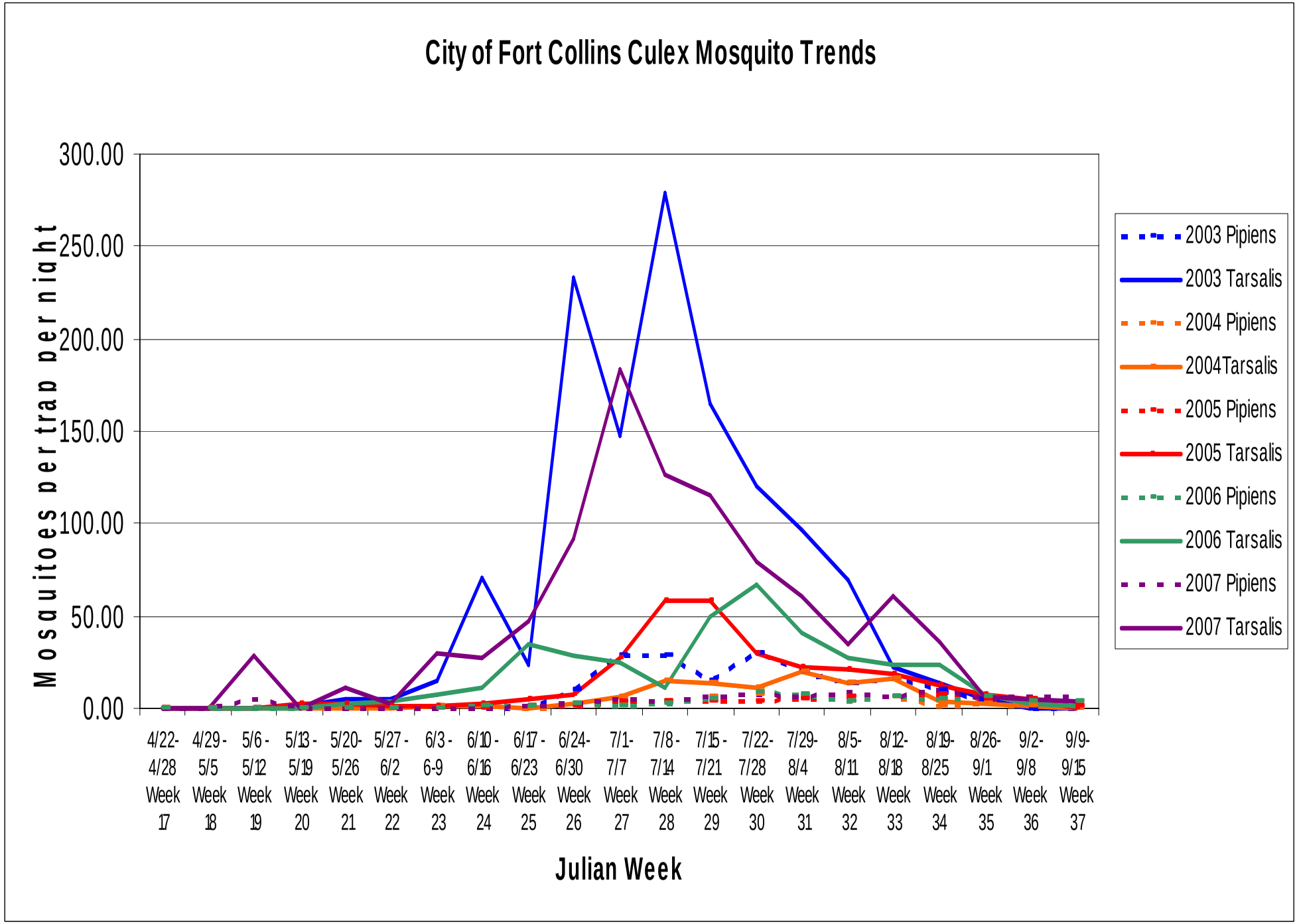


Figure 3. *Culex* Mosquito Populations Trends by City

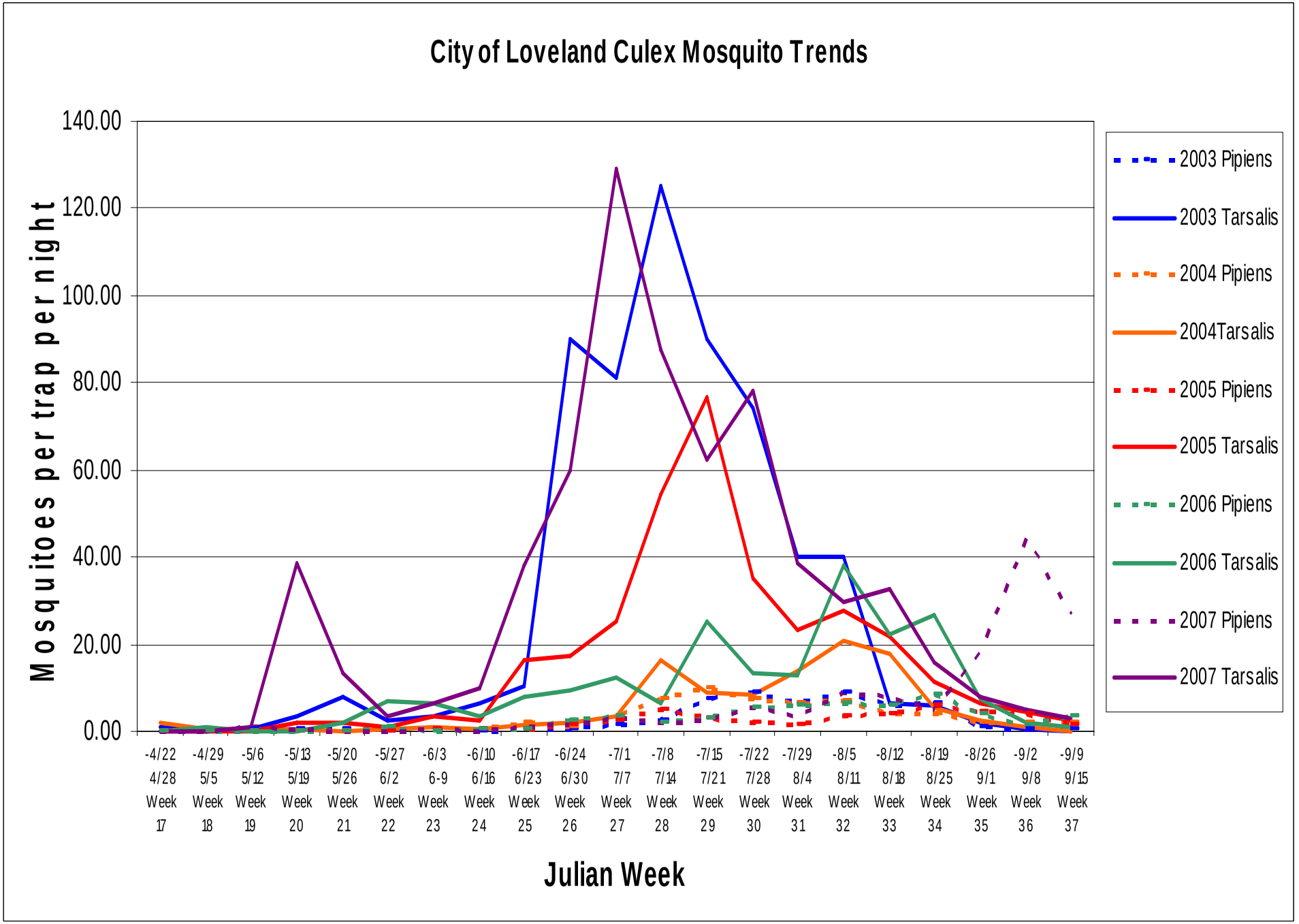


Figure 4. Seasonal Comparison of *Culex tarsalis* Trends by City

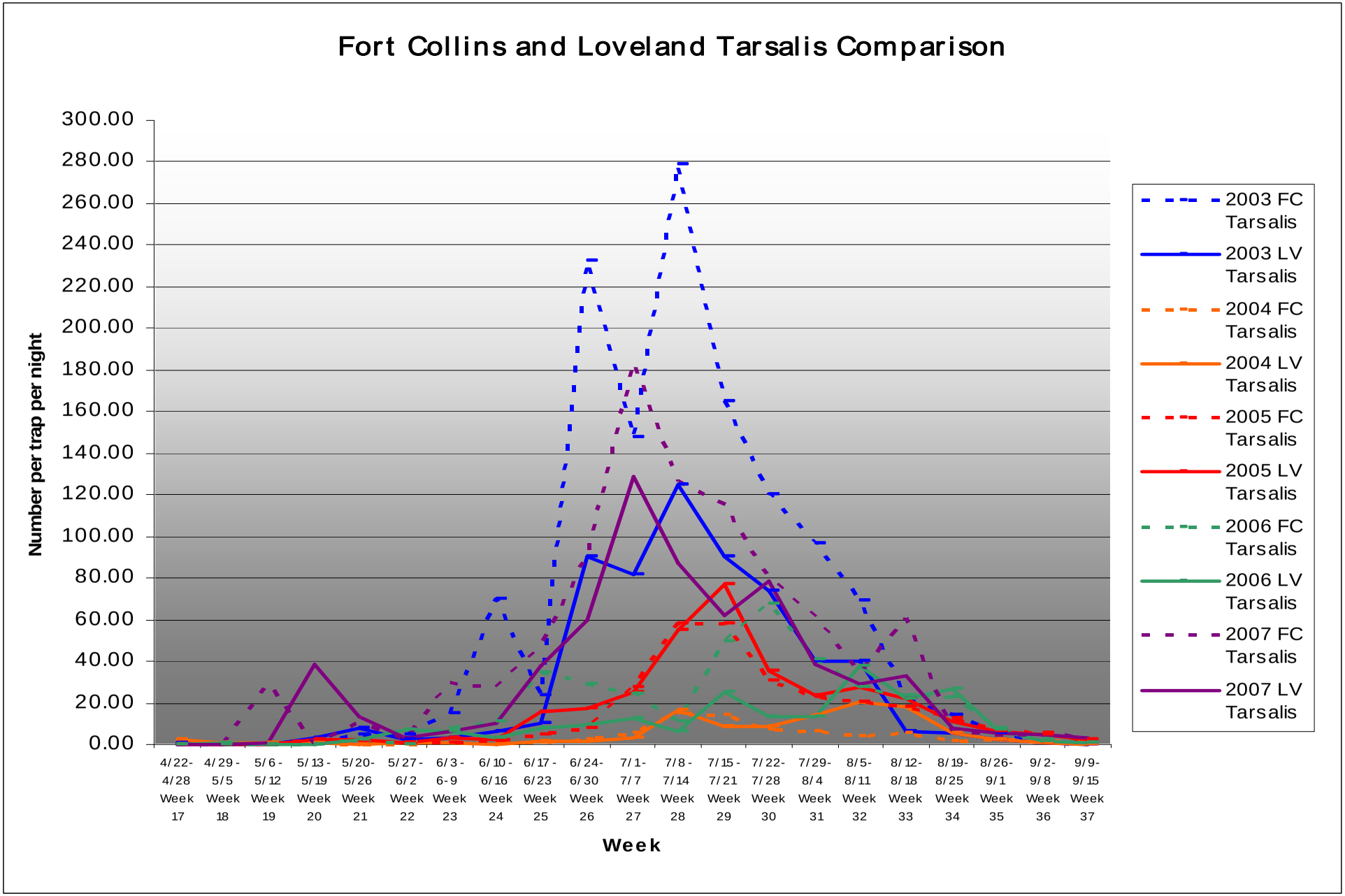
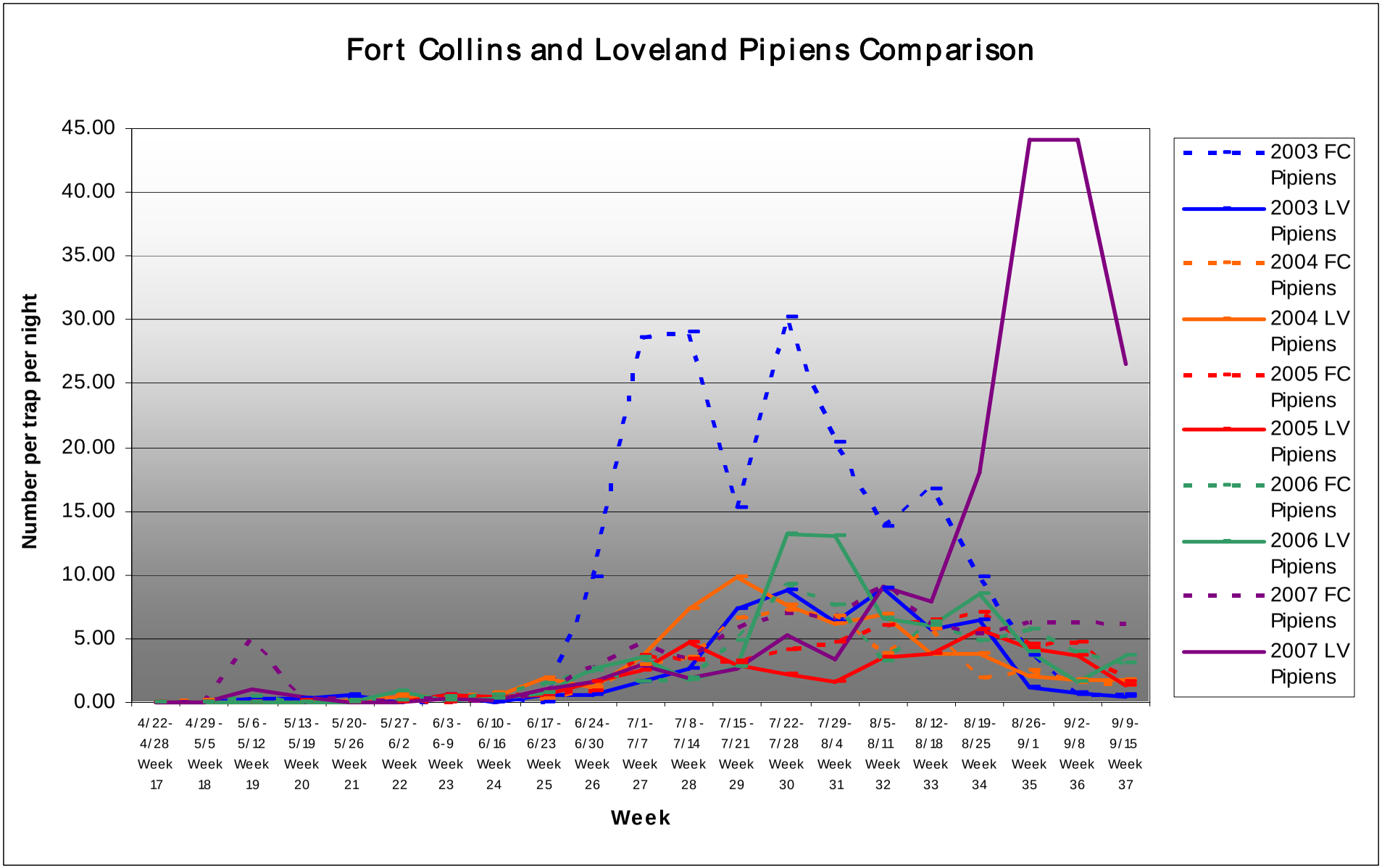


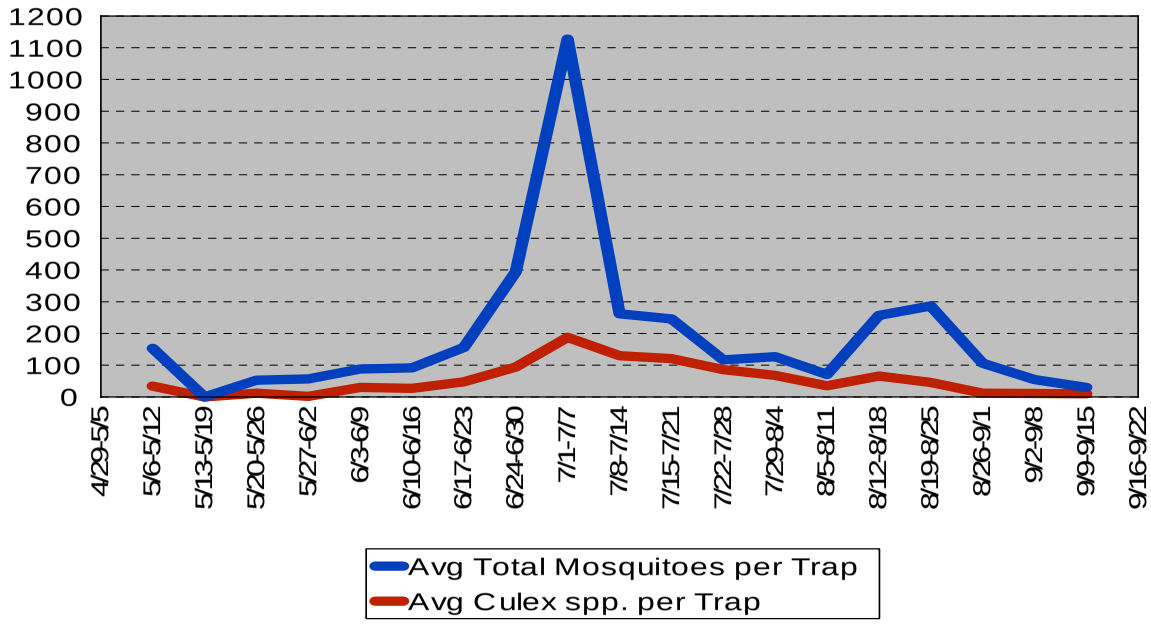
Figure 5. Seasonal Comparison of *Culex pipiens* Trends by City



2007 Fort Collins CDC Light Trap Composite Data

Total number of trap/nights set: 642
Total number of mosquitoes collected: 147,424
Average mosquitoes per trap/night: 229
Average Culex tarsalis per trap/night: 60
Average Culex pipiens per trap/night: 5

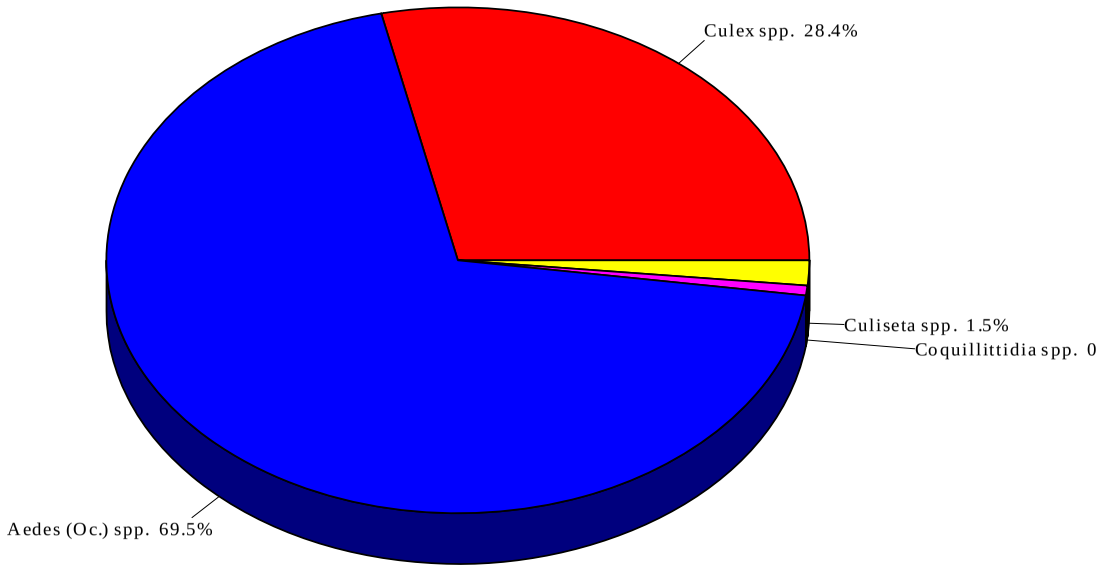
Trap sites included in this data: All regular City of Fort Collins light trap sites, which includes 1 floater trap that was set based on a resident complaint phone call.
**This data includes 81 CDPHE/LCDHE sentinel surveillance traps from the 4 FC locations set in 2007 (43,687 mosquitoes).



Species collected:
Aedes vexans
Aedes (Oc.) campetris
Aedes (Oc.) dorsalis
Aedes (Oc.) hendersoni
Aedes (Oc.) increpitus
Aedes (Oc.) melanimon
Aedes (Oc.) nigromaculis
Aedes (Oc.) trivittatus
Anopheles earlei
Anopheles hermsi
Coquillettidia perturbans
Culex pipiens
Culex tarsalis
Culiseta incidens
Culiseta inornata

Species abundance:

Species	Number	Percent of Total
Aedes(Oc.) spp.	102,369	69.4%
Anopheles spp.	76	0.05%
Coquillettidia spp.	912	0.6%
Culex spp.	41,811	28.4%
Culiseta spp.	2,256	1.5%



West Nile Virus Testing:
134 mosquito sample pools obtained from City of Fort Collins surveillance locations tested positive for WNV in 2007, which includes pools obtained from regular traps, gravid traps and sentinel traps.
The first positive was detected on June 19, 2007.

CMMS
Colorado Mosquito Control, Inc.

ADULT TRAP DATA - SPECIES SUMMARY

by REPORT DATE: 4/15/2007 to 10/15/2007
by : FC

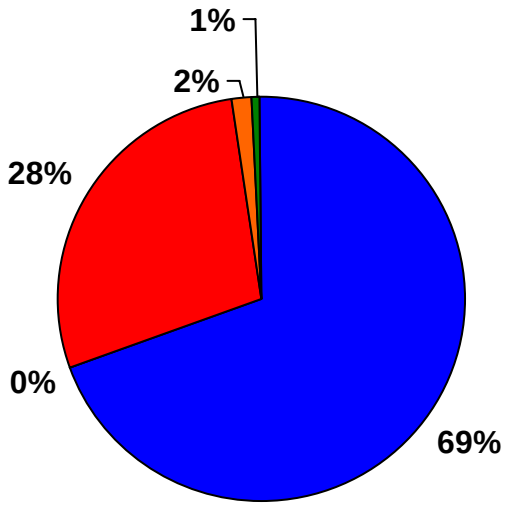
Species	Total
Aedes (Oc.) campestris	78
Aedes (Oc.) dorsalis	2889
Aedes (Oc.) hendersoni	8
Aedes (Oc.) increpitus	6834
Aedes (Oc.) melanimon	31803
Aedes (Oc.) nigromaculis	37
Aedes (Oc.) trivittatus	280
Aedes vexans	60436
Aedes-Ochlerotatus species	4
	102369
Anopheles earlei	63
Anopheles hermsi	13
	76
Culiseta incidens	3
Culiseta inornata	2252
Culiseta species	1
	2256
Culex pipiens	3069
Culex tarsalis	38742
	41811
Coquillettidia	912
Operational but empty	0
Trap malfunction	0
	912

CMMS
Colorado Mosquito Control, Inc.

ADULT TRAP DATA - SPECIES SUMMARY

by REPORT DATE: 4/15/2007 to 10/15/2007
by : FC

Species	Total



	Total	%
Aedes-Oc	102369	69
Anopheles	76	0
Culex	41811	28
Culiseta	2256	2
Other	912	1
	147424	

CMMS
Colorado Mosquito Control, Inc.

ADULT TRAP DATA - SPECIES SUMMARY

by REPORT DATE: 4/15/2007 to 10/15/2007
by TRAP NO: FC-04 - FC-14 - FC-53 - FC-67

Species	Total
Aedes (Oc.) campestris	33
Aedes (Oc.) dorsalis	1117
Aedes (Oc.) increpitus	5058
Aedes (Oc.) melanimon	9829
Aedes (Oc.) nigromaculis	10
Aedes (Oc.) trivittatus	1
Aedes vexans	13281
	29329
Anopheles hermsi	1
	1
Culiseta inornata	539
	539
Culex pipiens	1038
Culex tarsalis	12778
	13816
Coquillettidia	2
	2

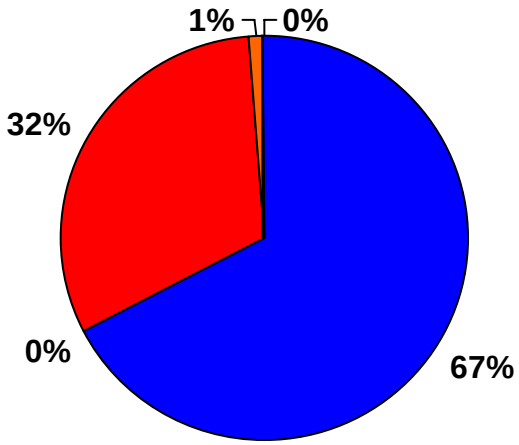
CMMS - Comprehensive Mosquito Management System

CMMS
Colorado Mosquito Control, Inc.

ADULT TRAP DATA - SPECIES SUMMARY

by REPORT DATE: 4/15/2007 to 10/15/2007
by TRAP NO: FC-04 - FC-14 - FC-53 - FC-67

Species **Total**

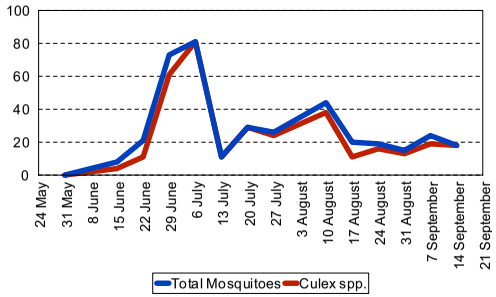


	Total	%
Aedes-Oc	29329	67
Anopheles	1	0
Culex	13816	32
Culiseta	539	1
Other	2	0
	43687	

FC-01: Magic Carpet

Season: 2007
Trap Type: Light/CO_2
Location: Fort Collins,
Hudson & Avondale Detention Basin
GPS: N40° 32 9.449', W105° 4.948'

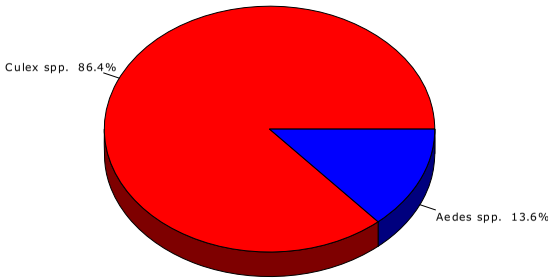
Total number of trap/nights set: 14
Total number of mosquitoes collected: 389
Average mosquitoes per trap/night: 28
Average Culex mosquitoes per trap/ night: 24



Species collected:
Aedes vexans
Aedes (Oc.) dorsalis
Aedes (Oc.) melanimon
Culex pipiens
Culex tarsalis

Species abundance:

Species	Number	Percent of Total
Aedes vexans	37	9.5%
Other *Aedes/Ochlerotatus*	16	4.1%
Culex tarsalis	266	68.4%
Other *Culex*	70	18.0%

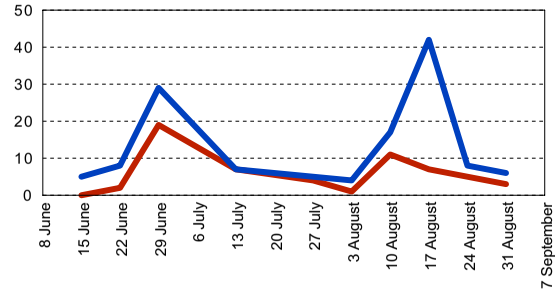


West Nile Virus Testing:
One mosquito sample pool obtained
from this surveillance location tested positive for WNV
on July 19th, 2007.

FC-02: 3907 Benthaven Street

Season: 2007
Trap Type: Light/CO_2
Location: Fort Collins, 3907 Benthaven Street
GPS: N40° 32.021', W105° 5.256'

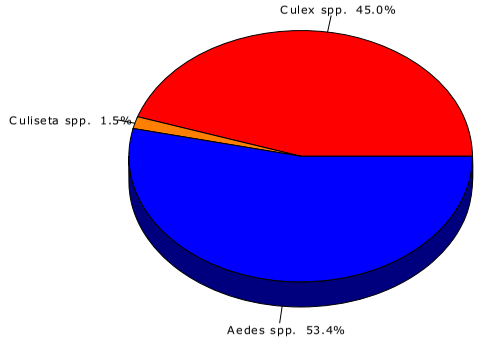
Total number of trap/nights set: 10
Total number of mosquitoes collected: 131
Average mosquitoes per trap/night: 13
Average *Culex* per trap/ night: 6



Species collected:
Aedes vexans
Aedes (Oc.) melanimon
Culex pipiens
Culex tarsalis
Culiseta inornata

Species abundance:

Species	Number	Percent of Total
Aedes vexans	66	50.4%
Other *Aedes/Ochlerotatus*	4	3.1%
Culex tarsalis	44	33.6%
Other *Culex*	15	11.4%
Culiseta spp.	2	1.5%

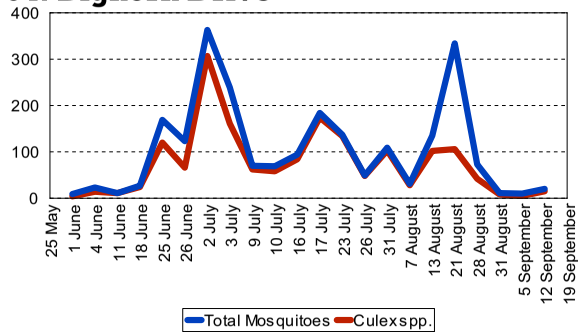


West Nile Virus Testing:
No mosquito sample pools obtained from this
surveillance location tested positive for WNV in 2007.

FC-04: Bighorn Drive

Season: 2007
Trap Type: Light/CO_2
Location: Fort Collins, 2201 Bighorn Drive
GPS: N40° 32.103', W105° 2.252'

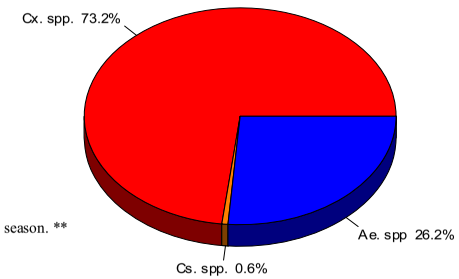
Total number of trap/nights set: 22
Total number of mosquitoes collected: 2,290
Average mosquitoes per trap/night: 104
Average Culex mosquitoes per trap/ night: 76



Species collected:
Aedes vexans
Aedes (Oc.) campestris
Aedes (Oc.) dorsalis
Aedes (Oc.) increpitus
Aedes (Oc.) melanimon
Culex pipiens
Culex tarsalis
Culiseta inornata

Species abundance:

Species	Number	Percent of Total
Aedes vexans	389	17.0%
Other *Aedes/Ochlerotatus*	211	9.2%
Culex tarsalis	1,553	67.8%
Other *Culex*	123	5.4%
Culiseta spp.	14	0.6%



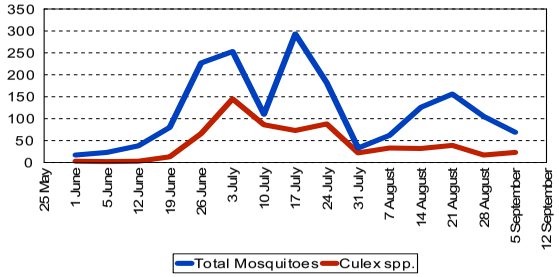
West Nile Virus Testing: Eight mosquito sample pools
obtained from this surveillance location tested positive for WNV on
July 3rd, July 9th, July 17th, July 23rd (2 pools),
July 26th, August 13th, and August 21st, 2007.

**This trap was part of the Larimer County Sentinel Zone for the 2007 season. **

FC-06: North Linden

Season: 2007
Trap Type: Light/CO_2
Location: Fort Collins,
North Linden on Poudre River Bike Trail
GPS: N40° 35.480, W105° 4.275'

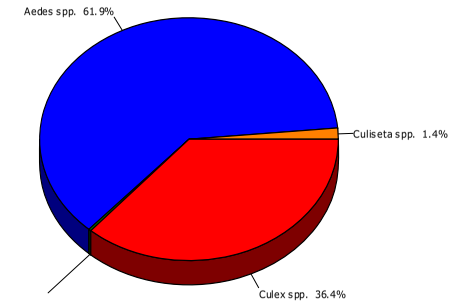
Total number of trap/nights set: 15
Total number of mosquitoes collected: 1,774
Average mosquitoes per trap/night: 118
Average *Culex* mosquitoes per trap/night: 43



Species collected:
Aedes vexans
Aedes (Oc.) dorsalis
Aedes(Oc.) hendersoni
Aedes (Oc.) increpitus
Aedes (Oc.) melanimon
Aedes (Oc.) nigromaculis
Aedes (Oc.) trivittatus
Anopheles earlei
Anopheles hermsi
Coquillettidia perturbans
Culex pipiens
Culex tarsalis
Culiseta inornata

Species abundance:

Species	Number	Percent of Total
Aedes vexans	987	55.6%
Other *Aedes/Ochlerotatus*	111	6.3%
Culex tarsalis	525	29.5%
Other *Culex*	120	6.8%
Culiseta spp.	25	1.4%
Coquillettidia spp.	1	.06%
Anopheles spp.	5	.3%

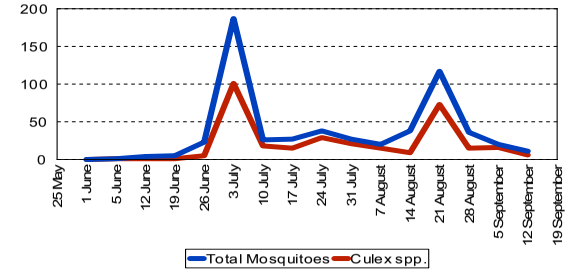


West Nile Virus Testing: Three mosquito sample pools
obtained from this surveillance location tested positive for
WNV on July 17th, August 21st, and September 5th, 2007.

FC-09: 720 Oak

Season: 2007
Trap Type: Light/CO_2
Location: Fort Collins, 720 Oak
GPS: N40° 35.480', W105° 5.357'

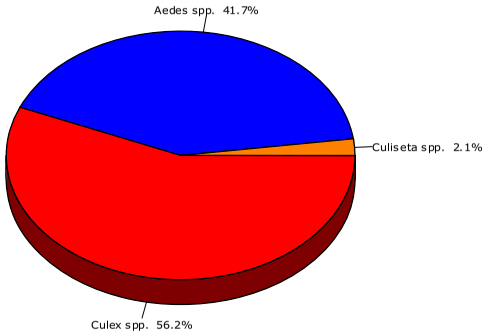
Total number of trap/nights set: 16
Total number of mosquitoes collected: 580
Average mosquitoes per trap/night: 36
Average *Culex* mosquitoes per trap/ night: 20



Species collected:
Aedes vexans
Aedes (Oc.) dorsalis
Aedes (Oc.) melanimon
Culex pipiens
Culex tarsalis
Culiseta incidens
Culiseta inornata

Species abundance:

Species	Number	Percent of Total
Aedes vexans	194	33.4%
Other *Aedes/Ochlerotatus*	48	8.3%
Culex tarsalis	250	43.1%
Other *Culex*	76	13.1%
Culiseta spp.	12	2.1%

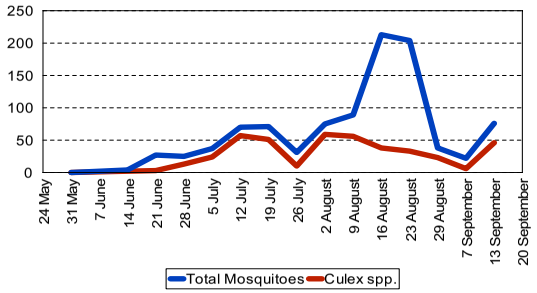


West Nile Virus Testing: One mosquito sample pool obtained from this surveillance location tested positive for WNV July 31st, 2007.

FC-11: Golden Current

Season: 2007
Trap Type: Light/CO_2
Location: Fort Collins,
Overland Trail and Golden Current
GPS: N40° 34.173', W105° 8.133'

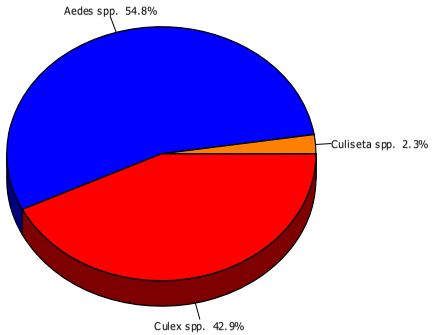
Total number of trap/nights set: 15
Total number of mosquitoes collected: 982
Average mosquitoes per trap/night: 65
Average *Culex* mosquitoes per trap/ night: 28



Species collected:
Aedes vexans
Aedes (Oc.) dorsalis
Aedes (Oc.) melanimon
Aedes (Oc.) nigromaculus
Aedes (Oc.) trivittatus
Culex pipiens
Culex tarsalis
Culiseta inornata

Species abundance:

Species	Number	Percent of Total
Aedes vexans	328	33.4%
Other *Aedes/Ochlerotatus*	210	21.4%
Culex tarsalis	262	26.7%
Other *Culex*	159	16.2%
Culiseta spp.	23	2.3%

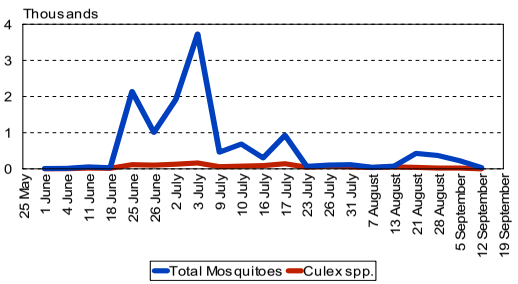


West Nile Virus Testing: Three mosquito sample pools obtained from this surveillance location tested positive for WNV on July 19th, August 2nd, and August 23rd, 2007.

FC-14: Fort Collins Visitors Center

Season: 2007
Trap Type: Light/CO_2
Location: Fort Collins,
Prospect and 1-25 Frontage Road
GPS: N40° 33.916', W105° 3.92'

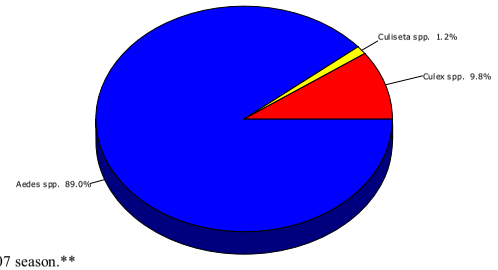
Total number of trap/nights set: 21
Total number of mosquitoes collected: 12,734
Average mosquitoes per trap/night: 606
Average Culex mosquitoes per trap/ night: 60



Species collected:
Aedes vexans
Aedes (Oc.) campestris
Aedes (Oc.) dorsalis
Aedes (Oc.) increpitus
Aedes (Oc.) melanimon
Anopheles hermsi
Culex pipiens
Culex tarsalis
Culiseta inornata

Species abundance:

Species	Number	Percent of Total
Aedes vexans	1,545	12.1%
Other *Aedes/Ochlerotatus*	9,783	76.8%
Culex tarsalis	1,202	9.4%
Other *Culex*	47	0.4%
Culiseta spp.	156	1.2%
Anopheles spp.	1	0.0%



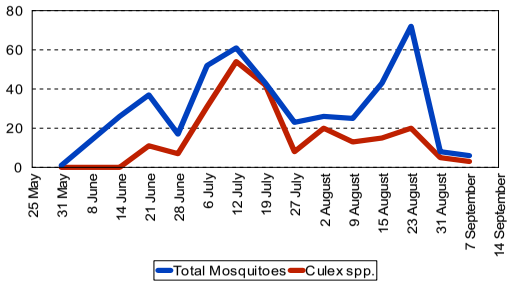
West Nile Virus Testing: Three mosquito sample pools obtained from this surveillance location tested positive for WNV on July 23rd, August 13th, and August 21st, 2007.

This trap was part of the Larimer County Sentinel Zone for the 2007 season.

FC-15: Stuart and Dorset

Season: 2007
Trap Type: Light/CO_2
Location: Fort Collins, Stuart and Romeldale Ditch
GPS: N40° 33.614', W105° 7.444'

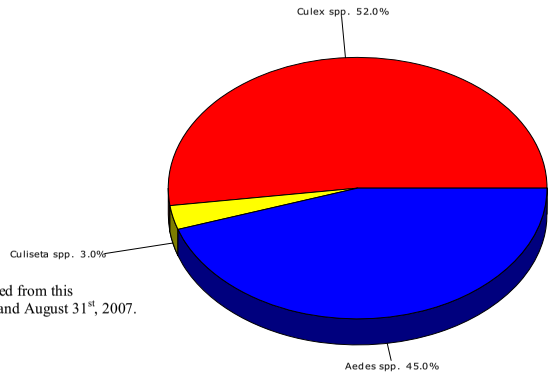
Total number of trap/nights set: 14
Total number of mosquitoes collected: 440
Average mosquitoes per trap/night: 31
Average Culex mosquitoes per trap/ night: 16



Species collected:
Aedes vexans
Aedes (Oc.) dorsalis
Aedes(Oc.) increpitus
Aedes (Oc.) melanimon
Aedes nigromaculus
Culex pipiens
Culex tarsalis
Culiseta inornata

Species abundance:

Species	Number	Percent of Total
Aedes vexans	174	39.5%
Other *Aedes/Ochlerotatus*	24	5.5%
Culex tarsalis	149	33.9%
Other *Culex*	80	18.2%
Culiseta spp.	13	2.9%

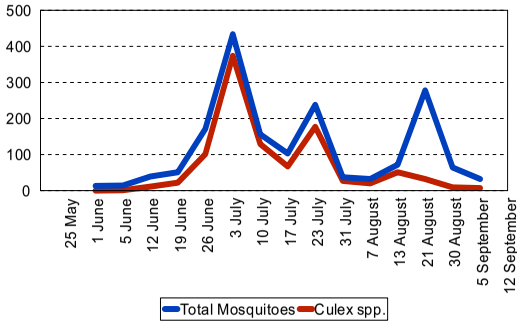


West Nile Virus Testing: Two mosquito sample pools obtained from this surveillance location tested positive for WNV on August 15th and August 31st, 2007.

FC-19: Edora Park

Season: 2007
Trap Type: Light/CO_2
Location: Fort Collins,
Prospect and Welch @ Spring Creek Trail
GPS: 40° 33.933', W105° 3.144'

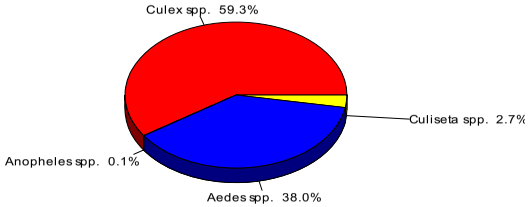
Total number of trap/nights set: 15
Total number of mosquitoes collected: 1,734
Average mosquitoes per trap/night: 116
Average Culex mosquitoes per trap/ night: 69



Species collected:
Aedes vexans
Aedes (Oc.) dorsalis
Aedes (Oc.) hendersoni
Aedes (Oc.) increpitus
Aedes (Oc.) melanimon
Anpholes hermsi
Coquillettidia perturbans
Culex pipiens
Culex tarsalis
Culiseta inornata

Species abundance:

Species	Number	Percent of Total
Aedes vexans	547	31.5%
Other *Aedes/Ochlerotatus*	111	6.4%
Culex tarsalis	951	54.8%
Other *Culex*	77	4.4%
Culiseta spp.	46	2.6%
Anopheles spp.	1	0%
Coquillettidia spp.	1	0%

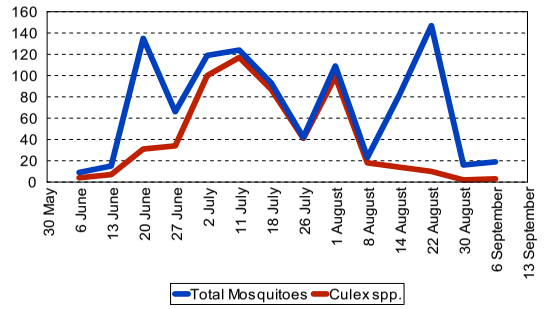


West Nile Virus Testing: Two mosquito sample pools obtained from this surveillance location tested positive for WNV on July 3rd and July 23rd, 2007.

FC-23: Boltz

Season: 2007
Trap Type: Light/CO_2
Location: Fort Collins,
720 Boltz Drive
(Boltz Junor High School)
GPS: N40° 32.669', W105° 3.860'

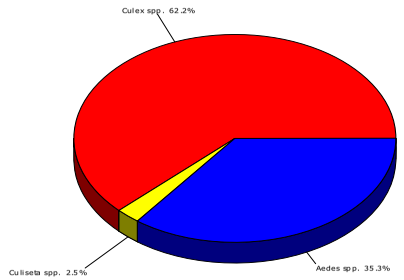
Total number of trap/nights set: 14
Total number of mosquitoes collected: 999
Average mosquitoes per trap/night: 71
Average Culex mosquitoes per trap/night: 41



Species collected:
Aedes vexans
Aedes (Oc.) dorsalis
Aedes (Oc.) melanimon
Aedes (Oc.) nigromaculis
Culex pipiens
Culex tarsalis
Culiseta inornata

Species abundance:

Species	Number	Percent of Total
Aedes vexans	361	36.1%
Other *Aedes/Ochlerotatus*	57	5.7%
Culex tarsalis	525	52.5%
Other *Culex*	42	4.2%
Culiseta spp.	14	1.4%

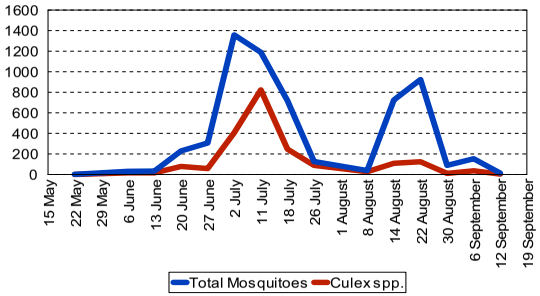


West Nile Virus Testing: Three mosquito sample pools obtained from this surveillance location tested positive for WNV on July 11th, July 18th, and August 1st, 2007.

FC-27: San Luis

Season: 2007
Trap Type: Light/CO_2
Location: Fort Collins, 3001 San Luis along ditch
GPS: N40° 32.814', W105° 2.006'

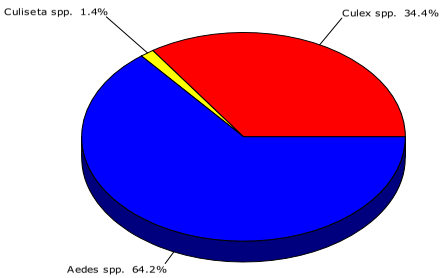
Total number of trap/nights set: 15
Total number of mosquitoes collected: 5,933
Average mosquitoes per trap/night: 395
Average Culex mosquitoes per trap/ night: 136



Species collected:
Aedes vexans
Aedes (Oc.) dorsalis
Aedes (Oc.) increpitus
Aedes (Oc.) melanimon
Aedes (Oc.) trivittatus
Culex pipiens
Culex tarsalis
Culiseta inornata

Species abundance:

Species	Number	Percent of Total
Aedes vexans	1,768	29.8%
Other *Aedes/Ochlerotatus*	2,039	34.4%
Culex tarsalis	1,941	32.7%
Other *Culex*	101	1.7 %
Culiseta spp.	84	1.4%

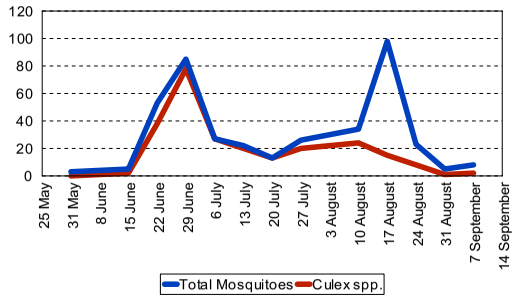


West Nile Virus Testing: Eight mosquito sample pools obtained from this trap surveillance location tested positive for WNV on July 18th (3 pools), July 26th, August 14th (2 pools), and August 22nd (2 pools), 2007.

FC-29: Ben's Park

Season: 2007
Trap Type: Light/CO_2
Location: Fort Collins,
Fossil Ridge Park
GPS: N40° 32.814', W105° 2.006'

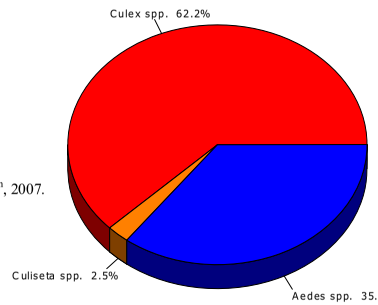
Total number of trap/nights set: 13
Total number of mosquitoes collected: 402
Average mosquitoes per trap/night: 31
Average *Culex* mosquitoes per trap/ night: 19



Species collected:
Aedes vexans
Aedes (Oc.) dorsalis
Aedes (Oc.) melanimon
Culex pipiens
Culex tarsalis
Culiseta inornata

Species abundance:

Species	Number	Percent of Total
Aedes vexans	127	31.6%
Other *Aedes/Ochlerotatus*	15	3.7%
Culex tarsalis	245	60.9%
Other *Culex*	5	1.2%
Culiseta spp.	10	2.5%



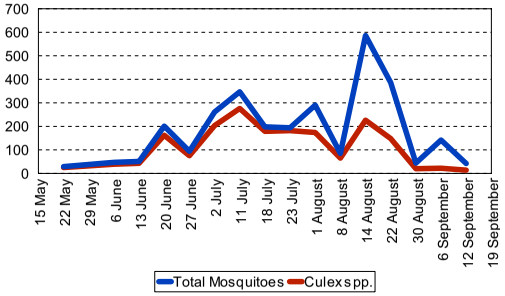
West Nile Virus Testing: Two mosquito sample pools obtained from this surveillance location tested positive for WNV on July 19th and August 24th, 2007.

[see also results for the gravid surveillance trap at this location (FC-29gr)]

FC-30: Cambridge

Season: 2007
Trap Type: Light/CO_2
Location: Fort Collins,
4700 Cambridge Avenue
GPS: N40° 31.263', W105° 0.639'

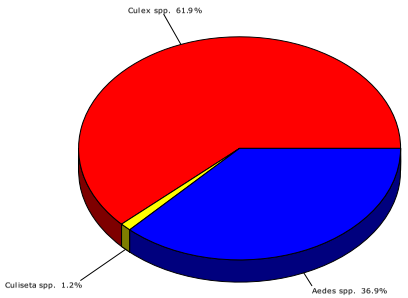
Total number of trap/nights set: 16
Total number of mosquitoes collected: 2,997
Average mosquitoes per trap/night: 187
Average Culex mosquitoes per trap/ night: 116



Species collected:
Aedes vexans
Aedes (Oc.) dorsalis
Aedes (Oc.) increpitus
Aedes (Oc.) melanimon
Anopheles earlei
Culex pipiens
Culex tarsalis
Culiseta inornata
Coquillettidia perturbans

Species abundance:

Species	Number	Percent of Total
Aedes vexans	964	32.2%
Other *Aedes/Ochlerotatus*	142	4.8%
Culex tarsalis	1,815	60.6%
Other *Culex*	38	1.3%
Culiseta spp.	35	1.1%
Coquillettidia spp.	2	.06%
Anopheles spp.	1	.03%

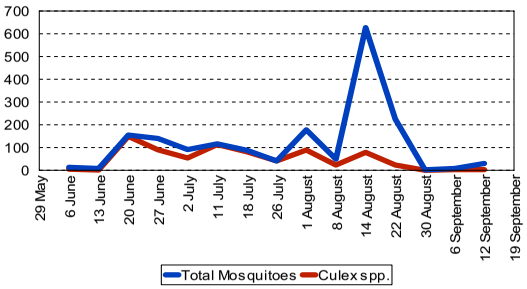


West Nile Virus Testing: Seven mosquito sample pools obtained from this surveillance location tested positive for WNV on July 11th, July 18th (2 pools), July 23rd, August 1st, and August 14th (2 pools), 2007.

FC-31: Willow Springs

Season: 2007
Trap Type: Light/CO_2
Location: Fort Collins,
Willow Springs HOA on Timberline
GPS: N40° 30.368', W105° 2.335'

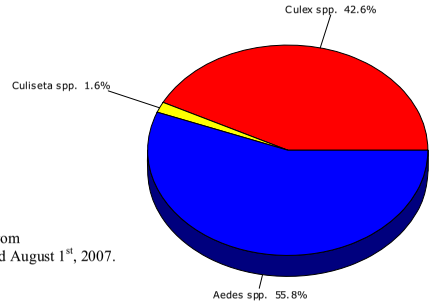
Total number of trap/nights set: 15
Total number of mosquitoes collected: 1,771
Average mosquitoes per trap/night: 118
Average Culex mosquitoes per trap/night: 50



Species collected:
Aedes vexans
Aedes (Oc.) dorsalis
Aedes (Oc.) increpitus
Aedes (Oc.) melanimon
Culex pipiens
Culex tarsalis
Culiseta inornata

Species abundance:

Species	Number	Percent of Total
Aedes vexans	848	47.9%
Other *Aedes/Ochlerotatus*	140	7.9%
Culex tarsalis	749	42.3%
Other *Culex*	5	.28%
Culiseta spp.	29	.16%

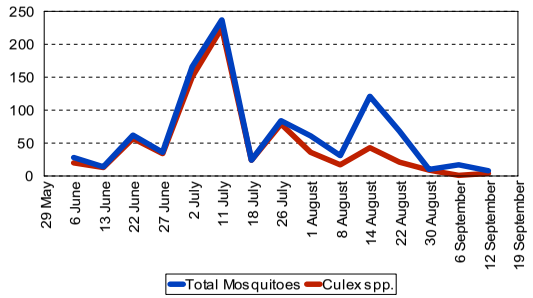


West Nile Virus Testing: Two mosquito sample pool obtained from this surveillance location tested positive for WNV on July 18th and August 1st, 2007.

FC-33: Sage Creek

Season: 2007
Trap Type: Light/CO_2
Location: Fort Collins, 5237 Zeigler
GPS: N40° 30.802', W105° 1.207'

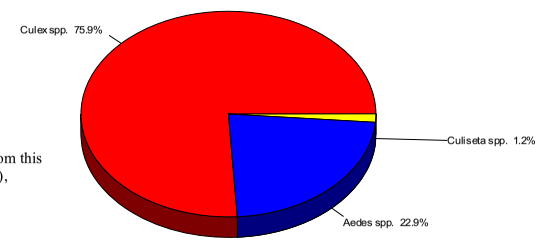
Total number of trap/nights set: 15
Total number of mosquitoes collected: 967
Average mosquitoes per trap/night: 64
Average Culex mosquitoes per trap/night: 49



Species collected:
Aedes vexans
Aedes (Oc.) dorsalis
Aedes (Oc.) melanimon
Aedes (Oc.) nigromaculis
Culex pipiens
Culex tarsalis
Culiseta inornata

Species abundance:

Species	Number	Percent of Total
Aedes vexans	120	12.4%
Other *Aedes/Ochlerotatus*	101	10.4%
Culex tarsalis	729	75.4%
Other *Culex*	5	.52%
Culiseta spp.	12	1.2%



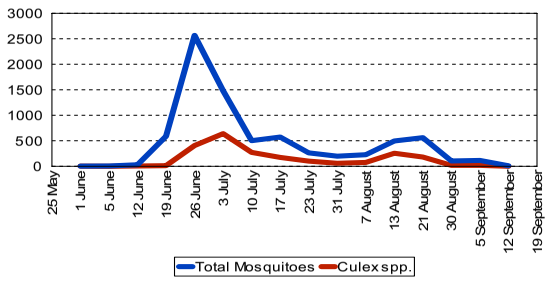
West Nile Virus Testing: Five mosquito sample pools obtained from this surveillance location tested positive for WNV on July 11th (3 pools), July 18th, and August 8th, 2007 (light/CO_2 trap only).

[see also results for the gravid trap at this location (FC-33gr)]

FC-34: Country Club

Season: 2007
Trap Type: Light/CO_2
Location: Fort Collins,
1400 Richard's Lake Road
GPS: N40° 37.594', W105° 3.113'

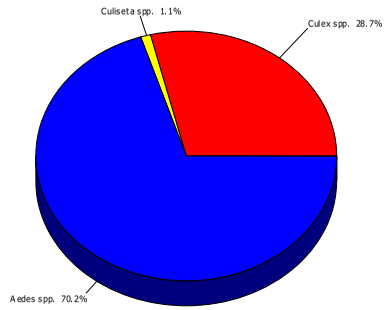
Total number of trap/nights set: 16
Total number of mosquitoes collected: 7,723
Average mosquitoes per trap/night: 483
Average Culex mosquitoes per trap/ night: 139



Species collected:
Aedes vexans
Aedes (Oc.) dorsalis
Aedes (Oc.) increpitus
Aedes (Oc.) melanimon
Aedes (Oc.) trivittatus
Culex pipiens
Culex tarsalis
Culiseta inornata
Coquillettidia perturbans

Species abundance:

Species	Number	Percent of Total
Aedes vexans	3,190	41.3%
Other *Aedes/Ochlerotatus*	2,231	28.9%
Culex tarsalis	2,188	28.3%
Other *Culex*	31	.4%
Culiseta spp.	82	1.1%
Coquillettidia spp.	1	.01%



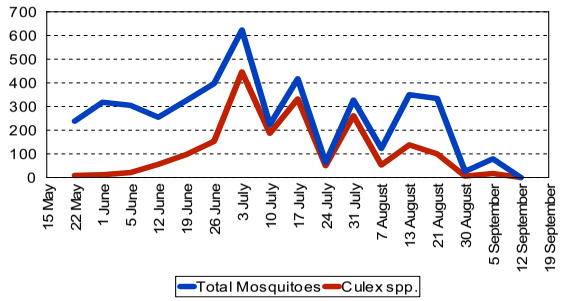
West Nile Virus Testing: Three mosquito sample pools obtained from this surveillance location tested positive for WNV on July 3rd , July 17th , and August 13th, 2007.

FC-36: Hemlock

Season: 2007
Trap Type: Light/CO_2
Location: Fort Collins,
Hemlock Street at River's Edge FCNA
GPS: N40° 36.008', W105° 4.771'

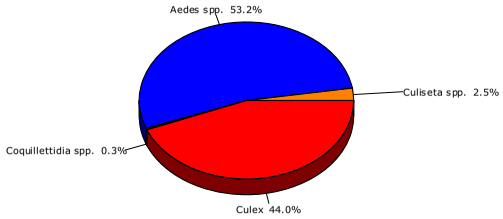
Total number of trap/nights set: 17
Total number of mosquitoes collected: 4,404
Average mosquitoes per trap/night: 259
Average *Culex* mosquitoes per trap/ night: 114

Species collected:
Aedes vexans
Aedes (Oc.) dorsalis
Aedes (oc.) hendersoni
Aedes (Oc.) increpitus
Aedes (Oc.) melanimon
Aedes(Oc.) nigromaculis
Aedes (Oc.) trivittatus
Anopholes hermsi
Culex pipiens
Culex tarsalis
Culiseta inornata
Coquillettidia perturbans



Species abundance:

Species	Number	Percent of Total
Aedes vexans	1,071	24.3%
Other *Aedes/Ochlerotatus*	1,272	28.9%
Culex tarsalis	1,879	42.7%
Other *Culex*	59	1.3%
Culiseta spp.	108	2.5%
Coquillettidia spp.	13	.29%
Anopholes spp.	2	.04%



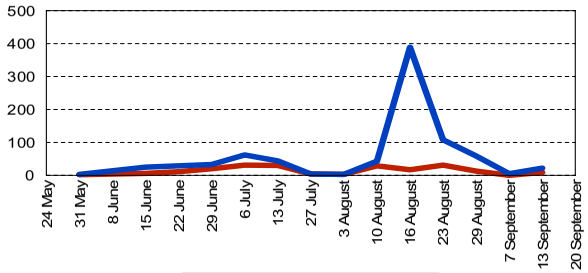
West Nile Virus Testing: Six mosquito sample pools obtained from this surveillance location tested positive for WNV on July 17th, July 31st, August 13th (3 pools), and August 21st, 2007.

FC-37: Chelsea Ridge

Season: 2007
Trap Type: Light/CO_2
Location: Fort Collins, 1113 Wooded Creek Road
GPS: N40° 31.003', W105° 5.910'

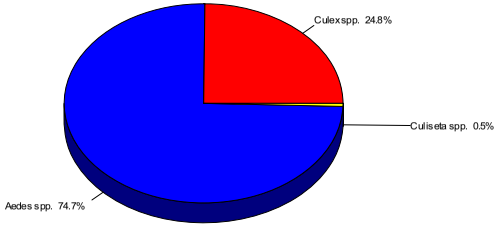
Total number of trap/nights set: 14
Total number of mosquitoes collected: 829
Average mosquitoes per trap/night: 59
Average Culex mosquitoes per trap/ night: 15

Species collected:
Aedes vexans
Aedes (Oc.) dorsalis
Aedes (Oc.) melanimon
Aedes (Oc.) trivittatus
Culex pipiens
Culex tarsalis
Culiseta inornata



Species abundance:

Species	Number	Percent of Total
Aedes vexans	588	70.9%
Other *Aedes/Ochlerotatus*	31	3.7%
Culex tarsalis	193	23.3%
Other *Culex*	13	1.6%
Culiseta spp.	4	.48%



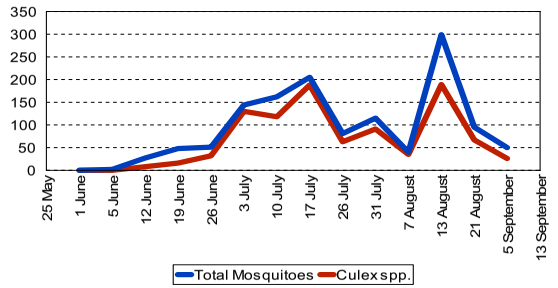
West Nile Virus Testing: No mosquito sample pools obtained from this surveillance location tested positive for WNV in 2007.

FC-38: Lochside Lane

Season: 2007
Trap Type: Light/CO_2
Location: Fort Collins,
Lockside Lane and Glenlock Drive
GPS: N40° 35.939', W105° 0.426'

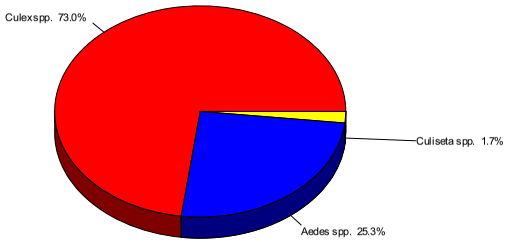
Total number of trap/nights set: 14
Total number of mosquitoes collected: 1,319
Average mosquitoes per trap/night: 94
Average Culex mosquitoes per trap/night: 69

Species collected:
Aedes vexans
Aedes (Oc.) dorsalis
Aedes (Oc.) increpitus
Aedes (Oc.) melanimon
Aedes (Oc.) nigromaculis
Culex pipiens
Culex tarsalis
Culiseta inornata



Species abundance:

Species	Number	Percent of Total
Aedes vexans	148	11.2%
Other *Aedes/Ochlerotatus*	186	14.1%
Culex tarsalis	938	71.1%
Other *Culex*	25	1.8%
Culiseta spp.	22	1.7%



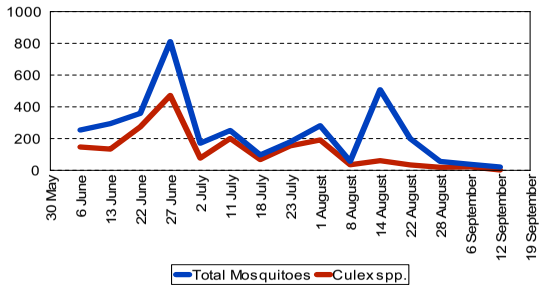
West Nile Virus Testing: Three mosquito sample pools obtained from this surveillance location tested positive for WNV on July 17th (2 pools) and July 26th, 2007.

FC-39: Fossil Creek South

Season: 2007
Trap Type: Light/CO_2
Location: Fort Collins,
Timberline and County Road 32
GPS: N40° 28.844', W105° 2.349'

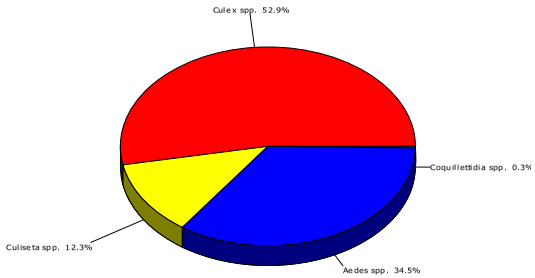
Total number of trap/nights set: 15
Total number of mosquitoes collected: 3,577
Average mosquitoes per trap/night: 238
Average Culex mosquitoes per trap/night: 126

Species collected:
Aedes vexans
Aedes (Oc.) dorsalis
Aedes (Oc.) increptus
Aedes (Oc.) melanimon
Anopheles hermsi
Culex tarsalis
Culex pipiens
Culiseta inornata
Coquillettidia perturbans



Species abundance:

Species	Number	Percent of Total
Aedes vexans	571	16.0%
Other *Aedes/Ochlerotatus*	664	18.6%
Culex tarsalis	1825	51.0%
Other *Culex*	66	1.8%
Culiseta spp.	441	11.5%
Coquillettidia spp.	9	.25%
Anopheles spp.	1	.02%

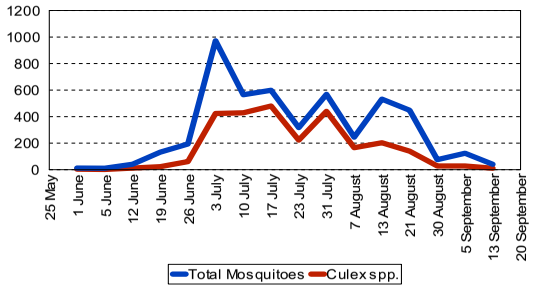


West Nile Virus Testing: Seven mosquito sample pools obtained from this surveillance location tested positive for WNV on June 26th, July 18th, July 23rd (3 pools), August 1st, and August 14th 2007.

FC-40: Redwood

Season: 2007
Trap Type: Light/CO_2
Location: Fort Collins, Redwood and Conifer
GPS: N40° 36.190', W105° 4.027'

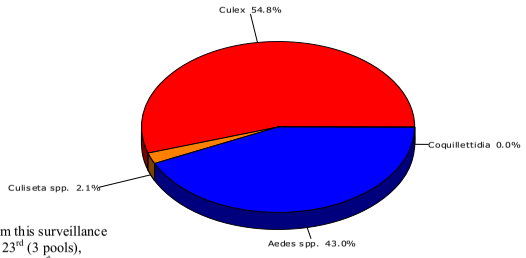
Total number of trap/nights set: 16
Total number of mosquitoes collected: 4,877
Average mosquitoes per trap/night: 304
Average Culex mosquitoes per trap/night: 167



Species collected:
Aedes vexans
Aedes (Oc.) dorsalis
Aedes (oc.) increpitus
Aedes (Oc.) melanimon
Aedes (Oc.) trivittatus
Coquillettidia perturbans
Culex pipiens
Culex tarsalis
Culiseta increpitus
Culiseta inornata

Species abundance:

Species	Number	Percent of Total
Aedes vexans	1,418	29.1%
Other *Aedes/Ochlerotatus*	681	14.0%
Culex tarsalis	2,419	49.6%
Other *Culex*	255	5.2%
Culsieta spp.	102	2.1%
Coquilettidia spp.	2	.04%

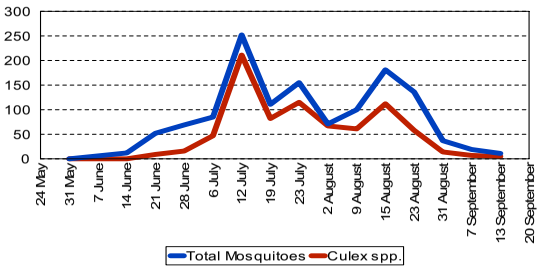


West Nile Virus Testing: Sixteen mosquito sample pools obtained from this surveillance location tested positive for WNV on June 19th, July 17th (2 pools), July 23rd (3 pools), July 31st (2 pools), August 7th (3 pools), August 13th (4 pools) and September 5th, 2007. (light/CO_2 trap only). [see also results for the gravid trap at this location (FC-40gr)]

FC-41: Fishback

Season: 2007
Trap Type: Light/CO_2
Location: Fort Collins,
Fishback and Richards Place Alley
GPS: N40° 35.282', W105° 6.262'

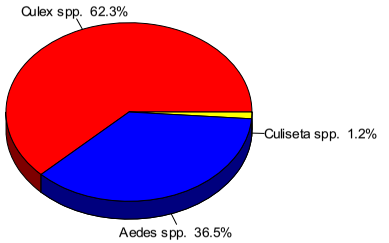
Total number of trap/nights set: 15
Total number of mosquitoes collected: 1,291
Average mosquitoes per trap/night: 86
Average Culex mosquitoes per trap/ night: 54



Species collected:
Aedes vexans
Aedes (Oc.) dorsalis
Aedes (Oc.) melanimon
Aedes (Oc) trivittatus
Culex pipiens
Culex tarsalis
Culiseta inornata
Coquillettidia perturbans

Species abundance:

Species	Number	Percent of Total
Aedes vexans	436	33.8%
Other *Aedes/Ochlerotatus*	35	2.7%
Culex tarsalis	662	51.3%
Other *Culex*	142	11.0%
Culiseta inornata	15	1.2%
Coquillettidia	1	.08%

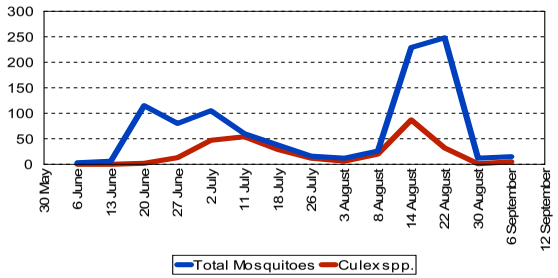


West Nile Virus Testing: Five mosquito sample pools obtained from this surveillance location tested positive for WNV on July 23rd, August 2nd, August 9th, August 15th, and September 5th, 2007.

FC-46: 725 Westshore Court

Season: 2007
Trap Type: Light/CO_2
Location: Fort Collins, 725 Westshore Court
GPS: N40° 31.789', W105° 3.926'

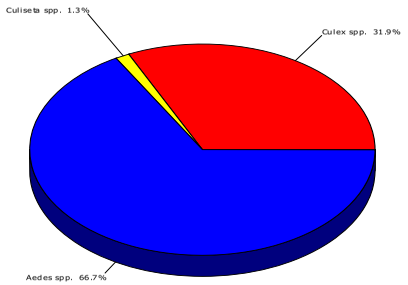
Total number of trap/nights set: 14
Total number of mosquitoes collected: 965
Average mosquitoes per trap/night: 69
Average Culex mosquitoes per trap/ night: 22



Species collected:
Aedes vexans
Aedes (Oc.) dorsalis
Aedes (Oc.) melanimon
Culex pipiens
Culex tarsalis
Culiseta inornata

Species abundance:

Species	Number	Percent of Total
Aedes vexans	577	59.8%
Other *Aedes/Ochlerotatus*	67	6.9%
Culex tarsalis	280	29.0%
Other *Culex*	28	2.9%
Culiseta spp.	13	1.4%

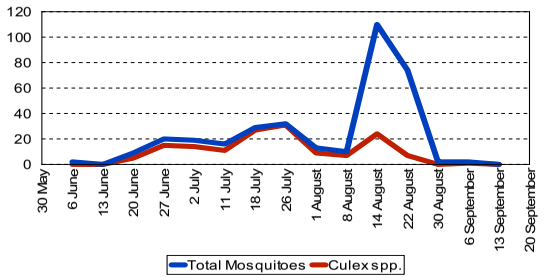


West Nile Virus Testing: Two mosquito sample pools obtained from this surveillance location tested positive for WNV on August 14th (2 pools), 2007.

FC-47: Keenland & Twin Oak

Season: 2007
Trap Type: Light/CO_2
Location: Fort Collins,
Keenland and Twin Oak detention basin
GPS: N40° 30.907', W105° 3.177'

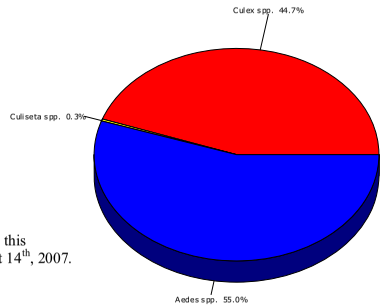
Total number of trap/nights set: 15
Total number of mosquitoes collected: 338
Average mosquitoes per trap/night: 23
Average Culex mosquitoes per trap/ night: 10



Species collected:
Aedes vexans
Aedes (Oc.) dorsalis
Aedes (Oc.) melanimon
Aedes trivittatus
Culex pipiens
Culex tarsalis
Culiseta inornata

Species abundance:

Species	Number	Percent of Total
Aedes vexans	180	53.3%
Other *Aedes/Ochlerotatus*	6	1.8%
Culex tarsalis	149	44.1%
Other *Culex*	2	.59%
Culiseta spp.	1	.29%



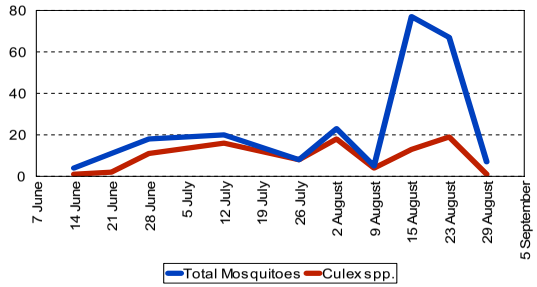
West Nile Virus Testing: Two mosquito sample pools obtained from this surveillance location tested positive for WNV on July 26th and August 14th, 2007.

FC-49: Casa Grande & Downing

Season: 2007
Trap Type: Light/CO_2
Location: Fort Colllins,
Casa Grande and Downing at Ditch
GPS: N40° 32.525', W105° 6.042'

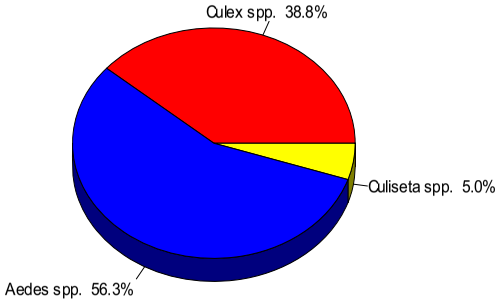
Total number of trap/nights set: 10
Total number of mosquitoes collected: 240
Average mosquitoes per trap/night: 24
Average Culex mosquitoes per trap/night: 10

Species collected:
Aedes vexans
Aedes (Oc.) dorsalis
Aedes (Oc.) melanimon
Culex pipiens
Culex tarsalis
Culiseta inornata



Species abundance:

Species	Number	Percent of Total
Aedes vexans	127	52.9%
Other *Aedes/Ochlerotatus*	8	3.3%
Culex tarsalis	75	31.3%
Other *Culex*	18	7.5%
Culiseta spp.	12	5.0%



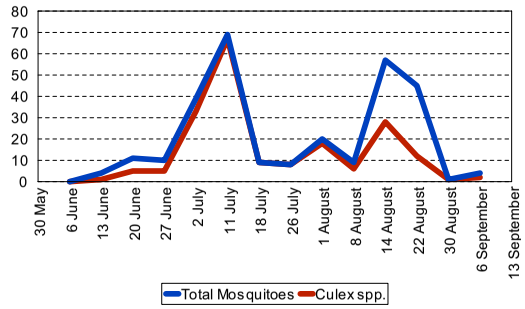
West Nile Virus Testing:
No mosquito sample pools obtained from this surveillance location tested positive for WNV in 2007.

FC-50: Golden Meadows Ditch

Season: 2007
Trap Type: Light/CO_2
Location: Fort Collins, 1513 Ticonderoga at Ditch
GPS: N40° 31.745', W105° 3.042'

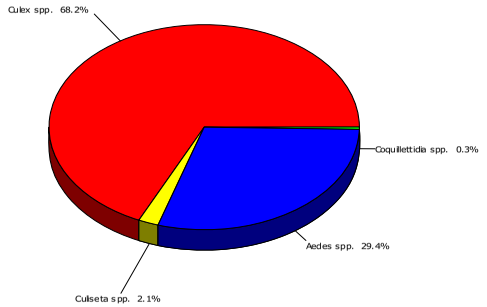
Total number of trap/nights set: 14
Total number of mosquitoes collected: 286
Average mosquitoes per trap/night: 20
Average Culex mosquitoes per trap/night: 14

Species collected:
Aedes vexans
Aedes (Oc.) melanimon
Coquillettidia perturbans
Culex pipiens
Culex tarsalis
Culiseta inornata



Species abundance:

Species	Number	Percent of Total
Aedes vexans	78	27.3%
Other *Aedes/Ochlerotatus*	6	2.1%
Culex tarsalis	188	65.7%
Other *Culex*	7	2.4%
Culiseta spp.	6	2.1%
Coquillettidia spp.	1	.35%



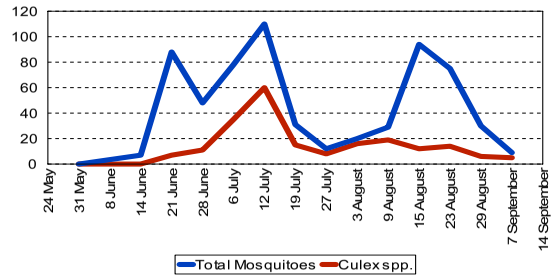
West Nile Virus Testing: Three mosquito sample pools obtained from this surveillance location tested positive for WNV on August 22nd, August 30th and September 6th, 2007.

FC-52: 603 Gilgalad Way

Season: 2007
Trap Type: Light/CO_2
Location: Fort Collins, 603 Gilgalad Way
GPS: N40° 33.690', W105° 5.205'

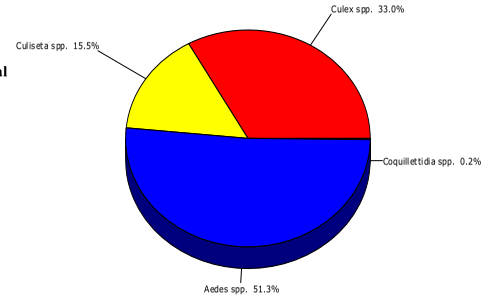
Total number of trap/nights set: 14
Total number of mosquitoes collected: 631
Average mosquitoes per trap/night: 45
Average Culex mosquitoes per trap/night: 15

Species collected:
Aedes vexans
Aedes (Oc.) dorsalis
Aedes (Oc.) increpitus
Aedes (Oc.) melanimon
Coquillettidia perturbans
Culex pipiens
Culex tarsalis
Culiseta inornata



Species abundance:

Species	Number	Percent of Total
Aedes vexans	286	45.3%
Other *Aedes/Ochlerotatus*	38	6.0%
Culex tarsalis	194	30.7%
Other *Culex*	14	2.0%
Culiseta spp.	98	15.5%
Coquillettidia spp.	1	.2%



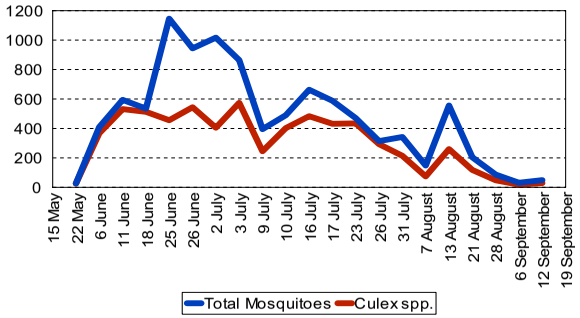
West Nile Virus Testing: Three mosquito sample pools obtained from this surveillance location tested positive for WNV on July 27th, August 3rd and September 7th, 2007.

FC-53: Egret & Rookery

Season: 2007
Trap Type: Light/CO_2
Location: Fort Collins, 3480 Egret Lane
GPS: N40° 29.878', W105° 0.694'

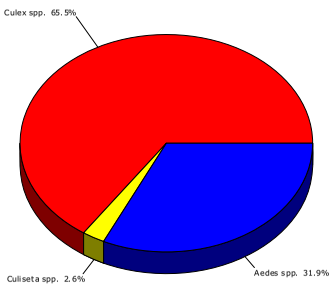
Total number of trap/nights set: 21
Total number of mosquitoes collected: 9,872
Average mosquitoes per trap/night: 470
Average Culex mosquitoes per trap/ night: 307

Species collected:
Aedes vexans
Aedes (Oc.) dorsalis
Aedes (Oc.) increpitus
Aedes (Oc.) melanimon
Aedes (Oc.) nigromaculis
Culex tarsalis
Culex pipiens
Culiseta inornata



Species abundance:

Species	Number	Percent of Total
Aedes vexans	2,822	28.6%
Other *Aedes/Ochlerotatus*	330	3.3%
Culex tarsalis	6,147	62.3%
Other *Culex*	318	3.2%
Culiseta spp.	253	2.6%
Coquillettidia spp.	2	0.02%



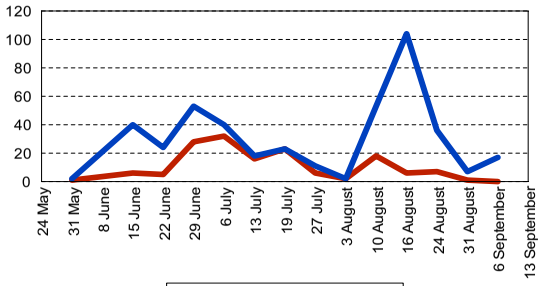
West Nile Virus Testing: Eight mosquito sample pools obtained from this surveillance location tested positive for WNV on July 3rd, July 17th (2 pools), July 23rd, July 26th, August 13th, August 21st and August 28th, 2007.

This trap was part of the Larimer County Sentinel Zone for the 2007 season.

FC-54: 737 Parliment

Season: 2007
Trap Type: Light/CO_2
Location: 737 Parilment
GPS: N40° 30.021', W105° 3.822'

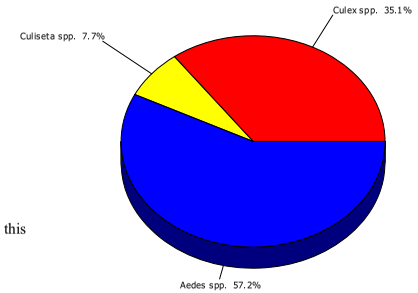
Total number of trap/nights set: 14
Total number of mosquitoes collected: 430
Average mosquitoes per trap/night: 31
Average Culex mosquitoes per trap/night: 11



Species collected:
Aedes vexans
Aedes (Oc.) dorsalis
Aedes (Oc.) melanimon
Aedes (Oc.) trivittatus
Culex pipiens
Culex tarsalis
Culiseta inornata

Species abundance:

Species	Number	Percent of Total
Aedes vexans	181	42.1%
Other *Aedes/Ochlerotatus*	65	15.0%
Culex tarsalis	146	34.0%
Culex spp.	5	1.2%
Culiseta spp.	33	7.7%

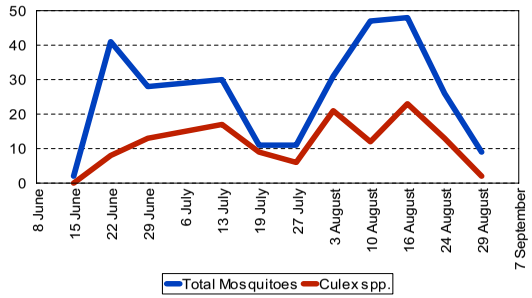


West Nile Virus Testing: No mosquito sample pools obtained from this surveillance location tested positive for WNV in 2007.

FC-57: Registry Ridge- End of Ranger Drive

Season: 2007
Trap Type: Light/CO_2
Location: Fort Collins,
between 7262 and 7256 Ranger Drive
GPS: N40° 29.055', W105° 6.305'

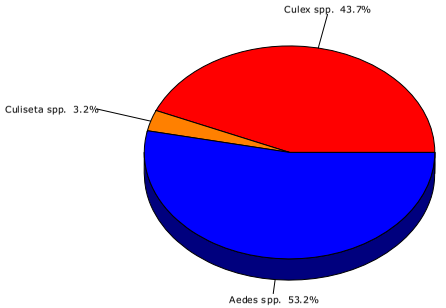
Total number of trap/nights set: 11
Total number of mosquitoes collected: 284
Average mosquitoes per trap/night: 26
Average Culex mosquitoes per trap/night: 11



Species collected:
Species collected:
Aedes vexans
Aedes (Oc.) campestris
Aedes (Oc.) dorsalis
Aedes (Oc.) melanimon
Culex pipiens
Culex tarsalis
Culiseta inornata

Species abundance:

Species	Number	Percent of Total
Aedes vexans	32	11.2%
Other *Aedes/Ochlerotatus*	119	42.0%
Culex tarsalis	3	1.0%
Other *Culex*	121	42.6%
Culiseta spp.	9	3.2%

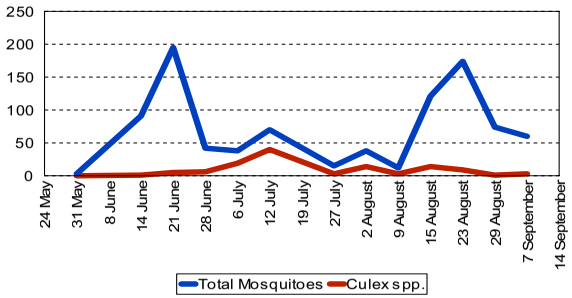


West Nile Virus Testing:
No mosquito sample pools obtained from this surveillance location tested positive for WNV in 2007.

FC-58: Spring Creek Trail at Michener Drive

Season: 2007
Trap Type: Light/CO_2
Location: Fort Collins,
Spring Creek Trail at Michener Drive
GPS: N40° 35.480, W105° 4.275'

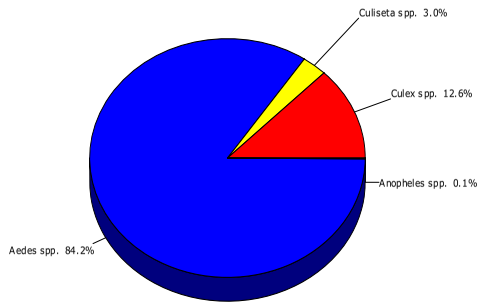
Total number of trap/nights set: 13
Total number of mosquitoes collected: 933
Average mosquitoes per trap/night: 72
Average Culex mosquitoes per trap/night: 9



Species collected:
Aedes vexans
Aedes (Oc.) dorsalis
Aedes (Oc.) increpitus
Aedes (Oc.) melanimon
Anopheles hermsi
Culex pipiens
Culex tarsalis
Culiseta inornata

Species abundance:

Species	Number	Percent of Total
Aedes vexans	741	79.4%
Other *Aedes/Ochlerotatus*	45	4.8%
Culex tarsalis	103	11.0%
Other *Culex*	15	1.6%
Culiseta spp.	28	3.0%
Anopheles spp.	1	.1%

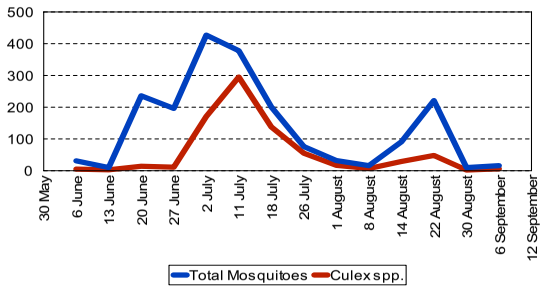


West Nile Virus Testing:
No mosquito sample pools obtained from this surveillance location tested positive for WNV in 2007.

FC-59: Springwood & Lockwood

Season: 2007
Trap Type: Light/CO_2
Location: Fort Collins, Nelson Farm Storm
Water Detention Pond
GPS: N40° 32.537', W105° 2.728'

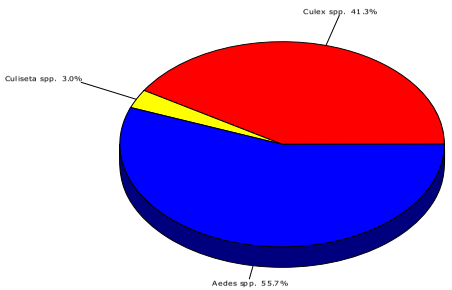
Total number of trap/nights set: 14
Total number of mosquitoes collected: 1,941
Average mosquitoes per trap/night: 139
Average Culex mosquitoes per trap/night: 57



Species collected:
Aedes vexans
Aedes (Oc.) dorsalis
Aedes (Oc.) increpitus
Aedes (Oc.) melanimon
Aedes (Oc.) trivittatus
Culex pipiens
Culex tarsalis
Culiseta inornata

Species abundance:

Species	Number	Percent of Total
Aedes vexans	830	42.8%
Other *Aedes/Ochlerotatus*	252	13.0%
Culex tarsalis	737	38.0%
Other *Culex*	64	3.3%
Culiseta spp.	58	3.0%

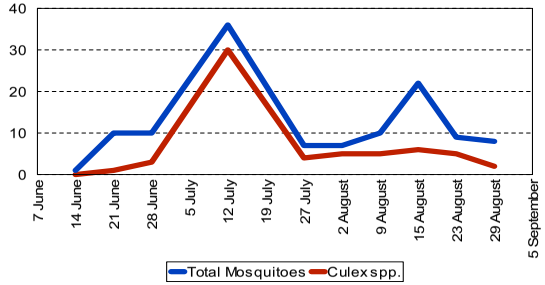


West Nile Virus Testing: No mosquito sample pools obtained from this surveillance location tested positive for WNV in 2007.

FC-60: 808 Ponderosa

Season: 2007
Trap Type: Light/CO_2
Location: Fort Collins, 808 Ponderosa
GPS: 40° 34.668', W105° 7.216'

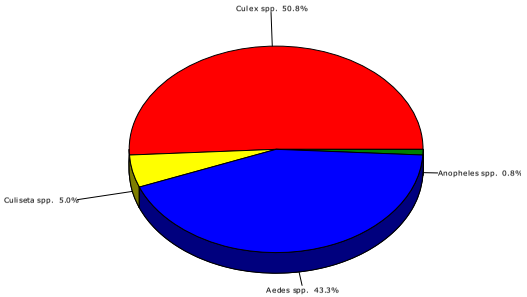
Total number of trap/nights set: 10
Total number of mosquitoes collected: 120
Average mosquitoes per trap/night: 12
Average Culex mosquitoes per trap/night: 6



Species collected:
Aedes vexans
Aedes (Oc.) dorsalis
Anopheles earlei
Culex pipiens
Culex tarsalis
Culiseta inornata

Species abundance:

Species	Number	Percent of Total
Aedes vexans	48	40.0%
Other *Aedes/Ochlerotatus*	4	3.3%
Culex tarsalis	58	48.3%
Other *Culex*	3	2.5%
Culiseta spp.	6	5.0%
Anopheles spp.	1	.8%

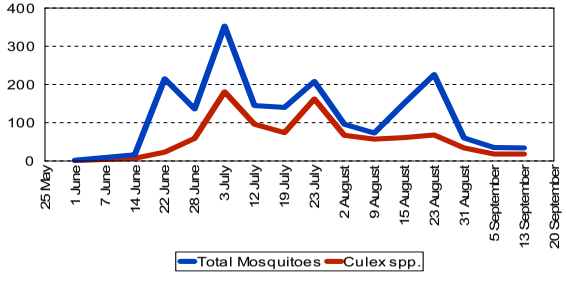


West Nile Virus Testing:
No mosquito sample pools obtained from this surveillance location tested positive for WNV in 2007.

FC-61: CSU Holley Plant Research Center

Season: 2007
Trap Type: Light/CO_2
Location: Fort Collins,
CSU Holley Environmental
Plant Research Center
GPS: N40° 34.153', W105° 5.524'

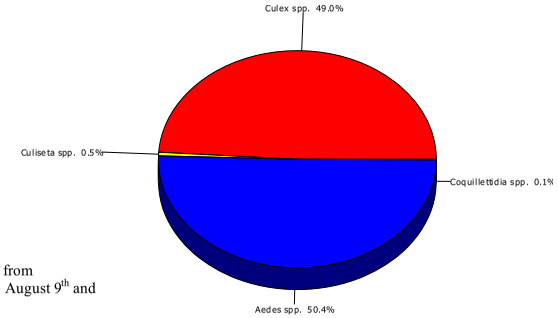
Total number of trap/nights set: 15
Total number of mosquitoes collected: 1,890
Average mosquitoes per trap/night: 126
Average Culex mosquitoes per trap/ night: 62



Species collected:
Aedes vexans
Aedes (Oc.) dorsalis
Aedes (Oc.) hendersoni
Aedes (Oc.) increpitus
Aedes (Oc.) melanimon
Aedes (Oc.) nigrocmaculis
Aedes (Oc.) trivittatus
Culex pipiens
Culex tarsalis
Culiseta inornata
Coquillettidia perturbans

Species abundance:

Species	Number	Percent of Total
Aedes vexans	870	46.0%
Other *Aedes/Ochlerotatus*	82	4.4%
Culex tarsalis	825	43.6%
Other *Culex*	101	5.3%
Culiseta spp.	10	.5%
Coquillettidia spp.	2	.1%

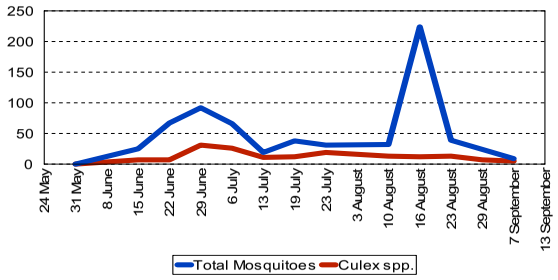


West Nile Virus Testing: Three mosquito sample pools obtained from this surveillance location tested positive for WNV on July 23rd, August 9th and September 5th, 2007.

FC-62: Water's Edge FCNA at Blue Mesa Court

Season: 2007
Trap Type: Light/CO_2
Location: Fort Collins,
Water's Edge FCNA at Blue Mesa Court
GPS: N40° 32.545, W105° 5.229'

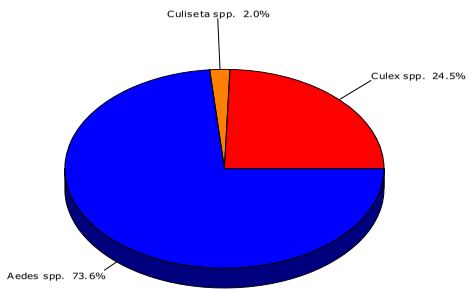
Total number of trap/nights set: 13
Total number of mosquitoes collected: 666
Average mosquitoes per trap/night: 51
Average Culex mosquitoes per trap/ night: 13



Species collected:
Aedes vexans
Aedes (Oc.) dorsalis
Aedes (Oc.) melanimon
Aedes (Oc.) nigromaculis
Aedes (Oc.) trivittatus
Culex pipiens
Culex tarsalis
Culiseta inornata

Species abundance:

Species	Number	Percent of Total
Aedes vexans	468	70.3%
Other *Aedes/Ochlerotatus*	22	3.3%
Culex tarsalis	108	16.2%
Other *Culex*	55	8.2%
Culiseta spp.	13	2.0%

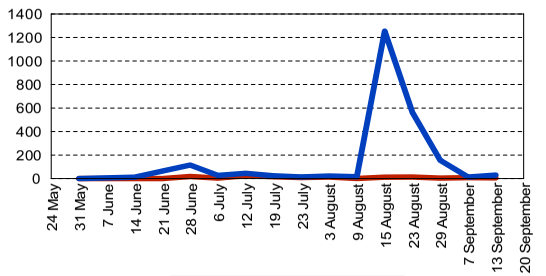


West Nile Virus Testing: One mosquito sample pool obtained from this surveillance location tested positive for WNV on June 29th, 2007.

FC-63: Red Fox Meadows FCNA

Season: 2007
Trap Type: Light/CO_2
Location: Fort Collins, Prospect and Heatheridge
GPS: N40° 33.925', W105° 6.312'

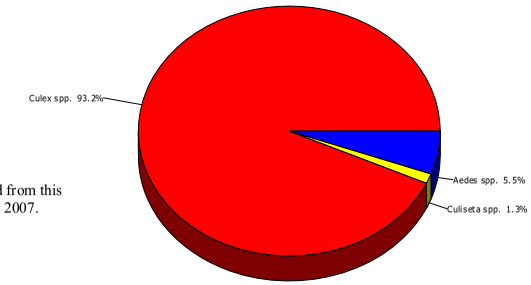
Total number of trap/nights set: 15
Total number of mosquitoes collected: 2,355
Average mosquitoes per trap/night: 157
Average Culex mosquitoes per trap/ night: 9



Species collected:
Aedes vexans
Aedes (Oc.) dorsalis
Aedes (Oc.) melanimon
Aedes (Oc.) trivittatus
Culex pipiens
Culex tarsalis
Culiseta inornata

Species abundance:

Species	Number	Percent of Total
Aedes vexans	2,159	91.7%
Other *Aedes/Ochlerotatus*	37	1.6%
Culex tarsalis	106	4.5%
Other *Culex*	23	.9%
Culiseta spp.	30	1.3%



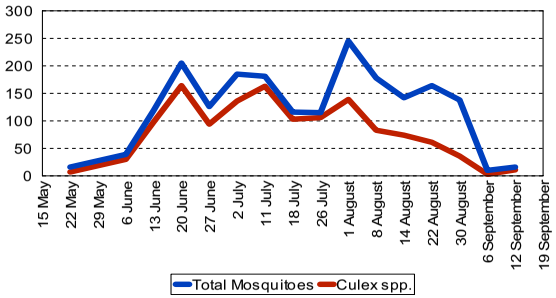
West Nile Virus Testing: One mosquito sample pool obtained from this surveillance location tested positive for WNV on August 23rd , 2007. (light/Co_2 trap only)

[see also results for the gravid trap at this location (FC-63gr)]

FC-64: West Chase

Season: 2007
Trap Type: Light/CO_2
Location: Fort Collins,
Westchase at East Trilby dead end
GPS: N40° 29.915', W105° 1.787'

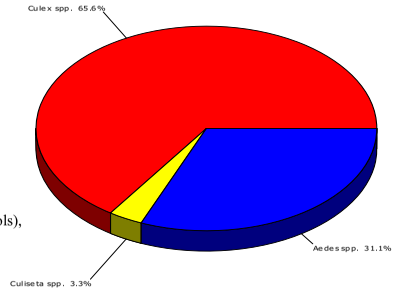
Total number of trap/nights set: 16
Total number of mosquitoes collected: 1,995
Average mosquitoes per trap/night: 125
Average Culex mosquitoes per trap/night: 82



Species collected:
Aedes vexans
Aedes (Oc.) dorsalis
Aedes (Oc.) melanimon
Aedes (Oc.) nigromaculis
Culex pipiens
Culex tarsalis
Culiseta inornata

Species abundance:

Species	Number	Percent of Total
Aedes vexans	385	19.3%
Other *Aedes/Ochlerotatus*	236	11.8%
Culex tarsalis	1,238	62.1%
Other *Culex*	70	3.5%
Culiseta spp.	66	3.3%

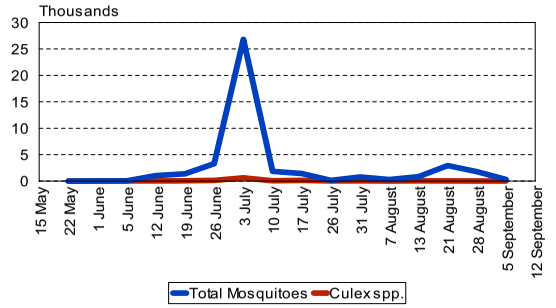


West Nile Virus Testing: Eight mosquito pools obtained from this surveillance location tested positive for WNV on July 11th, July 18th (2 pools), July 26th, August 9th, August 10th, August 22nd, and August 28th, 2007.

FC-66: Prospect Ponds FCNA @ Drake Reclamation

Season: 2007
Trap Type: Light/CO_2
Location: Fort Collins, Prospect Ponds FCNA
GPS: N40° 33.525', W105° 1.312'

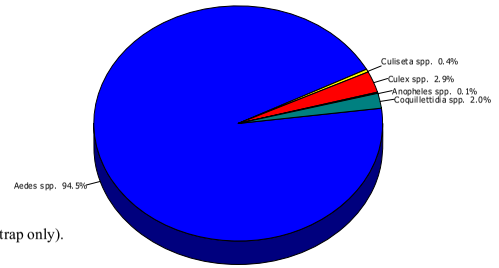
Total number of trap/nights set: 16
Total number of mosquitoes collected: 42,988
Average mosquitoes per trap/night: 2,686
Average Culex mosquitoes per trap/ night: 79



Species collected:
Aedes vexans
Aedes (Oc.) dorsalis
Aedes (Oc.) increpitus
Aedes (Oc.) melanimon
Aedes (Oc.) nigromaculis
Aedes (Oc.) trivittatus
Culex pipiens
Culex tarsalis
Culiseta incidens
Anopheles earlei
Anopheles hermsi
Coquillettidia perturbans

Species abundance:

Species	Number	Percent of Total
Aedes vexans	24,320	56.6%
Other *Aedes/Ochlerotatus*	16,295	37.9%
Culex tarsalis	1,165	2.7%
Other *Culex*	95	.2%
Culiseta spp.	180	.4%
Anopheles spp.	58	.1%
Coquillettidia spp.	875	2.0%

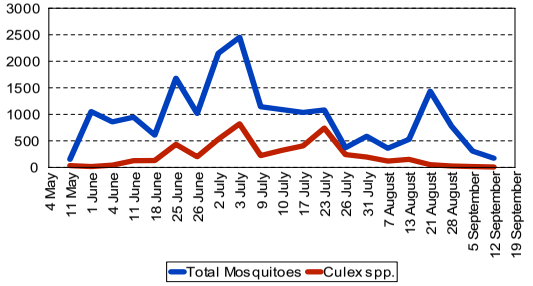


West Nile Virus Testing: No mosquito sample pools obtained from this surveillance location tested positive for WNV in 2007 (light/Co_2 trap only). [see also results for the gravid trap at this location (FC-66gr)]

FC-67: Poudre River Trail at Mulberry & Lemay

Season: 2007
Trap Type: Light/CO_2
Location: Fort Collins,
Poudre River Trail at Mulberry and Lemay
GPS: N40° 34.742', W105° 3.335'

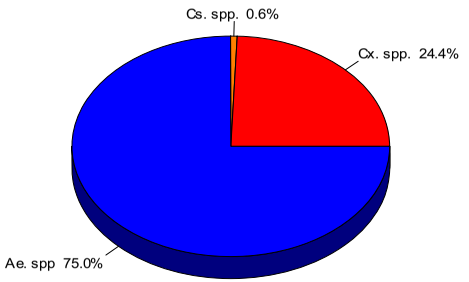
Total number of trap/nights set: 21
Total number of mosquitoes collected: 19,808
Average mosquitoes per trap/night: 943
Average Culex mosquitoes per trap/ night: 230



Species collected:
Aedes vexans
Aedes (Oc.) dorsalis
Aedes (Oc.) increpitus
Aedes (Oc.) melanimon
Aedes (Oc.) nigromaculis
Aedes (Oc.) trivittatus
Culex pipiens
Culex tarsalis
Culiseta inornata

Species abundance:

Species	Number	Percent of Total
Aedes vexans	9,047	45.7%
Other *Aedes/Ochlerotatus*	5,805	29.3%
Culex tarsalis	4,231	21.4%
Other *Culex*	600	3.0%
Culiseta spp	125	0.6%



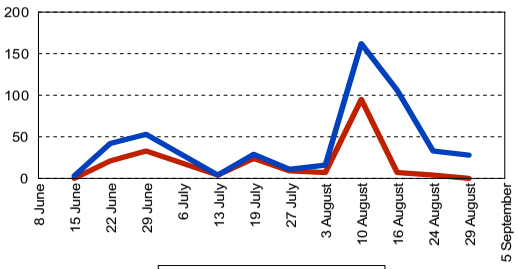
West Nile Virus Testing: Five mosquito sample pools obtained from this surveillance location tested positive for WNV on July 17th, July 23rd (2 pools), July 26th, July 31st, 2007.

This trap was part of the Larimer County Sentinel Zone for the 2007 season.

FC-68: 502 Crest Drive

Season: 2007
Trap Type: Light/CO_2
Location: Fort Collins, 502 Crest Drive
GPS: N40° 32.987', W105° 5.155'

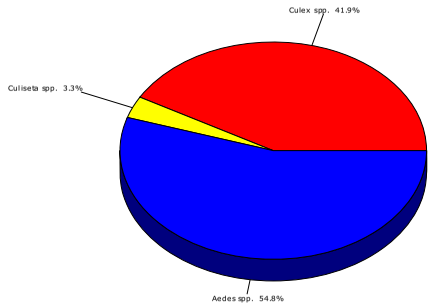
Total number of trap/nights set: 11
Total number of mosquitoes collected: 487
Average mosquitoes per trap/night: 44
Average Culex mosquitoes per trap/ night: 19



Species collected:
Aedes vexans
Aedes (Oc.) dorsalis
Aedes (Oc.) increpitus
Aedes (Oc.) melanimon
Aedes (Oc.) trivittatus
Culex pipiens
Culex tarsalis
Culiseta incidens
Culiseta inornata

Species abundance:

Species	Number	Percent of Total
Aedes vexans	241	49.4%
Other *Aedes/Ochlerotatus*	26	5.4%
Culex tarsalis	191	39.2%
Other *Culex*	13	2.7%
Culiseta spp.	16	3.3%

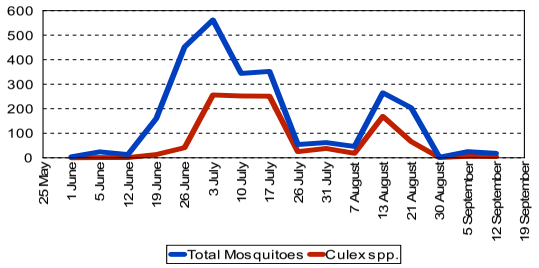


West Nile Virus Testing:
No mosquito sample pools obtained from this surveillance location tested positive for WNV in 2007.

FC-69: Lindenwood HOA

Season: 2007
Trap Type: Light/CO_2
Location: Fort Collins,
2005 Linden Lake Rd
GPS: N40° 36.856', W105° 3.198'

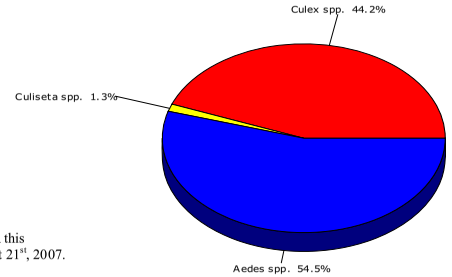
Total number of trap/nights set: 16
Total number of mosquitoes collected: 2,587
Average mosquitoes per trap/night: 162
Average Culex mosquitoes per trap/night: 71



Species collected:
Aedes vexans
Aedes (Oc.) campestris
Aedes (Oc.) dorsalis
Aedes (Oc.) increpitus
Aedes (Oc.) melanimon
Aedes (Oc.) trivittatus
Anopheles earlei
Coquillettidia perturbans
Culex pipiens
Culex tarsalis
Culiseta inornata

Species abundance:

Species	Number	Percent of Total
Aedes vexans	1,049	40.5%
Other *Aedes/Ochlerotatus*	360	13.9%
Culex tarsalis	1,117	43.2%
Other *Culex*	26	1.0%
Culiseta spp.	33	1.3%
Anopheles spp.	1	.03%
Coquillettidia spp.	1	.03%

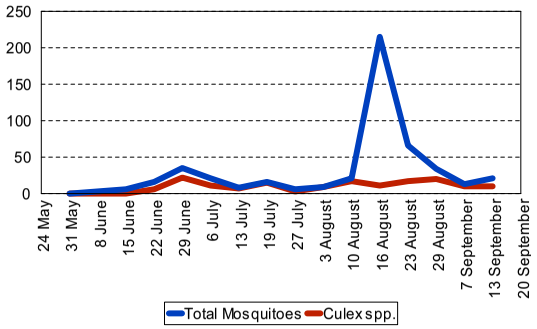


West Nile Virus Testing: Two mosquito sample pools obtained from this surveillance location tested positive for WNV on July 17th and August 21st, 2007.

FC-71: Silvergate

Season: 2007
Trap Type: Light/CO_2
Location: Fort Collins, Silvergate & Harmony
GPS: N40° 31.650', W105° 6.478'

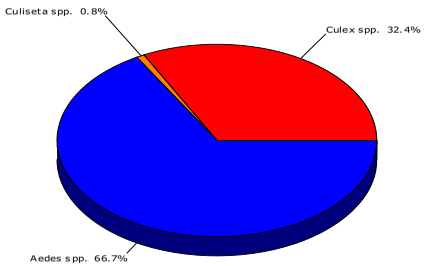
Total number of trap/nights set: 15
Total number of mosquitoes collected: 487
Average mosquitoes per trap/night: 33
Average Culex mosquitoes per trap/ night: 10



Species collected:
Aedes vexans
Aedes (Oc.) dorsalis
Aedes (Oc.) melanimon
Aedes nigromaculus
Aedes trivittatus
Culex pipiens
Culex tarsalis
Culiseta inornata

Species abundance:

Species	Number	Percent of Total
Aedes vexans	287	59%
Other *Aedes/Ochlerotatus*	38	7.7%
Culex tarsalis	115	23.6%
Other *Culex*	43	8.8%
Culiseta spp.	4	.8%

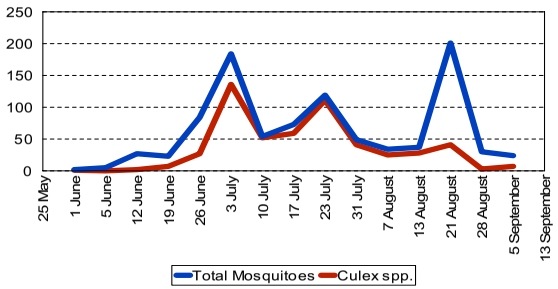


West Nile Virus Testing:
No mosquito sample pools obtained from this surveillance location tested positive for WNV in 2007.

FC-72: 422 Lake Drive Alley

Season: 2007
Trap Type: Light/CO_2
Location: Fort Collins, 422 Lake Drive Alley
GPS: N40° 34.150', W105° 4.277'

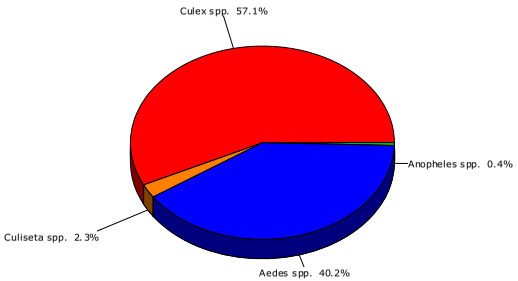
Total number of trap/nights set: 15
Total number of mosquitoes collected: 946
Average mosquitoes per trap/night: 63
Average Culex mosquitoes per trap/night: 36



Species collected:
Aedes vexans
Aedes (Oc.) dorsalis
Aedes (Oc.) increpitus
Aedes (Oc.) melanimon
Aedes(Oc.) trivittatus
Anopheles earlei
Culex pipiens
Culex tarsalis
Culiseta inornata

Species abundance:

Species	Number	Percent of Total
Aedes vexans	328	34.6%
Other *Aedes/Ochlerotatus*	52	5.5%
Culex tarsalis	478	50.5%
Other *Culex*	62	6.6%
Culiseta spp.	22	2.3%
Anopheles spp.	4	.43%

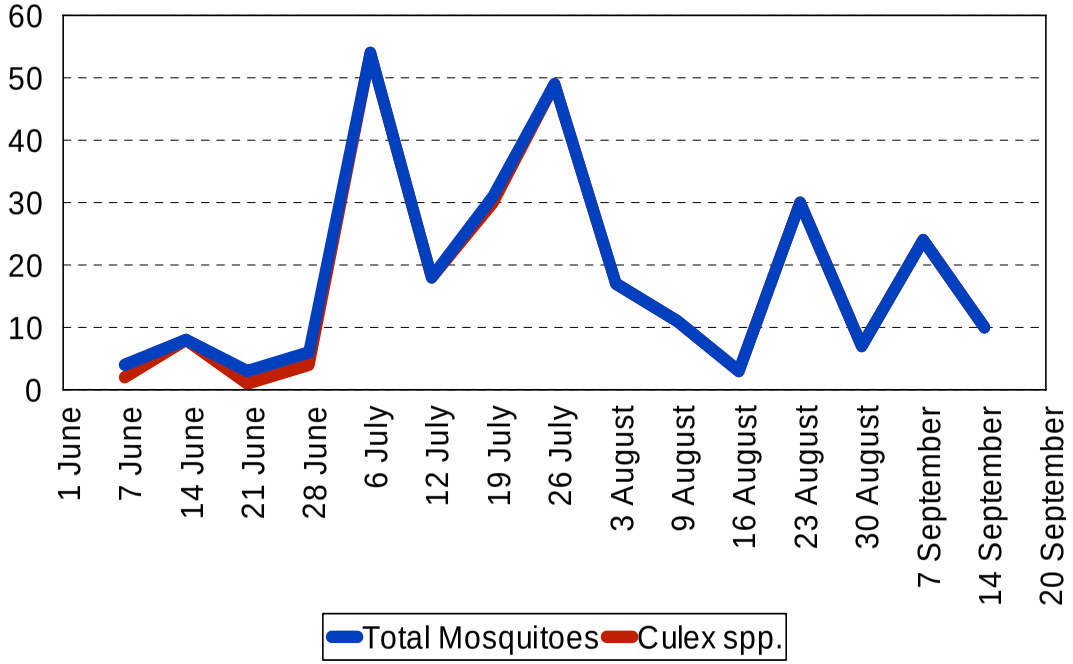


West Nile Virus Testing: One mosquito sample pool obtained from this surveillance location tested positive for WNV on July 23rd, 2007.

2007 Fort CollinsGravid Trap Composite Data

Total number of trap/nights set: 61
Total number of mosquitoes collected: 1018
Average mosquitoes per trap/night: 17

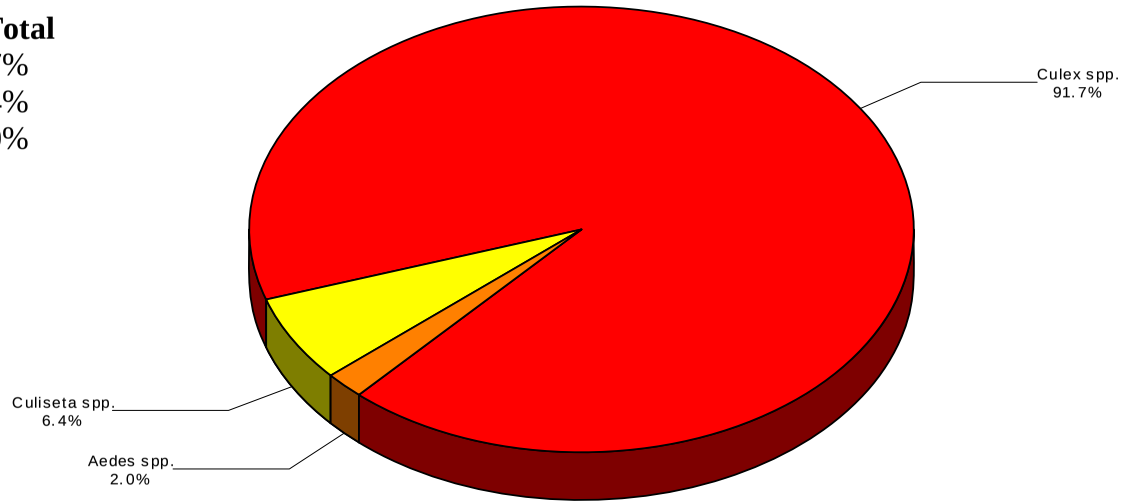
Trap sites included in this data:
FC-29gr, FC-33gr, FC-40gr, FC-53gr, FC-63gr, FC-66gr



Species collected:
Aedes vexans
Aedes (Oc.) dorsalis
Aedes (Oc.) melanimon
Culex pipiens
Culex tarsalis
Culiseta inornata

Species abundance:

Species	Number	Percent of Total
Aedes (Oc.) spp.	20	91.7%
Culex spp.	933	6.4%
Culiseta spp.	65	2.0%



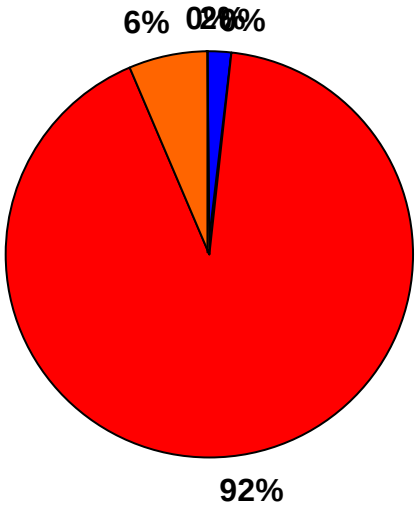
West Nile Virus Testing:
134 mosquito sample pools obtained from City of Fort Collins surveillance locations tested positive for WNV in 2007, which includes pools obtained from regular traps, gravid traps and sentinel traps. The first positive was detected on June 19, 2007.

CMMS
Colorado Mosquito Control, Inc.

ADULT TRAP DATA - SPECIES SUMMARY

by REPORT DATE: 4/15/2007 to 10/15/2007
by : FC

Species	Total
Aedes (Oc.) dorsalis	2
Aedes (Oc.) melanimon	3
Aedes vexans	15
	20
Culiseta inornata	65
	65
Culex pipiens	903
Culex tarsalis	30
	933
Operational but empty	0
	0



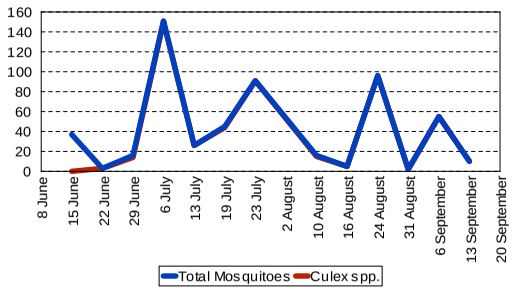
	Total	%
Aedes-Oc	20	2
Anopheles	0	0
Culex	933	92
Culiseta	65	6
Other	0	0
	1018	

CMMS - Comprehensive Mosquito Management System

FC-29gr: Ben's Park

Season: 2007
Trap Type: Gravid trap
Location: Fort Collins,
Fossil Ridge Community Park
GPS: N40° 32.814', W105° 2.006'

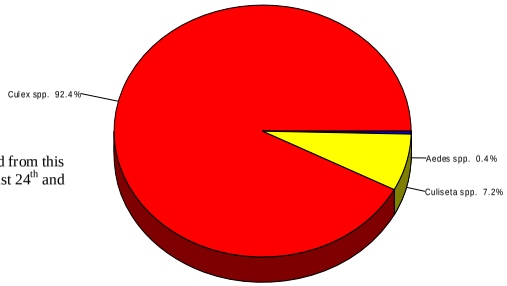
Total number of trap/nights set: 13
Total number of mosquitoes collected: 553
Average mosquitoes per trap/night: 43



Species collected:
Aedes(Oc.) vexans
Culiseta inornata
Culex pipiens
Culex tarsalis

Species abundance:

Species	Number	Percent of Total
Aedes spp.	2	0.4%
Culex pipiens	505	91.3%
Culex tarsalis	6	1.1%
Culiseta spp.	40	7.2%



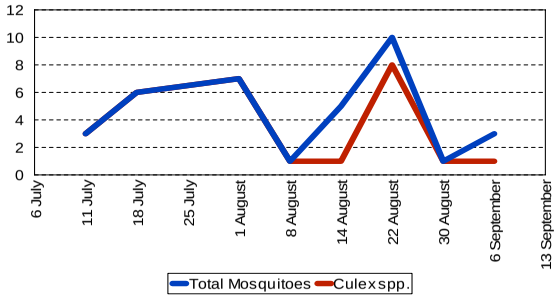
West Nile Virus Testing: Three mosquito sample pools obtained from this surveillance location tested positive for WNV on July 23rd, August 24th and September 7th, 2007.

[See also results for the Light trap at this location (FC-29)]

FC-33gr: Sage Creek

Season: 2007
Trap Type: Gravid
Location: Fort Collins, 5237 Zeigler
GPS: N40° 30.802', W105° 1.207'

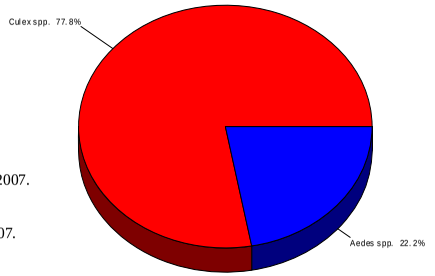
Total number of trap/nights set: 8
Total number of mosquitoes collected: 36
Average mosquitoes per trap/night: 5



Species collected:
Aedes vexans
Aedes (Oc.) dorsalis
Aedes (Oc.) melanimon
Culex pipiens
Culex tarsalis

Species abundance:

Species	Number	Percent of Total
Aedes spp.	8	22.2%
Culex pipiens	21	58.3%
Culex tarsalis	7	19.4%



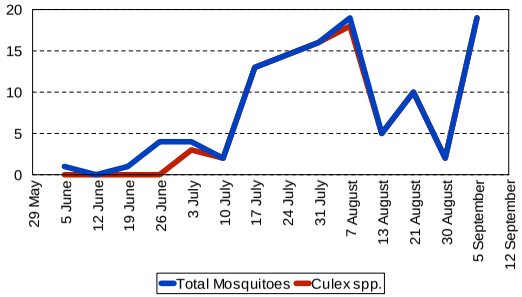
West Nile Virus Testing: One mosquito sample pool obtained from this surveillance location tested positive for WNV on August 30th, 2007.
[See also results for the light trap at this location (FC-33)]

This trap replaced the gravid trap FC-53gr which was last set on 6/27/2007.

FC-40gr: Redwood

Season: 2007
Trap Type: Gravid
Location: Fort Collins, Redwood & Conifer
GPS: N40° 36.190', W105° 4.027'

Total number of trap/nights set: 13
Total number of mosquitoes collected: 96
Average mosquitoes per trap/night: 7



Species collected:
Aedes vexans
Aedes (Oc.) melanimon
Culex pipiens
Culex tarsalis
Culiseta inornata

Species abundance:

Species	Number	Percent of Total
Aedes spp.	5	5.2%
Culex pipiens	86	89.6%
Culex tarsalis	2	2.1%
Culiseta spp.	3	3.1%

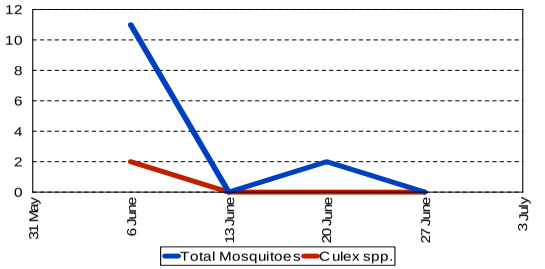
West Nile Virus Testing: Two mosquito sample pools obtained from this surveillance location tested positive for WNV on July 31st and August 21st, 2007.

[See also results for the Light trap at this location (FC-40)]

FC-53gr: Egret & Rookery

Season: 2007
Trap Type: Gravid
Location: Fort Collins, 3480 Egret Lane
GPS: N40° 29.878', W105° 0.694'

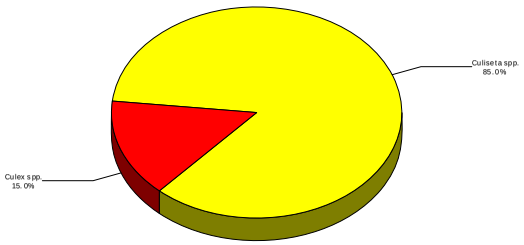
Total number of trap/nights set: 4
Total number of mosquitoes collected: 13
Average mosquitoes per trap/night: 3



Species collected:
Culistea inornata
Culex tarsalis

Species abundance:

Species	Number	Percent of Total
Culiseta spp.	11	85.0%
Culex tarsalis	2	15.0%



West Nile Virus Testing: No mosquito sample pools obtained from this trap site tested positive for WNV (gravid only) in 2007.

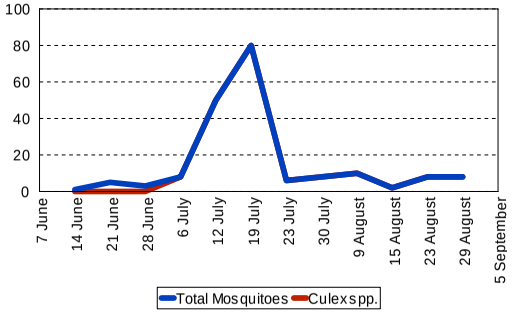
This trap was replaced by FC-33gr, due to minimal data collection from historical surveillance trapping at FC-53gr.

[See also results for the Light trap at this location (FC-53)]

FC-63gr: Red Fox Meadows FCNA

Season: 2007
Trap Type: Gravid trap
Location: Fort Collins,
Prospect and Heatheridge
GPS: N40° 33.925', W105° 6.312'

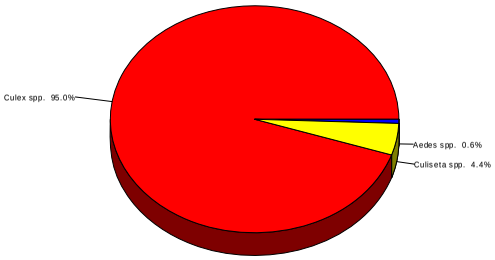
Total number of trap/nights set: 11
Total number of mosquitoes collected: 181
Average mosquitoes per trap/night: 16



Species collected:
Aedes (Oc.) dorsalis
Culex pipiens
Culex tarsalis
Culiseta inornata

Species abundance:

Species	Number	Percent of Total
Aedes spp.	1	.6%
Culex pipiens	170	93.9%
Culex tarsalis	2	1.1%
Culiseta spp.	8	4.4%



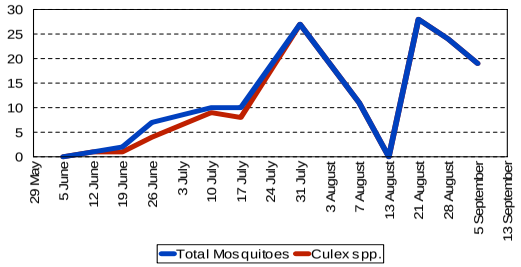
West Nile Virus Testing: No mosquito sample pools from this trap site tested positive for WNV in 2007.

[See also results for the Light trap at this location (FC-63)]

FC-66gr: Prospect Ponds FCNA @ Drake Reclamation

Season: 2007
Trap Type: Gravid trap
Location: Fort Collins,
Prospect & Sharp Point
GPS: N40° 33.525', W105° 1.312'

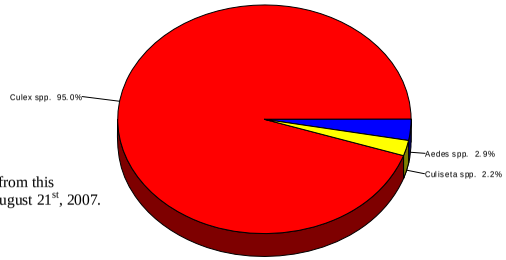
Total number of trap/nights set: 12
Total number of mosquitoes collected: 139
Average mosquitoes per trap/night: 12



Species collected:
Aedes vexans
Culex pipiens
Culex tarsalis
Culiseta inornata

Species abundance:

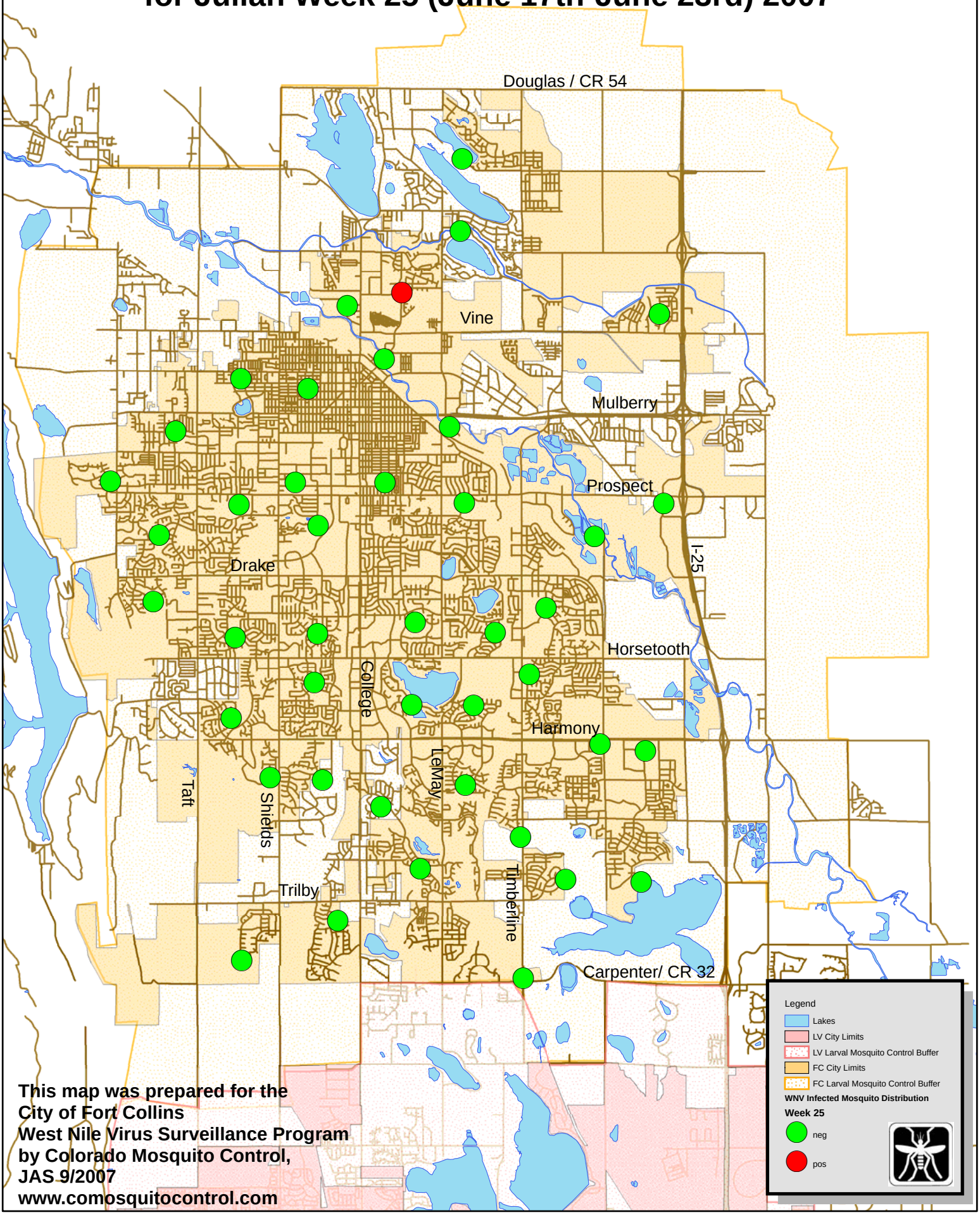
Species	Number	Percent of Total
Aedes spp.	4	2.9%
Culex pipiens	121	87.1%
Culex tarsalis	11	7.9%
Culiseta spp.	3	2.2%



West Nile Virus Testing: Two mosquito sample pools obtained from this surveillance location tested positive for WNV on July 31st and August 21st, 2007.

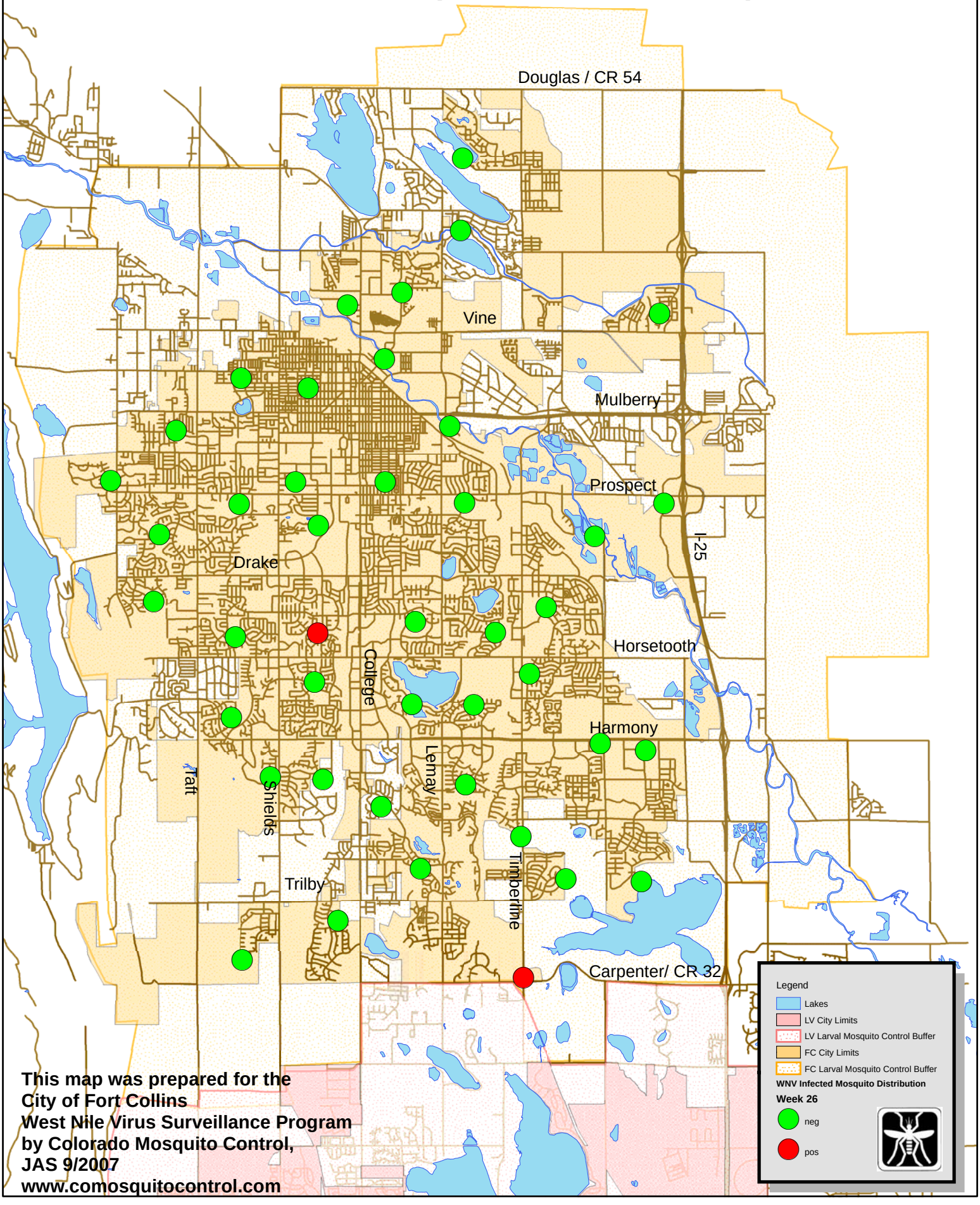
[See also results for the Light trap at this location (FC-66)]

West Nile Virus Mosquito Surveillance Location Map for Julian Week 25 (June 17th-June 23rd) 2007



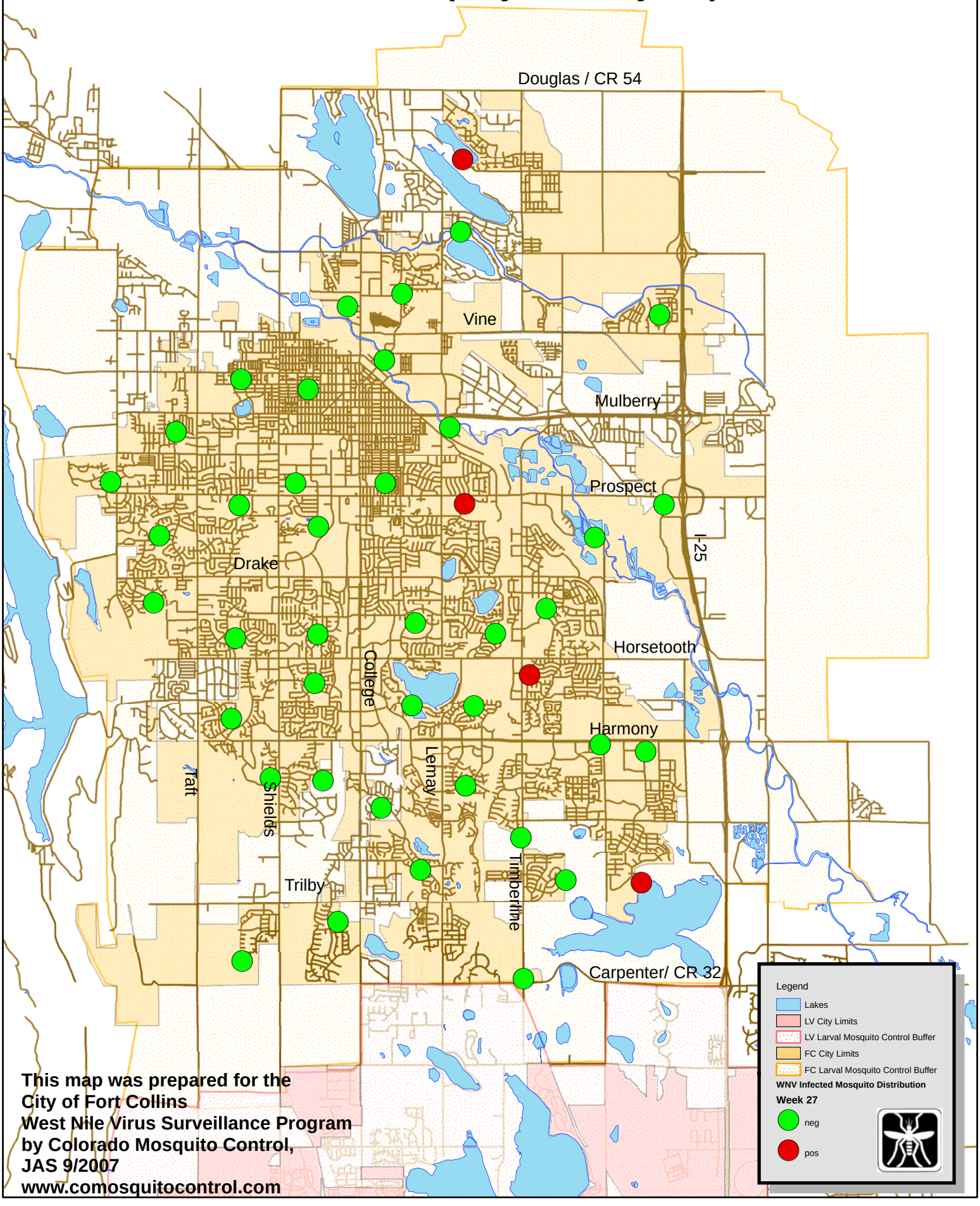
This map was prepared for the
City of Fort Collins
West Nile Virus Surveillance Program
by Colorado Mosquito Control,
JAS 9/2007
www.comosquitocontrol.com

West Nile Virus Mosquito Surveillance Location Map for Julian Week 26 (June 24th-June 30th) 2007



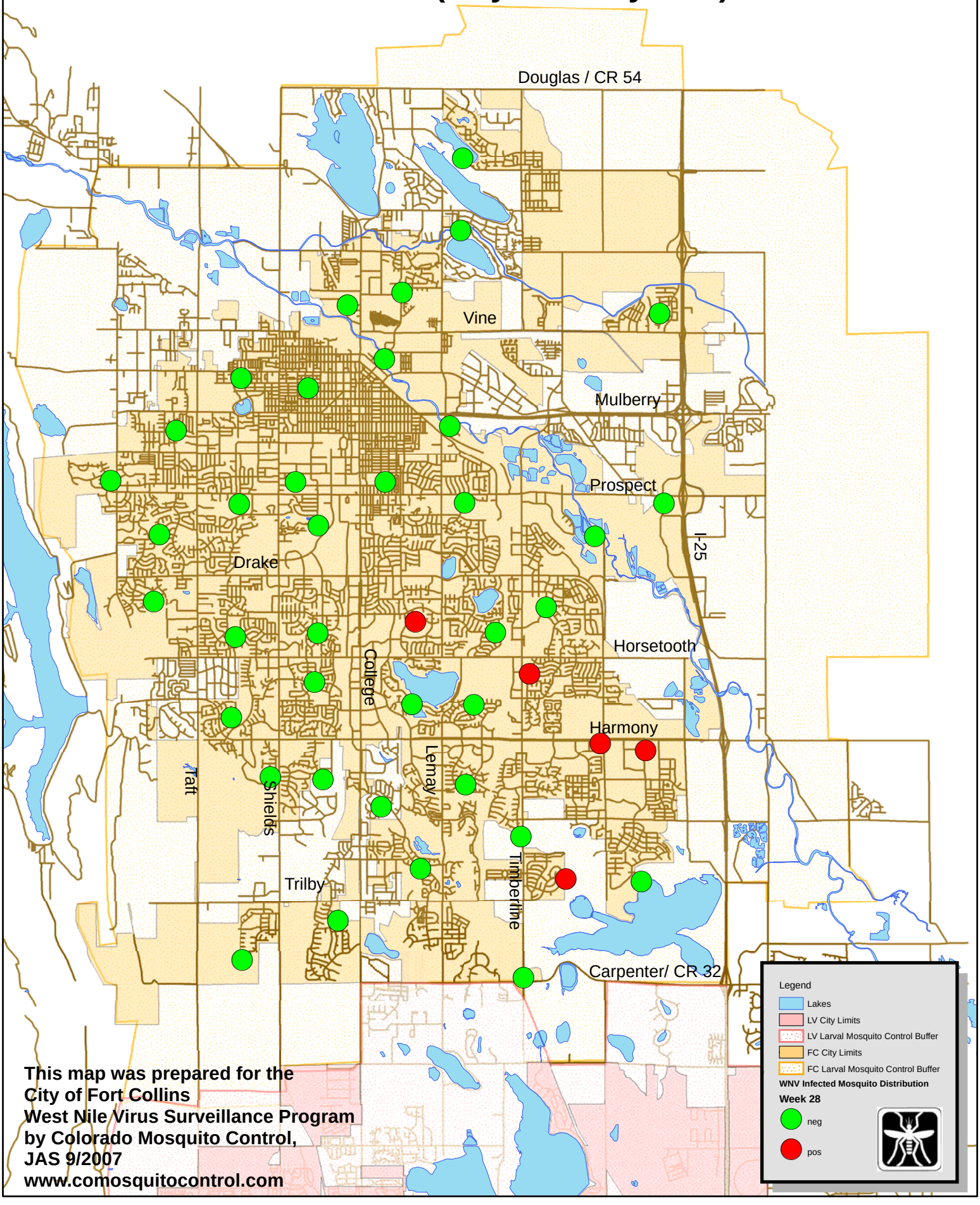
This map was prepared for the City of Fort Collins West Nile Virus Surveillance Program by Colorado Mosquito Control, JAS 9/2007
www.comosquitocontrol.com

West Nile Virus Mosquito Surveillance Location Map for Julian Week 27 (July 1st- July 7th) 2007



This map was prepared for the City of Fort Collins West Nile Virus Surveillance Program by Colorado Mosquito Control, JAS 9/2007
www.comosquitocontrol.com

West Nile Virus Mosquito Surveillance Location Map for Julian Week 28 (July 8th- July 14th) 2007



This map was prepared for the
City of Fort Collins
West Nile Virus Surveillance Program
by Colorado Mosquito Control,
JAS 9/2007
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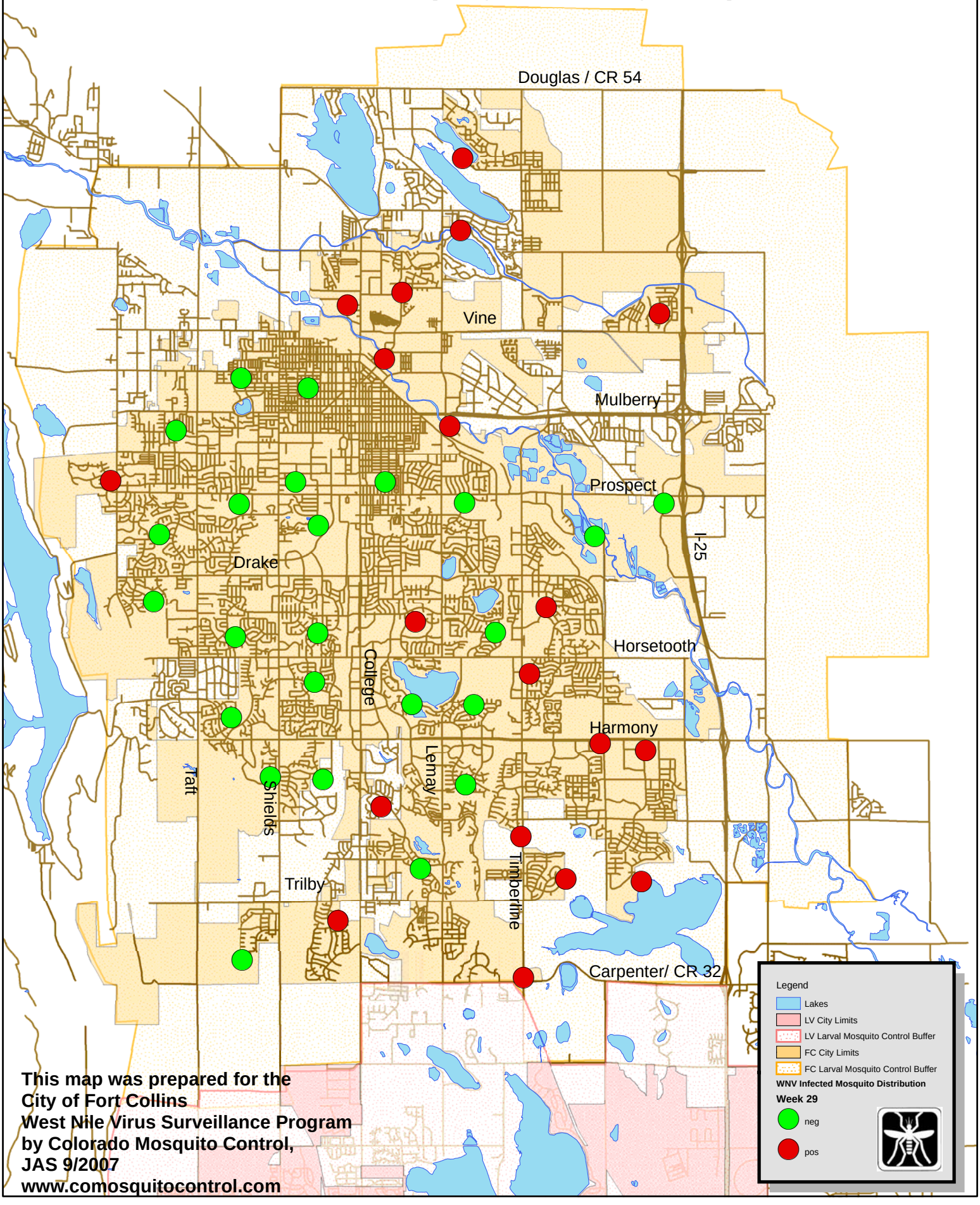
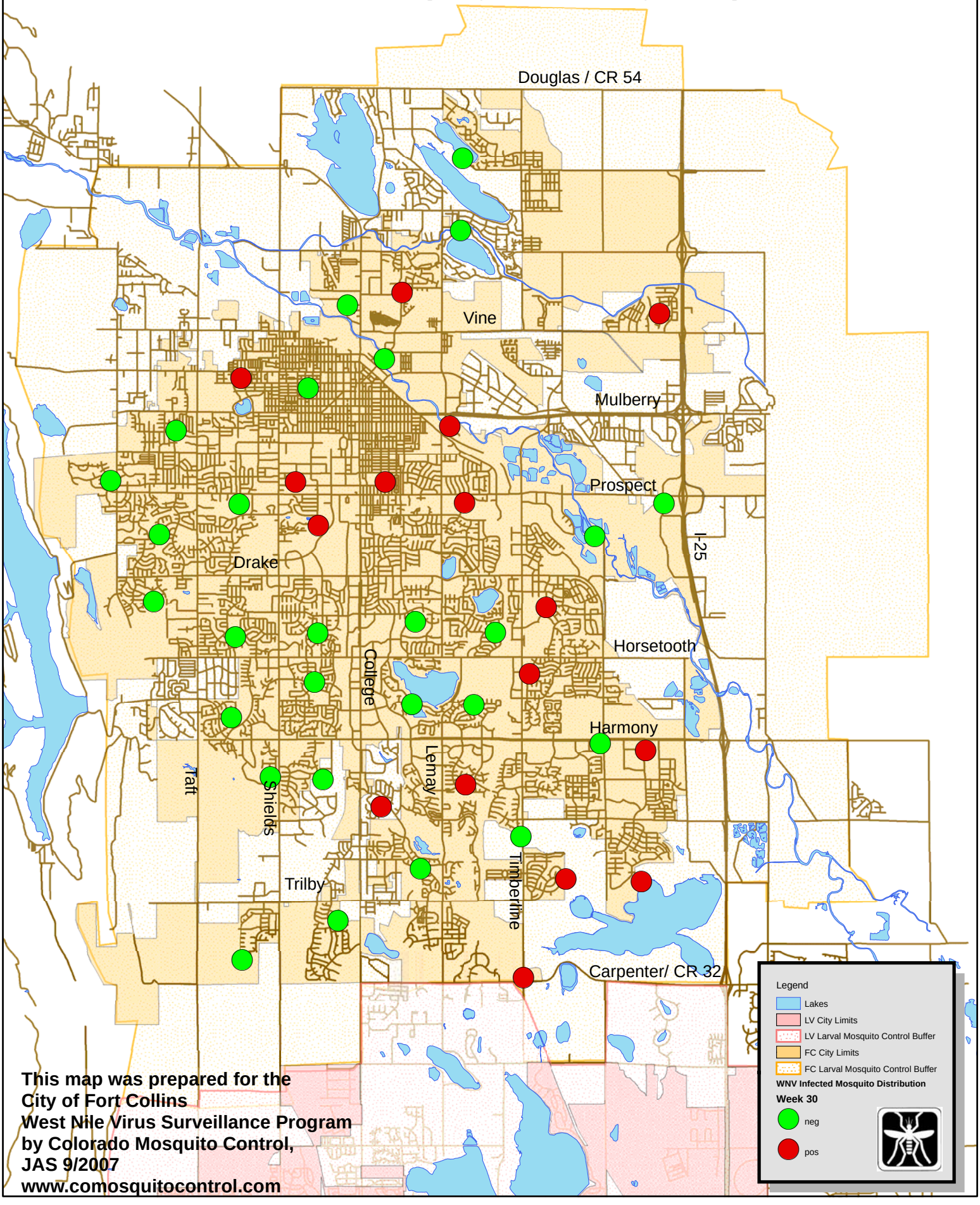
West Nile Virus Mosquito Surveillance Location Map for Julian Week 29 (July 15th- July 21st) 2007



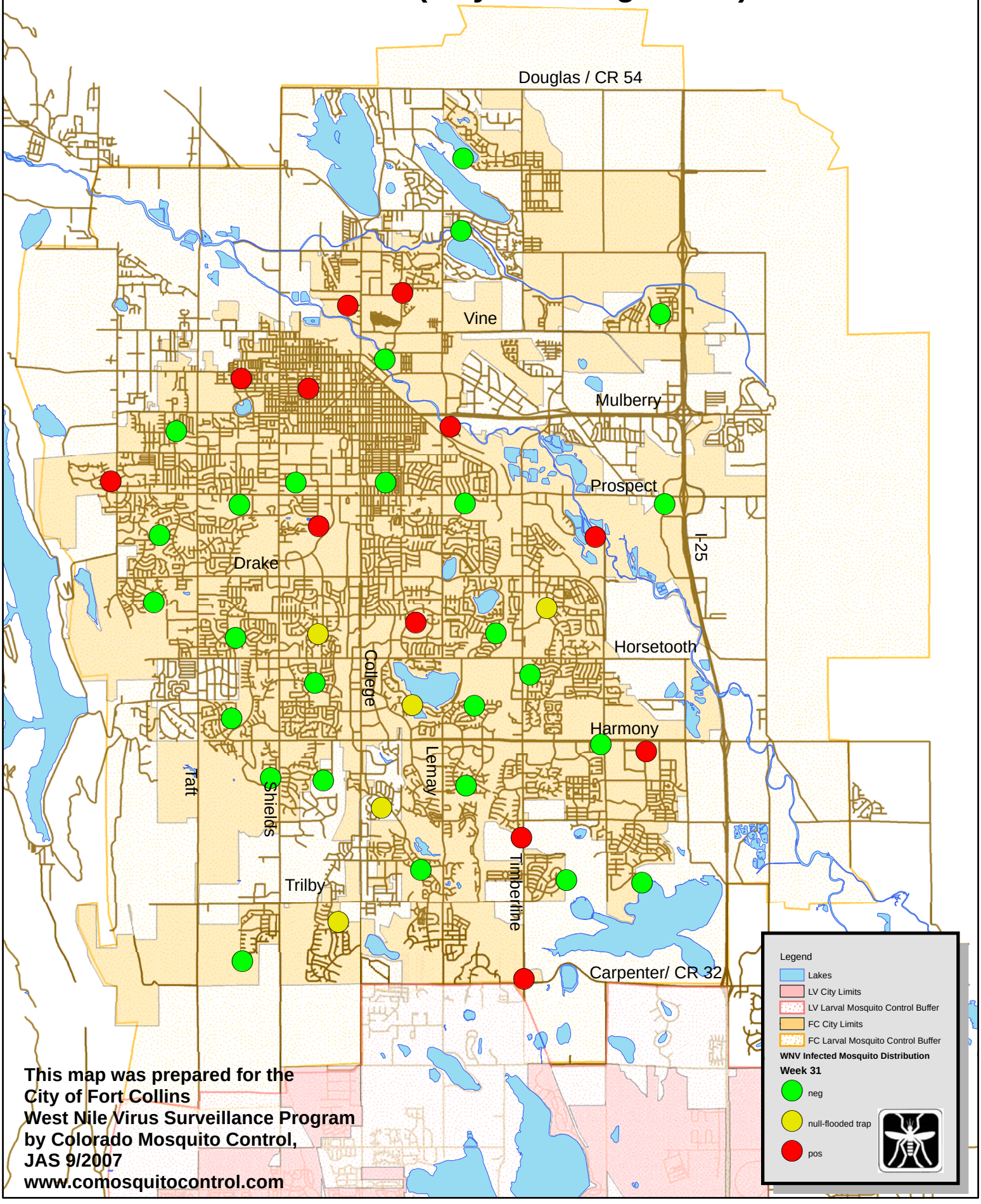
This map was prepared for the City of Fort Collins West Nile Virus Surveillance Program by Colorado Mosquito Control, JAS 9/2007
www.comosquitocontrol.com

West Nile Virus Mosquito Surveillance Location Map for Julian Week 30 (July 22nd- July 28th) 2007



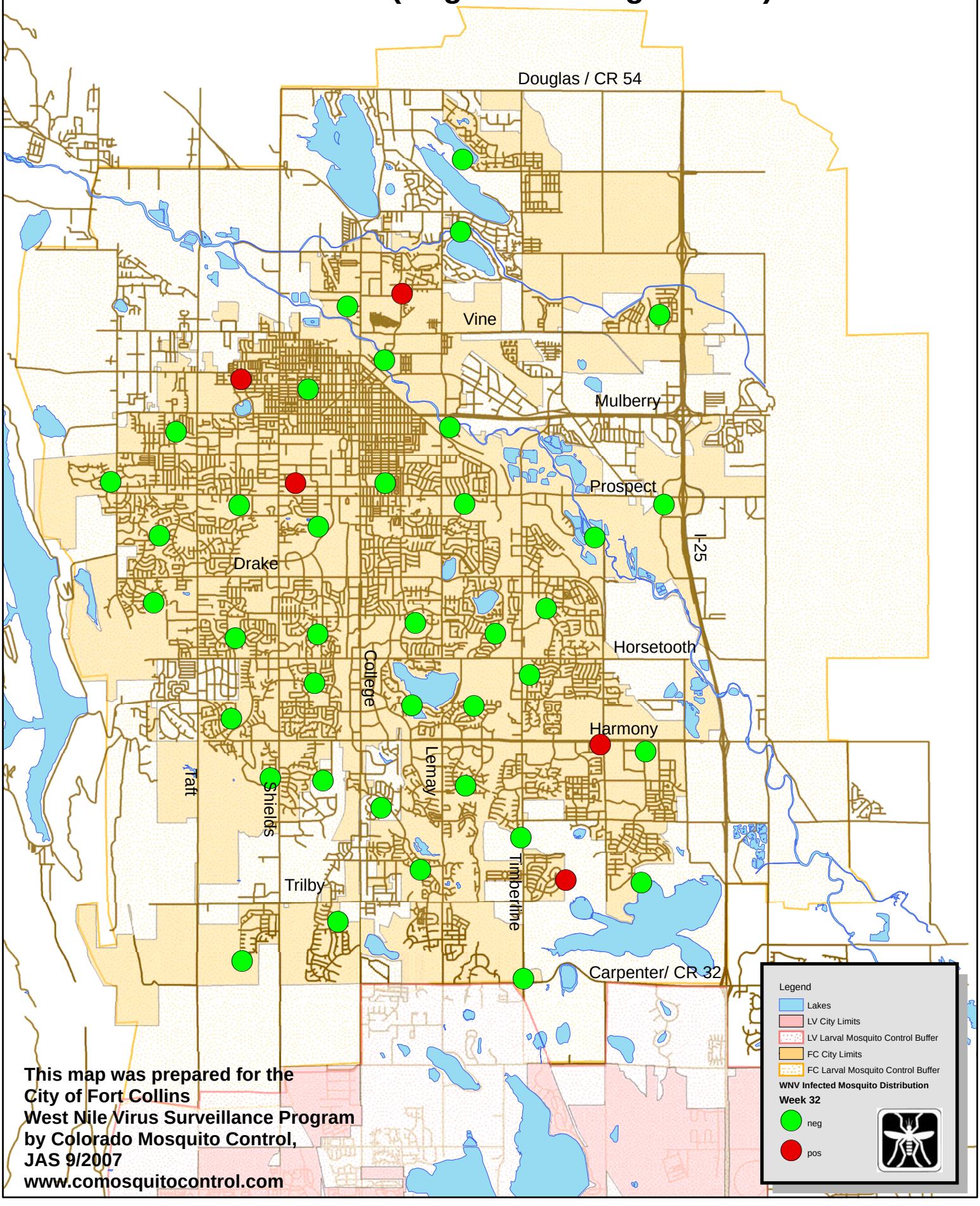
This map was prepared for the City of Fort Collins West Nile Virus Surveillance Program by Colorado Mosquito Control, JAS 9/2007
www.comosquitocontrol.com

West Nile Virus Mosquito Surveillance Location Map for Julian Week 31 (July 29th-August 4th) 2007



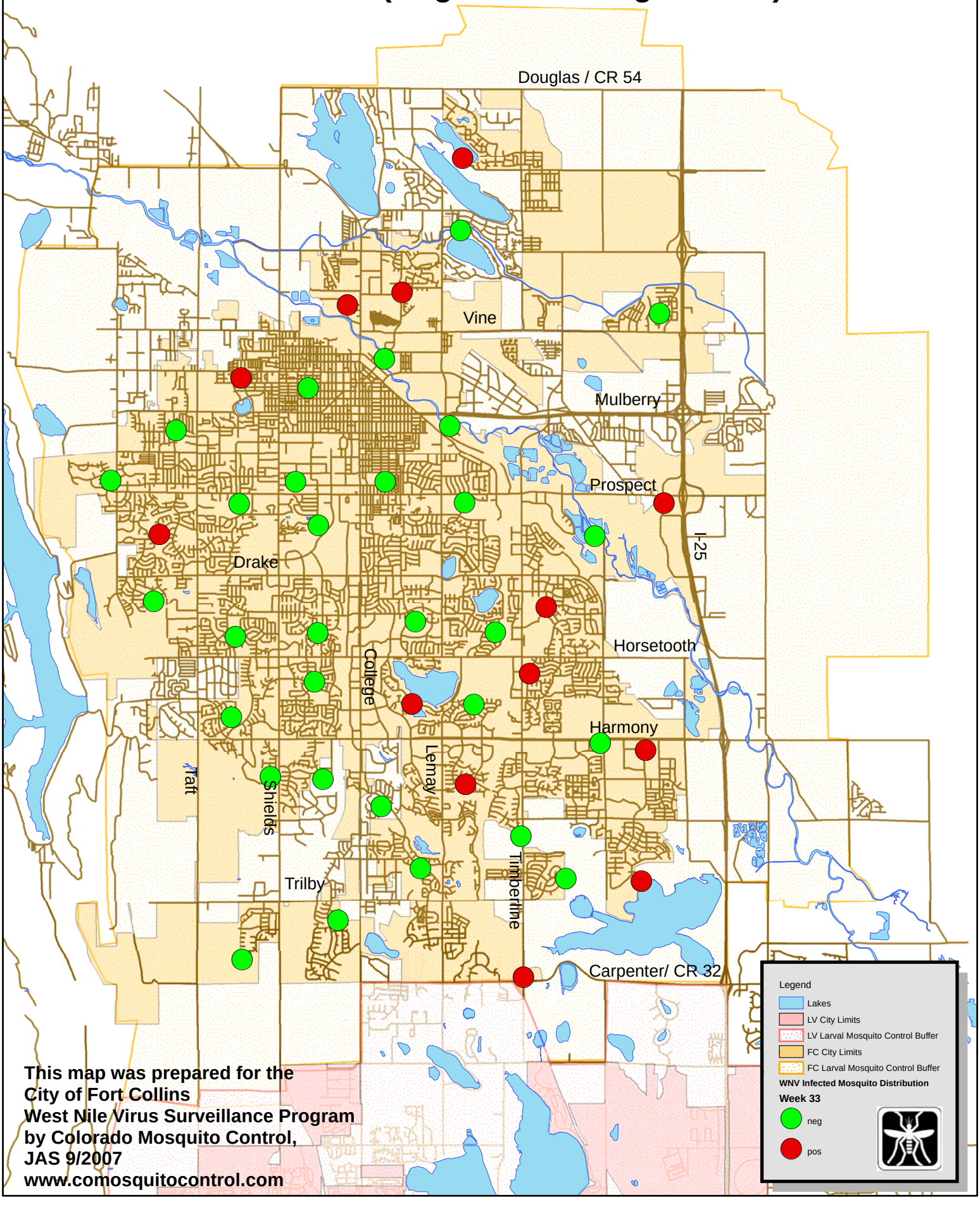
This map was prepared for the City of Fort Collins West Nile Virus Surveillance Program by Colorado Mosquito Control, JAS 9/2007
www.comosquitocontrol.com

West Nile Virus Mosquito Surveillance Location Map for Julian Week 32 (August 5th- August 11th) 2007



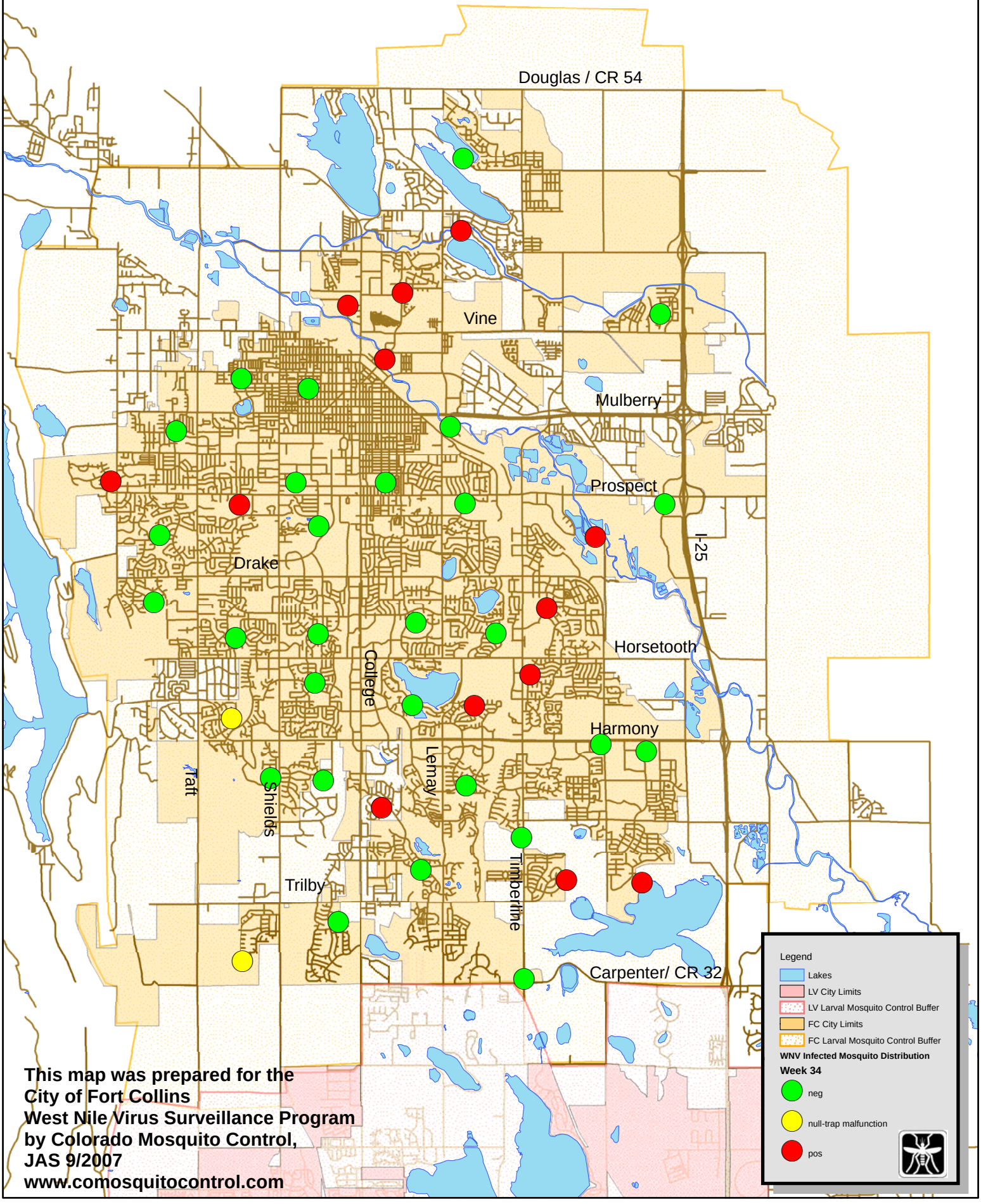
This map was prepared for the
City of Fort Collins
West Nile Virus Surveillance Program
by Colorado Mosquito Control,
JAS 9/2007
www.comosquitocontrol.com

West Nile Virus Mosquito Surveillance Location Map for Julian Week 33 (August 12th- August 18th) 2007



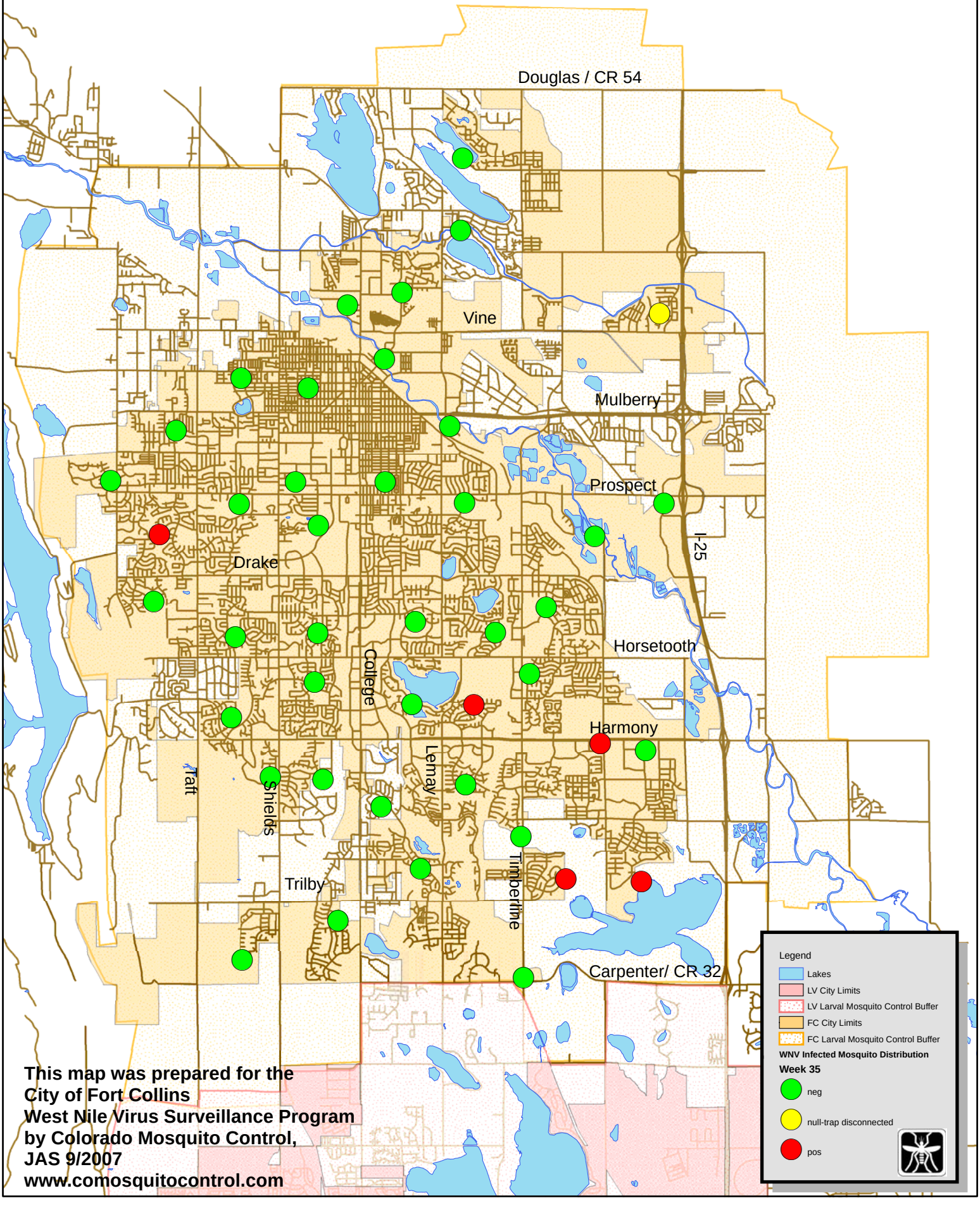
This map was prepared for the
City of Fort Collins
West Nile Virus Surveillance Program
by Colorado Mosquito Control,
JAS 9/2007
www.comosquitocontrol.com

West Nile Virus Mosquito Surveillance Location Map for Julian Week 34 (August 19th-August 25th) 2007



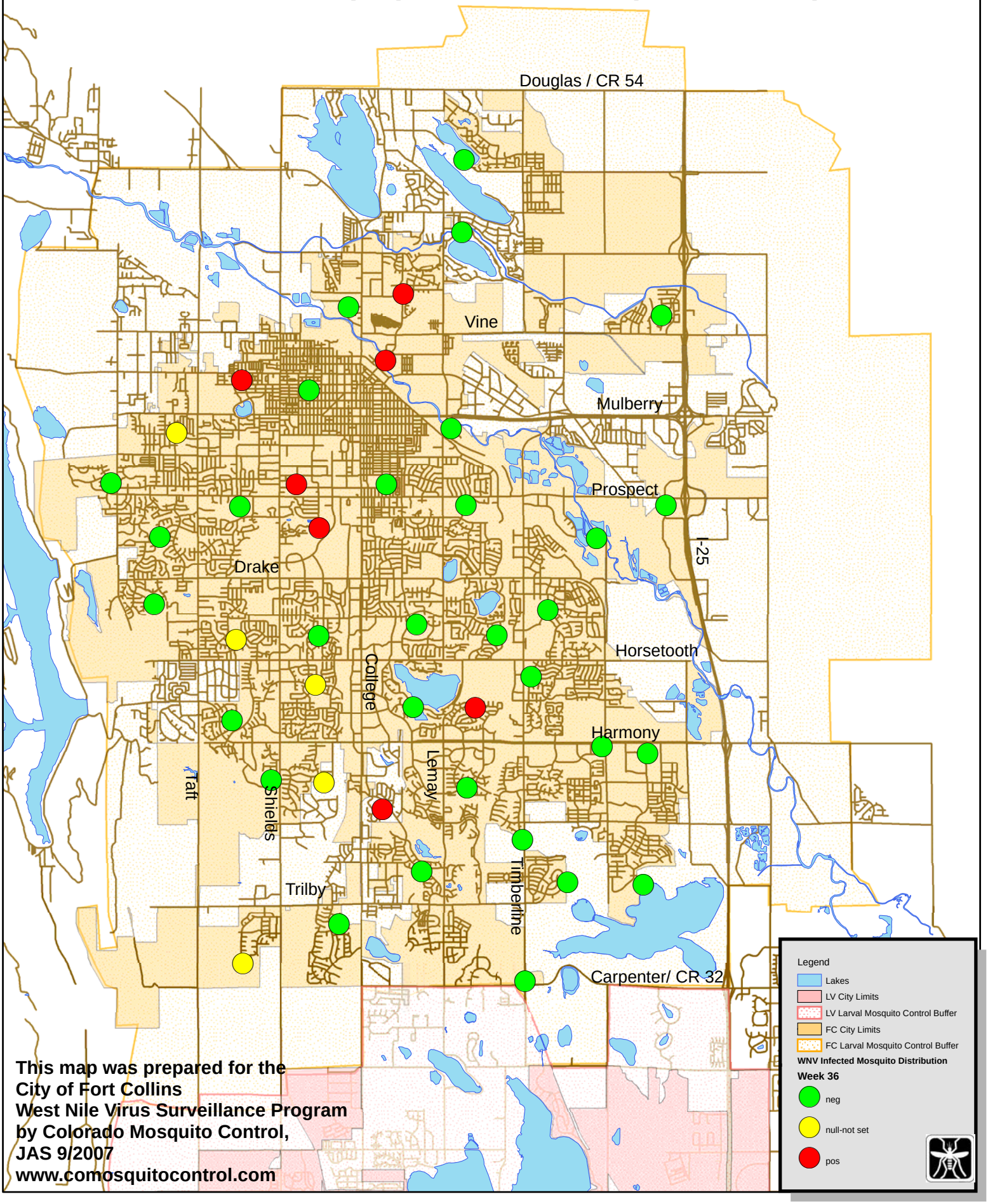
This map was prepared for the City of Fort Collins West Nile Virus Surveillance Program by Colorado Mosquito Control, JAS 9/2007
www.comosquitocontrol.com

West Nile Virus Mosquito Surveillance Location Map for Julian Week 35 (August 26th-September 1st) 2007



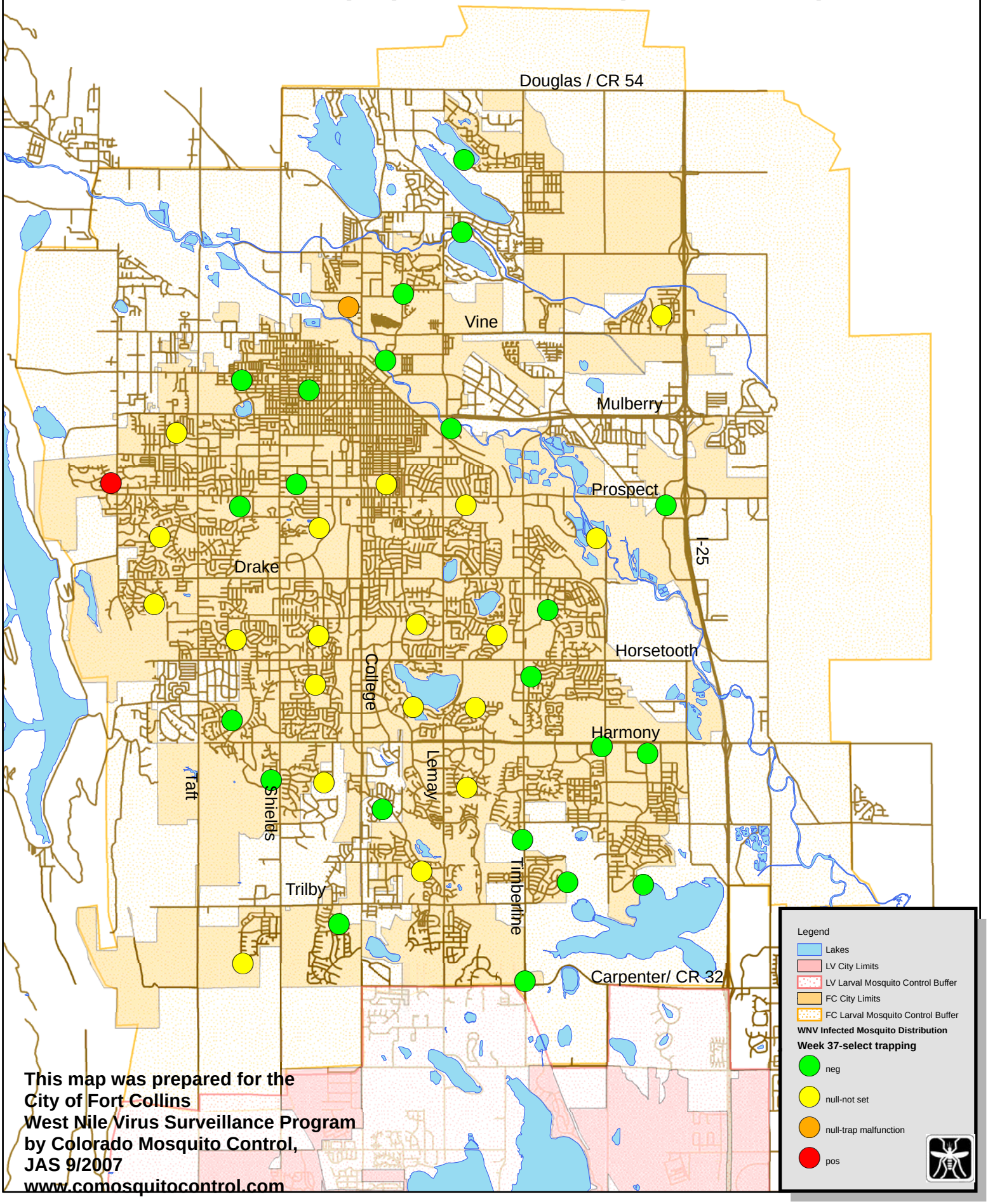
This map was prepared for the City of Fort Collins West Nile Virus Surveillance Program by Colorado Mosquito Control, JAS 9/2007
www.comosquitocontrol.com

West Nile Virus Mosquito Surveillance Location Map for Julian Week 36 (September 2nd-September 8th) 2007



This map was prepared for the City of Fort Collins West Nile Virus Surveillance Program by Colorado Mosquito Control, JAS 9/2007
www.comosquitocontrol.com

West Nile Virus Mosquito Surveillance Location Map for Julian Week 37 (September 9th-September 15th) 2007



This map was prepared for the City of Fort Collins West Nile Virus Surveillance Program by Colorado Mosquito Control, JAS 9/2007
www.comosquitocontrol.com

ADULTICIDE - CUSTOMER

by REPORT DATE: 7/19/2007 to 7/24/2007
by CUSTOMERID: FC

	Subdiv/Area	Material	Start Time	End Time	Miles
Fort Collins, City of					
Truck ULV					
7/19/2007	38	AquaLuer ULV	1:35 AM	2:00 AM	5.0
7/19/2007	06	AquaLuer ULV	11:24 PM	11:40 PM	3.0
7/19/2007	01	AquaLuer ULV	8:30 PM	9:20 PM	8.0
7/19/2007	05	AquaLuer ULV	9:35 PM	11:10 PM	18.0
7/19/2007	22	AquaLuer ULV	10:01 PM	11:12 PM	15.0
7/19/2007	46	AquaLuer ULV	1:20 AM	1:55 AM	8.0
7/19/2007	31	AquaLuer ULV	8:37 PM	10:00 PM	5.0
7/19/2007	48	AquaLuer ULV	10:09 PM	11:09 PM	13.0
7/19/2007	47	AquaLuer ULV	11:11 PM	12:11 AM	9.0
7/19/2007	37	AquaLuer ULV	2:02 AM	2:37 AM	9.0
7/19/2007	60	AquaLuer ULV	10:47 PM	11:39 PM	11.0
7/19/2007	39	AquaLuer ULV	11:16 PM	12:32 PM	16.0
7/19/2007	45	AquaLuer ULV	12:35 AM	1:31 AM	12.0
7/19/2007	03	AquaLuer ULV	9:45 PM	10:50 PM	14.0
7/19/2007	02	AquaLuer ULV	8:45 PM	9:40 PM	10.0
7/19/2007	28	AquaLuer ULV	2:21 AM	3:55 AM	12.0
7/19/2007	54	AquaLuer ULV	8:38 PM	9:30 PM	12.0
7/19/2007	56	AquaLuer ULV	10:37 PM	11:51 PM	17.0
7/19/2007	62	AquaLuer ULV	11:52 PM	12:49 AM	7.0
7/19/2007	55	AquaLuer ULV	9:47 PM	10:34 PM	7.0
7/19/2007	COLLEGE	AquaLuer ULV	1:50 AM	2:27 AM	6.0
7/19/2007	19	AquaLuer ULV	12:35 AM	1:25 AM	8.0
7/19/2007	40	AquaLuer ULV	12:12 AM	1:15 AM	16.0
7/19/2007	30	AquaLuer ULV	8:34 PM	9:37 PM	12.0
7/19/2007	29	AquaLuer ULV	9:38 PM	11:09 PM	20.0
7/19/2007	14	AquaLuer ULV	11:05 PM	12:25 AM	13.0
7/19/2007	49	AquaLuer ULV	9:29 PM	10:08 PM	6.0
7/19/2007	59	AquaLuer ULV	1:45 AM	2:25 AM	8.0
7/19/2007	12	AquaLuer ULV	11:55 PM	12:25 AM	6.0
7/19/2007	20	AquaLuer ULV	1:25 AM	2:15 AM	7.0
7/19/2007	27	AquaLuer ULV	1:05 AM	2:20 AM	6.0
7/19/2007	53	AquaLuer ULV	9:48 PM	10:40 PM	11.0
7/19/2007	64	AquaLuer ULV	11:56 PM	1:13 AM	17.0
7/19/2007	13	AquaLuer ULV	12:28 AM	1:20 AM	10.0
7/20/2007	32	AquaLuer ULV	7:55 PM	10:30 PM	10.0
7/20/2007	07	AquaLuer ULV	8:00 PM	8:51 PM	8.0
7/20/2007	26	AquaLuer ULV	11:19 PM	12:25 AM	13.0
7/20/2007	24	AquaLuer ULV	1:37 AM	2:05 AM	8.0
7/20/2007	58	AquaLuer ULV	1:05 AM	2:00 AM	12.0
7/20/2007	51	AquaLuer ULV	11:40 PM	1:00 AM	18.0
7/20/2007	04	AquaLuer ULV	9:10 PM	9:30 PM	3.0
7/20/2007	43	AquaLuer ULV	8:20 PM	9:30 PM	10.0
7/20/2007	11	Aqualeur ULV	1:28 AM	2:13 AM	9.0

ADULTICIDE - CUSTOMER

by REPORT DATE: 7/19/2007 to 7/24/2007
by CUSTOMERID: FC

	Subdiv/Area	Material	Start Time	End Time	Miles
7/20/2007	57	AquaLuer ULV	7:50 PM	8:46 PM	12.0
7/20/2007	08	Aqualeur ULV	10:14 PM	11:07 PM	11.0
7/20/2007	25	AquaLuer ULV	9:47 PM	11:12 PM	18.0
7/20/2007	09	AquaLuer ULV	12:52 AM	1:05 AM	4.0
7/20/2007	16	AquaLuer ULV	1:34 AM	2:45 AM	12.0
7/20/2007	23	AquaLuer ULV	9:55 PM	10:52 PM	11.0
7/20/2007	10	Aqualeur ULV	12:41 AM	1:27 AM	10.0
7/20/2007	50	AquaLuer ULV	10:15 PM	11:36 PM	20.0
7/20/2007	15	AquaLuer ULV	1:10 AM	1:33 AM	6.0
7/20/2007	36	AquaLuer ULV	12:05 PM	12:30 PM	5.0
7/20/2007	33	AquaLuer ULV	10:40 PM	11:31 PM	10.0
7/20/2007	42	AquaLuer ULV	1:55 AM	2:25 AM	6.0
7/20/2007	34	AquaLuer ULV	11:42 PM	12:28 AM	9.0
7/20/2007	52	AquaLuer ULV	12:52 AM	1:21 AM	3.0
7/20/2007	17	AquaLuer ULV	8:53 PM	10:00 PM	16.0
7/20/2007	35	AquaLuer ULV	10:58 PM	11:44 PM	9.0
7/20/2007	63	AquaLuer ULV	8:20 PM	10:09 PM	22.0
7/23/2007	62	AquaLuer ULV	10:37 PM	11:49 PM	20.0
7/23/2007	COLLEGE	AquaLuer ULV	1:57 AM	2:28 AM	9.0
7/23/2007	31	AquaLuer ULV	9:48 PM	11:12 PM	10.0
7/23/2007	38	AquaLuer ULV	12:28 AM	1:06 AM	8.5
7/23/2007	03	AquaLuer ULV	9:20 PM	10:41 PM	18.0
7/23/2007	19	AquaLuer ULV	1:45 AM	2:28 AM	9.0
7/23/2007	14	AquaLuer ULV	11:00 PM	12:05 AM	12.0
7/23/2007	55	AquaLuer ULV	1:21 AM	1:50 AM	8.0
7/23/2007	28	AquaLuer ULV	8:33 PM	9:37 PM	7.0
7/23/2007	21	AquaLuer ULV	1:10 AM	3:00 AM	20.0
7/23/2007	27	AquaLuer ULV	8:05 PM	9:30 PM	16.0
7/23/2007	61	AquaLuer ULV	9:52 PM	10:33 PM	10.0
7/23/2007	13	AquaLuer ULV	12:10 AM	12:55 AM	10.0
7/23/2007	45	AquaLuer ULV	1:07 AM	1:48 AM	9.3
7/23/2007	12	AquaLuer ULV	1:02 AM	1:36 AM	7.0
7/23/2007	22	AquaLuer ULV	11:20 PM	12:50 AM	6.0
7/23/2007	02	AquaLuer ULV	8:00 PM	9:18 PM	14.0
7/23/2007	56	AquaLuer ULV	11:50 PM	1:20 AM	22.0
7/24/2007	52	AquaLuer ULV	11:46 PM	12:42 AM	2.0
7/24/2007	09	AquaLuer ULV	9:52 PM	10:20 PM	8.1
7/24/2007	32	AquaLuer ULV	11:44 PM	1:04 AM	15.0
7/24/2007	41	AquaLuer ULV	11:31 PM	11:37 PM	1.5
7/24/2007	16	AquaLuer ULV	11:05 PM	11:54 PM	14.0
7/24/2007	17	Aqualeur ULV	9:22 PM	10:32 PM	15.5
7/24/2007	57	AquaLuer ULV	8:17 PM	9:15 PM	14.0
7/24/2007	04	AquaLuer ULV	11:06 PM	11:46 PM	9.0
7/24/2007	15	AquaLuer ULV	10:23 PM	11:00 PM	9.4
7/24/2007	18	AquaLuer ULV	11:54 PM	12:55 AM	16.5

CMMS™
Colorado Mosquito Control, Inc.

ADULTICIDE - CUSTOMER

by REPORT DATE: 7/19/2007 to 7/24/2007
by CUSTOMERID: FC

	Subdiv/Area	Material	Start Time	End Time	Miles
7/24/2007	51	AquaLuer ULV	9:55 PM	11:35 PM	20.0
7/24/2007	44	AquaLuer ULV	11:00 PM	11:49 PM	13.0
7/24/2007	07	AquaLuer ULV	8:26 PM	9:20 PM	10.8
7/24/2007	50	AquaLuer ULV	8:00 PM	9:49 PM	18.0
7/24/2007	11	AquaLuer ULV	11:16 PM	11:52 PM	6.9
7/24/2007	25	AquaLuer ULV	12:17 AM	1:36 AM	18.2
7/24/2007	24	AquaLuer ULV	10:38 PM	11:22 PM	10.5
7/24/2007	10	Aqualeur ULV	10:36 PM	11:14 PM	8.0
7/24/2007	43	AquaLuer ULV	8:30 PM	9:47 PM	13.0
7/24/2007	33	AquaLuer ULV	8:04 PM	8:50 PM	21.0
7/24/2007	36	AquaLuer ULV	9:51 PM	11:05 PM	16.0
7/24/2007	63	AquaLuer ULV	1:14 AM	2:16 AM	23.7
7/24/2007	23	AquaLuer ULV	8:38 PM	10:23 PM	25.5
7/24/2007	58	AquaLuer ULV	12:40 AM	1:11 AM	9.7
7/24/2007	26	AquaLuer ULV	11:32 PM	12:14 AM	10.0
7/24/2007	08	AquaLuer ULV	9:45 PM	10:51 PM	13.0
7/24/2007	42	AquaLuer ULV	8:23 PM	10:06 PM	20.0
7/24/2007	34	AquaLuer ULV	8:56 PM	10:51 PM	19.0
7/24/2007	35	AquaLuer ULV	11:10 PM	12:10 AM	13.0
			Truck ULV	**Sum**	**1,242.1**
				Avg	**11.6**
				Min	**1.5**
				Max	**25.5**
			Grand Total Miles		**1,242.1**

CMMS™
Colorado Mosquito Control, Inc.

ADULTICIDE - CUSTOMER

by REPORT DATE: 8/28/2007
by CUSTOMERID: FC - LC

	Subdiv/Area	Material	Start Time	End Time	Miles
Fort Collins, City of					
Truck ULV					
8/28/2007	55	AquaLuer ULV	7:47 PM	8:30 PM	9.0
8/28/2007	60	AquaLuer ULV	9:25 PM	9:56 PM	6.0
8/28/2007	40	AquaLuer ULV	7:42 PM	9:25 PM	20.0
8/28/2007	04	AquaLuer ULV	10:02 PM	10:35 PM	6.0
8/28/2007	01	AquaLuer ULV	7:52 PM	8:37 PM	10.0
8/28/2007	47	AquaLuer ULV	8:36 PM	9:26 PM	11.0
8/28/2007	56	AquaLuer ULV	10:26 PM	11:09 PM	10.0
8/28/2007	54	AquaLuer ULV	8:06 PM	9:11 PM	14.0
8/28/2007	46	AquaLuer ULV	9:38 PM	10:56 PM	17.8
8/28/2007	56	AquaLuer ULV	10:12 PM	11:06 PM	11.0
8/28/2007	05	AquaLuer ULV	8:40 PM	9:54 PM	12.0
8/28/2007	57	AquaLuer ULV	8:59 PM	10:11 PM	16.0
8/28/2007	06	AquaLuer ULV	7:58 PM	8:37 PM	9.0
8/28/2007	48	AquaLuer ULV	9:37 PM	10:45 PM	14.0
8/28/2007	62	AquaLuer ULV	7:45 PM	8:57 PM	14.0
				Truck ULV Sum	**179.8**
				Avg	**12.0**
				Min	**6.0**
				Max	**20.0**
Larimer County Health Departme					
Truck ULV					
8/28/2007	LC V	AquaLuer ULV	10:38 PM	10:52 PM	2.1
8/28/2007	LC U	AquaLuer ULV	8:52 PM	9:30 PM	6.5
8/28/2007	LC T	AquaLuer ULV	9:38 PM	10:55 PM	15.7
8/28/2007	LC SERRAMONTE	AquaLuer ULV	8:40 PM	8:46 PM	1.1
				Truck ULV Sum	**25.4**
				Avg	**6.4**
				Min	**1.1**
				Max	**15.7**
			Grand Total Miles		**205.2**