

CITY OF FORT COLLINS AUGUST 2015 MONTHLY REPORT

MONTHLY REPORT: SEPTEMBER 7TH, 2015

COLORADO MOSQUITO CONTROL

West Nile Virus Risk

Contact CMC:

City of Fort Collins Mosquito Control Program Broox Boze, Operations Manager The number of confirmed cases of human West Nile virus infections in Colorado for the 2015 season is currently at 20 (4 from Larimer County, 3 from Boulder County, 3 from Arapahoe County, 2 from Adams County, 2 from Denver County and 1 each from Weld, Mesa, Fremont, and Costilla Counties). This case count is on par with that of the 2014 season, during which time 20 cases had also been confirmed. While trap counts are currently low and the *Culex* populations are diminishing, it is expected that the number of human cases will continue to increase as the vast majority of cases are identified in August and September. Therefore, continued use of personal protective measures against mosquitoes is recommended.



Colorado State University has tested 258 sample pools of *Cx. pipiens* mosquitoes and 240 sample pools of *Cx. tarsalis* mosquitoes collected from surveillance traps in the City of Fort Collins during August 2015. There were 50 WNv+ pools of *Cx. pipiens* and 12 WNv+ pools of *Cx. tarsalis* collected from Fort Collins during August.

Colorado State University tested 23 sample pools of *Cx. pipiens* mosquitoes and 39 sample pools of *Cx. tarsalis* mosquitoes collected from mosquito traps in the City of Loveland during August 2015. There were no WNv+ pools of *Cx. pipiens* and 5 WNv+ pools of *Cx. tarsalis* collected from the City of Loveland during August.

The CDPHE has completed mosquito testing for the 2015 season. The City of Fort Collins in conjunction with CSU continue mosquito testing through September 18th, 2015.

Phone (970)962-2582

Fax (970)962-2584

E-Mail: bboze@ comosquito control.com

<u>Website:</u> www.comosquit ocontrol.com

Main Office:

General E-Mail: info@comosquito control.com Toll Free: (877) 276-4306

7000 North Broadway Suite 108 Denver, CO 80221 303-428-5908

<u>Weather</u>

The average temperature in the month of August 2015 was 71° F in Fort Collins and Loveland, 72° F in Johnstown and 74° F in the City of Longmont. The total rainfall which occurred in the month of August 2015 was 1.15" in Fort Collins and Loveland, 1.19" in Johnstown and 0.22" in the City of Longmont.

Wear Your Repellent!

Use approved mosquito repellents containing DEET, picaridin or oil of lemon eucalyptus.

DEET products generally provide the longest protection. The other repellents work but must be applied more frequently.

Follow the product label for correct use. Products with 10 percent or less DEET are recommended for children.



Larval Control Operations

CMC field technicians performed 1,318 site inspections as part of the inspection and larviciding program in August 2015. Of the 1,318 inspections, 1,163 sites were wet (88.2%) and 740 sites were producing mosquito larvae (63.5% of the wet sites). An estimated 1.2 billion larvae were killed before emerging in August 2015. Of the 378.5 acres treated in August 2015, 1,833 lbs. of VectoBac (*Bti*), 0.1 lbs. of Altosid (methoprene) and 14.2 gallons of BVA mineral oil were applied in August 2015.

CMC field technicians performed 1,634 site inspections as part of the inspection and larviciding program for the City of Fort Collins in August 2014. Of the 1,634 inspections, 1,460 sites were wet (89.4%) and 979 sites were producing mosquito larvae (66.7% of the wet sites). An estimated 2.1 billion larvae were killed before emerging in August 2014. Of the 644.6 acres treated in August 2014, 6,850.8 lbs. of VectoBac (*Bti*), 171.1 lbs. of VectoLex (*Bsph*), and 33.7 gallons of BVA mosquito larviciding oil were applied.

CMC's backyard technician performed 33 site inspections as a part of the Fort Collins backyard program in August 2015. Of the 33 inspections, 16 sites (48.5%) were wet and 6 (37.5%) were producing or had the potential to produce mosquito larvae. An estimated 0.2 million mosquito larvae were prevented from emerging from backyard habitats in the

month of August 2015. Of the 0.1 acres treated 0.05 lbs. of Altosid (methoprene) and 0.2 lbs Vectobac (Bti) were applied.

CMC's backyard technician performed 15 site inspections as a part of the Fort Collins storm drain program in August 2015. Of the 15 inspections, 3 sites (20%) were wet and 2 were producing mosquito larvae or had the potential to produce mosquito larvae.

Mosquito Population Surveillance

There were 186 light traps set in Fort Collins the month of August 2015. From the 186 light traps set; a total of 14,196 mosquitoes were collected. There were 7,369 (52%) *Aedes spp.*, 201 (1%) *Culiseta spp.*, and 6,608 (57%) *Culex spp* mosquitoes collected. There was an average of 76 mosquitoes per trap night and 35 *Culex spp.* mosquitoes per trap night collected in Fort Collins during August 2015.

There were 172 light traps set in Fort Collins the month of August 2014. Of the 172 light traps set; a total of 21,560 mosquitoes were collected. There were 10,179 (47.2%) *Aedes spp.*, 356 (1.7%) *Culiseta spp.*, 9,055 (42.0%) *Culex tarsalis*, 50 (0.2%) *Culex salinarius*, 1,710 (7.9%) *Culex pipiens*, 197 (1.8%) *Culex* spp., 10 (<1%) *Anopheles spp.*, and 3 (<1.0%) *Coquillettidia perturbans* mosquitoes collected. There was an average of 125 mosquitoes collected per trap night and 64 *Culex spp*. mosquitoes per trap night during August 2014 in the City of Fort Collins.

There were 45 gravid traps set in Fort Collins during the month of August 2015. Gravid traps set in the City of Fort Collins collected 3,489 total mosquitoes. There were 8 (<1.0%) *Aedes spp.*, 7 (<1.0%) *Culiseta inornata*, 3,474 (99%) *Culex spp*. mosquitoes collected.

There were 154 light traps set in the City of Loveland during August 2015. Mosquito surveillance traps set during August 2015 in Loveland collected a total of 6,852 mosquitoes. Of these there were 2,891 (42%) *Aedes spp.*, 129 (2%) *Culiseta inornata*, 1 (<1.0%) *Anopheles spp.*, 3,831 (56%) *Culex spp.* mosquitoes collected. There was an average of 44 mosquitoes collected per trap night and 24 *Culex spp.* mosquitoes per trap night during August 2015 in the City of Loveland.

There were 12 gravid traps set during the month of August 2015 in the City of Loveland. Gravid traps set in the City of Loveland collected 1,036 total mosquitoes. There was 1 (<1.0%) *Culiseta inornata* and 1,035 (99%) *Culex spp.* mosquitoes collected from gravid traps in Loveland.

Adult Mosquito Control Operations

CMC is contracted to perform mosquito adulticiding in Greenstone, Fossil Lake Ranch, Willow Springs and Lindenwood HOAs during the 2015 season, when mosquito counts surpass 100 mosquitoes in a single trapping night. The City of Fort Collins has not budgeted money for adulticiding for 2015.

CMC performed truck ULV applications using AquaLuer2020 in Willow Springs on August 3rd and 9th, Lindenwood on August 5th, and Fossil Lake Ranch on August 19th due to mosquito traps that contained more than 100 mosquitoes in the previous night's trapping. A total of 23.0 miles of road were driven and included in the applications.

Colorado	Mosquito	Control
Colorado	mosquito	Control

Adulticide Data

Customer	Subdiv/Area	Material	Start Time	End Time	Miles
Lindenwood HOA					
Truck					
08/05/2015	LINDENWOOD	Aqualuer	20:15:00	20:37:00	3.0
08/03/2015	Willow Springs	Aqualuer	21:28:00	21:55:00	5.0
08/19/2015	Willow Springs	Aqualuer	20:00:00	20:22:00	5.0
08/19/2015	Fossil Lake Ranch	Aqualuer	21:00:00	21:42:00	9.0
08/19/2015	Fossil Lake Ranch	Aqualuer	21:00:00	21:42:0	0

CMMS - Comprehensive Mosquito Management System

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CMC was contracted by the Larimer County Department of Health and Environment to perform ground based truck ULV applications using AquaLuer2020 in the month of August 2015. The portions of the city included in the recommendation by LCDHE included areas adjacent to City Limits boundary the NE part of the County. Mosquito adulticiding was performed on August 13th in response to elevated WNV activity in mosquitoes. A total of 45.0 miles of roads and trails were driven.

Colorado Mosquito Control			Adulticide Data		
Customer	Subdiv/Area	Material	Start Time	End Time	Miles
Larimer County Health Department	·	· · · ·			
Truck	k				
08/13/2015	5 WNV 5	Aqualuer	21:55:00	23:32:00	16.0
08/13/2015	5 WNV 4	Aqualuer	20:10:00	20:55:00	8.0
08/13/2015	5 WNV 3	Aqualuer	21:00:00	21:40:00	9.0
08/13/2015	5 WNV 2	Aqualuer	21:35:00	21:42:00	1.0
08/13/2015 WNV 1	5 WNV 1	Aqualuer	20:20:00	21:27:00	11.0
		Truck		Sum	45.0
				Avg	9.0
				Min	1.0
				Мах	16.0
				Grand Total	45.0

Public Relations

CMC received 9 phone calls from the residents of Fort Collins during the month of August 2015. We received 1 shutoff request at Lindenwood HOA, 4 information requests in response to the LCDHE fogging, 2 special event applications scheduled for August 14th, 1 fish request and 2 new larval site inspections which were inspected, not producing and already mapped in CMMS and on our regular inspection route.