



# CITY OF FORT COLLINS

## JUNE 2016 MONTHLY REPORT

MONTHLY REPORT: JULY 6, 2016

COLORADO MOSQUITO CONTROL

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### West Nile Virus Risk

Both The Colorado Department of Public Health & Environment (CDPHE) and Colorado State University began testing mosquito samples on June 17<sup>th</sup>, 2016. We have had only one confirmed mosquito pool infected with West Nile virus in Colorado as of July 5<sup>th</sup>, 2016. Last year this time we did not detect any positive WNV activity. In 2014 we had seen 10 confirmed mosquito pools infected with West Nile virus with 2 WN+ pools from Adams Co., 2 from Boulder Co., 1 from Mesa Co., 1 from Delta Co., and 4 WN+ pools from Weld County. At present Colorado reports a single human West Nile virus positive individual presenting with West Nile fever

Colorado State University has tested a total of 217 sample pools of mosquitoes containing 1605 *Cx. tarsalis* mosquitoes, 681 *Cx. pipiens* mosquitoes, 4 *Cx. spp* mosquitoes collected in both the Loveland and Fort Collins area as of June 30<sup>th</sup>, 2016. All mosquitoes which were collected from traps set in Fort Collins have been negative for WNV, to date. Larimer county reports one positive mosquito pool collected from trap LV-120 in Loveland, Colorado on June 29<sup>th</sup>.

There are no plans to test mosquito specimens collected from mosquito traps set in unincorporated Larimer County at this time, due to budget cutbacks at the state level.

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### Weather

Higher than average snowpack (210%) led to increased flooding along river corridors throughout northern Colorado during the first part of June. Receding floodwaters have kept larval production at a fast pace during the second half of the month but cooler than average temperatures have kept overall trap counts below historical averages. We saw an expected spike in *Cx. tarsalis* larvae occurring in the 2<sup>nd</sup> and 3<sup>rd</sup> weeks of June. The species composition of *Cx. tarsalis* mosquito larvae increased largely as a result of warm temperatures and stagnant pools of water left behind after flooding. Subsequent increases in adult *Cx. tarsalis* abundance data were observed from mosquito trapping at the end of June.

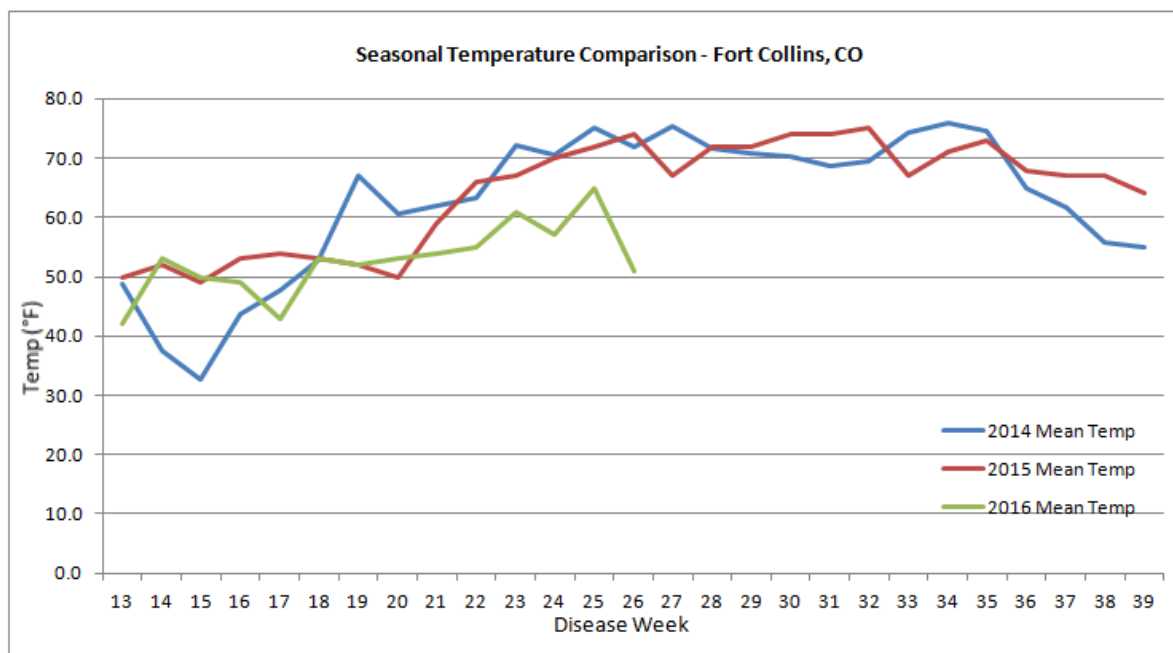
The average temperature in the month of June 2016 was 57.8 °F which is cooler than average. Total rainfall in the month of June 2016 was .17 inches. Again, much lower than the 2.36" we saw fall in June of 2015.

## 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 2,133 site inspections as part of the inspection and larviciding program in June 2016. Of the 2,133 inspections, 1,800 sites were wet (84.4%) and 784 sites were producing mosquito larvae (43.2% of the wet sites). Of the 290.4 acres treated in June 2016, 1713.4 lbs. of VectoBac (*Bti*), 1 lb. of VectoLex (*Bsph*), 0.3 lbs Altosid (Methoprene) and 9 gallons of BVA mosquito larviciding oil were applied.

CMC field technicians performed 1,988 site inspections as part of the inspection and larviciding program in June 2015. Of the 1,988 inspections, 1,658 sites were wet (83.4%) and 710 sites were producing mosquito larvae (41.4% of the wet sites). An estimated 690 million larvae were killed before emerging in June 2015. Of the 406.1 acres treated in June 2015, 3703 lbs. of VectoBac (*Bti*), 0.4 lbs. of Altosid (methoprene) and 29.3 gallons of BVA mosquito larviciding oil were applied.

CMC's backyard technician performed 35 site inspections as a part of the Fort Collins backyard program in June 2016. Of the 35 inspections, 20 sites (57.1%) were wet and 11 (55%) were producing or had the potential to produce mosquito larvae. Of the 0.1 acres treated 0.1 lbs. of altosid (methoprene) was applied.

During June 2016, CMC technicians performed site inspections at 28 storm drain grids as part of the City of Fort Collins Urban larviciding program to control larval mosquito populations in storm drains and catch basins. Of these inspections, 14 (50%) grids were found wet and 15 (57.1%) grids were treated with long term larvicide products including 0.2 lbs. of Altosid and 3.8 lbs of Vectobacc (*Bti*).

## Mosquito Population Surveillance

There were 234 light traps set in Fort Collins the month of June 2016. Of the 234 light traps set; a total of 14,929 mosquitoes were collected. There were 12,981 (87%) *Aedes spp.*, 231 (1.5%) *Culiseta spp.*, 1617 (10.8%) *Culex spp.*, and 96 (<1%) other mosquitoes collected. There was an average of 64 mosquitoes per trap night and 7 *Culex spp.* mosquitoes per trap night collected in Fort Collins during June 2016.

There were 128 light traps set in Fort Collins the month of June 2015. Of the 128 light traps set; a total of 31,061 mosquitoes were collected. There were 25,961 (84%) *Aedes spp.*, 359 (1%) *Culiseta spp.*, 4,446 (14%) *Culex spp.*, and 292 (1%) other mosquitoes collected. There was an average of 242 mosquitoes per trap night and 34 *Culex spp.* mosquitoes per trap night collected in Fort Collins during June 2015.

There were 183 light traps set in Fort Collins the month of June 2014. Of the 183 light traps set; a total of 13,594 mosquitoes were collected. There were 11,527 (84.8%) *Aedes spp.*, 304 (2.2%) *Culiseta spp.*, 1,643 (12.1%) *Culex tarsalis*, 86 (0.6%) *Culex pipiens*, 26 (0.2%) *Culex spp.*, and 8 (<1.0%) *Coquillettidia perturbans* mosquitoes collected. There was an average of 74 mosquitoes collected per trap night and 10 *Culex spp.* mosquitoes per trap night during June 2014 in the City of Fort Collins.

Sentinel traps (24) in Larimer County collected 6,461 mosquitoes in the month of June 2016. There were 5,947 (92%) *Aedes spp.*, 46 (0.7%) *Culiseta spp.*, 406 (6.3%) *Culex spp.*, and 62 (1%) other mosquitoes collected in June 2016.

There were 20 gravid traps set in Fort Collins during the month of June 2016. Gravid traps set in the City of Fort Collins collected 517 total mosquitoes. There were 14 (3%) *Aedes spp.*, 7 (1%) *Culiseta inornata*, 496 (96%) *Culex spp.*

There were 182 light traps set in the City of Loveland during June 2016. Mosquito surveillance traps set during June 2016 in Loveland collected a total of 6,736 mosquitoes. Of these there were 4,832 (72%) *Aedes spp.*, 127 (2%) *Culiseta spp.*, and 1,777 (26%) *Culex spp.* mosquitoes collected. There was an average of 37 mosquitoes collected per trap night and 10 *Culex spp.* mosquitoes per trap night during June 2016 in the City of Loveland.

There were 12 gravid traps set during the month of June 2016 in the City of Loveland. Gravid traps set in the City of Loveland collected 175 total mosquitoes. There was 56 (32%) *Aedes spp.*, 1 (<1%) *Culiseta inornata*, and 118 (67%) *Culex spp.* mosquitoes collected from gravid traps.

## Adult Mosquito Control Operations

CMC is contracted to perform mosquito adulticiding in Green Stone HOA, Willow Springs and Lindenwood HOA 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 2016.

CMC performed one application in Greenstone HOA on June 28<sup>th</sup> in response to a mosquito trap that contained more than 100 mosquitoes. We also performed an application at Willow Springs HOA on June 29<sup>th</sup>.



Customer	Subdiv/Area	Material	Start Time	End Time	Miles
<b>Greenstone HOA</b>					
Truck					
06/28/2016	Greenstone HOA	Aqua Kontrol 30 30	20:45:00	21:38:00	6.0
Truck				Sum	6.0
				Avg	6.0
				Min	6.0
				Max	6.0
<b>Willow Springs HOA</b>					
Truck					
06/29/2016	Willow Springs	Aqua Kontrol 30 30	23:09:00	23:35:00	5.0
Truck				Sum	5.0
				Avg	5.0
				Min	5.0
				Max	5.0
Grand Total					11.0

### Public Relations

CMC received 9 phone calls from the residents of Fort Collins during the month of June 2016. There were 4 new larval mosquito sites reported. Of these reports 4 were inspected and all 3 of the sites that were inspected were treated due to larval production or potential larval production. CMC received 2 calls from residents requesting information about the Fort Collins Backyard inspection program. CMC technicians inspected these site and treated as necessary. CMC received 3 requests for barrier applications at private residents which were performed on June 8<sup>th</sup>, 18<sup>th</sup> and 24<sup>th</sup>.