

FORT MORGAN MOSQUITO CONTROL PROGRAM

MONTHLY REPORT: AUGUST 2019

VECTOR DISEASE CONTROL INTERNATIONAL

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August

August brought hot and mostly dry weather to Colorado. Monsoonal moisture and occasional cold fronts allowed for rare periods of late day showers and thunderstorms. The average temperature was 75.4 degrees, 2.9 degrees above normal. There were 18 days of 90 degree or higher weather.

West Nile Virus

13 human cases of West Nile Virus were reported in August in Colorado. 6 in Delta County, 3 in Larimer County, 2 in Boulder County, and a single case in both Mesa County and Adams County.

Larval Control

Larval inspections continued in August with a total of 58 site inspections for a total of 2.3 acres treated.

Wear Your Repellent!

- Studies have shown that most human cases of WNV were preventable. Most people infected did not take precautions such as wearing long sleeves and using repellents.
- The most effective repellents contain 10%-35% DEET (N,N-diethyl-meta-toluamide).
 - DEET in high concentrations, above 50%, provides no additional protection.

Adult Control Operations/Surveillance

A total of 19.3 miles of adulticide applications took place in August.

Surveillance traps collected a total of 2,028 mosquitoes in August with 22.6% of the *Aedes* species and 77.1% of the *Culex* species.



Ground Adulticide Applications

Start Date: 08/01/2019 **End Date:** 08/31/2019

City of Fort Morgan

Month	Date	Municipality	Chemical	Mix Ratio	Trip Miles	Spray Miles	Spray Acres	Gallons Sprayed
FM Optimist Park Applications								
August 2019	08/08/2019	City of Fort Morgan	Aqua Kontrol 30-30 (73748-11)	1:5	1.2	1.2	41.8	0.3
	08/15/2019	City of Fort Morgan	Aqua Kontrol 30-30 (73748-11)	1:5	1.2	1.1	40.4	0.3
	08/22/2019	City of Fort Morgan	Aqua Kontrol 30-30 (73748-11)	1:5	1.2	1.1	41.1	0.3
	08/29/2019	City of Fort Morgan	Aqua Kontrol 30-30 (73748-11)	1:5	1.2	1.1	41.1	0.3
<i>Total Aqua Kontrol 30-30 Applied:</i>								<i>1.2</i>
FM Optimist Park Totals:					4.6	4.5	164.4	1.2
FM West of West Applications								
August 2019	08/01/2019	City of Fort Morgan	Aqua Kontrol 30-30 (73748-11)	1:5	4.1	3.6	131.6	1.0
	08/15/2019	City of Fort Morgan	Aqua Kontrol 30-30 (73748-11)	1:5	4.1	3.7	135.6	1.0

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Month	Date	Municipality	Chemical	Mix Ratio	Trip Miles	Spray Miles	Spray Acres	Gallons Sprayed
	08/22/2019	City of Fort Morgan	Aqua Kontrol 30-30 (73748-11)	1:5	4.1	3.8	139.3	1.1
	08/29/2019	City of Fort Morgan	Aqua Kontrol 30-30 (73748-11)	1:5	4.1	3.6	132.4	1.0
<i>Total Aqua Kontrol 30-30 Applied:</i>								<i>4.1</i>
<i>FM West of West Totals:</i>					<i>16.3</i>	<i>14.8</i>	<i>538.9</i>	<i>4.1</i>
<i>Grand Totals:</i>					<i>20.9</i>	<i>19.3</i>	<i>703.2</i>	<i>5.3</i>



Larval Data - Summary

Start Date: 08/01/2019 End Date: 08/31/2019

City of Fort Morgan

	Total Site Inspections	Wet Sites	% Wet	Sites Treated	Percentage Breeding*	Acres Treated
FM 0002	3.0	3.0	100.0%	0.0	0.0%	0.0
FM 0004	3.0	3.0	100.0%	0.0	0.0%	0.0
FM 0005	3.0	3.0	100.0%	0.0	0.0%	0.0
FM 0006	4.0	4.0	100.0%	2.0	50.0%	0.2
FM 0007	3.0	3.0	100.0%	0.0	0.0%	0.0
FM 0008	4.0	4.0	100.0%	1.0	25.0%	1.0
FM 0009	3.0	3.0	100.0%	0.0	0.0%	0.0
FM 0022	3.0	3.0	100.0%	2.0	66.7%	0.8
FM 0043	3.0	2.0	66.7%	1.0	50.0%	0.1
FM 0044	3.0	3.0	100.0%	0.0	0.0%	0.0
FM 0050	3.0	3.0	100.0%	1.0	33.3%	0.0
FM 0065	3.0	3.0	100.0%	1.0	33.3%	0.1
FM 0111	3.0	3.0	100.0%	0.0	0.0%	0.0
FM 0120	3.0	3.0	100.0%	1.0	33.3%	0.1
FM 0204	3.0	3.0	100.0%	0.0	0.0%	0.0
FM 0205	3.0	3.0	100.0%	0.0	0.0%	0.0
FM 0206	2.0	2.0	100.0%	0.0	0.0%	0.0
FM 0207	3.0	3.0	100.0%	0.0	0.0%	0.0
FM 0288	3.0	1.0	33.3%	0.0	0.0%	0.0
	58.0	55.0	94.8%	9.0	16.4%	2.3



Adult Trap Data - Detail

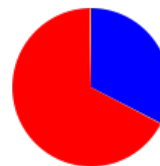
Start Date: 08/01/2019 End Date: 08/31/2019

City of Fort Morgan

Trap #	Date	Species	Count	Percent
FM-01 CDC Light Trap	Fort Morgan NW - Riverside Cemetery			
	08/01/2019	<i>Aedes dorsalis</i>	1	0.5%
	08/01/2019	<i>Aedes vexans</i>	2	1.0%
	08/01/2019	<i>Culex tarsalis</i>	92	46.9%
	08/08/2019	<i>Culex tarsalis</i>	20	10.2%
	08/15/2019	<i>Aedes dorsalis</i>	1	0.5%
	08/15/2019	<i>Culex pipiens</i>	1	0.5%
	08/15/2019	<i>Culex tarsalis</i>	7	3.6%
	08/15/2019	<i>Culiseta inornata</i>	1	0.5%
	08/22/2019	<i>Aedes dorsalis</i>	1	0.5%
	08/22/2019	<i>Culex tarsalis</i>	12	6.1%
	08/29/2019	<i>Culex pipiens</i>	5	2.6%
	08/29/2019	<i>Culex tarsalis</i>	53	27.0%
	Total			196

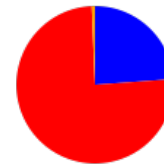


Trap #	Date	Species	Count	Percent
FM-02 CDC Light Trap	Fort Morgan SW - Brendy Joy Park			
	08/01/2019	<i>Aedes dorsalis</i>	3	0.3%
	08/01/2019	<i>Aedes vexans</i>	33	3.0%
	08/01/2019	<i>Culex pipiens</i>	2	0.2%
	08/01/2019	<i>Culex tarsalis</i>	169	15.5%
	08/08/2019	<i>Aedes vexans</i>	20	1.8%
	08/08/2019	<i>Culex tarsalis</i>	40	3.7%
	08/08/2019	<i>Culiseta inornata</i>	1	0.1%
	08/15/2019	<i>Aedes dorsalis</i>	3	0.3%
	08/15/2019	<i>Aedes vexans</i>	41	3.8%
	08/15/2019	<i>Culex pipiens</i>	8	0.7%
	08/15/2019	<i>Culex tarsalis</i>	162	14.8%
	08/15/2019	<i>Culiseta inornata</i>	1	0.1%
	08/22/2019	<i>Aedes dorsalis</i>	6	0.5%
	08/22/2019	<i>Aedes hendersoni</i>	1	0.1%
	08/22/2019	<i>Aedes trivittatus</i>	5	0.5%
	08/22/2019	<i>Aedes vexans</i>	80	7.3%
	08/22/2019	<i>Culex pipiens</i>	4	0.4%
	08/22/2019	<i>Culex tarsalis</i>	63	5.8%



Trap #	Date	Species	Count	Percent
	08/29/2019	<i>Aedes dorsalis</i>	2	0.2%
	08/29/2019	<i>Aedes hendersoni</i>	2	0.2%
	08/29/2019	<i>Aedes trivittatus</i>	1	0.1%
	08/29/2019	<i>Aedes vexans</i>	158	14.5%
	08/29/2019	<i>Anopheles freeborni</i>	1	0.1%
	08/29/2019	<i>Culex pipiens</i>	10	0.9%
	08/29/2019	<i>Culex tarsalis</i>	274	25.1%
	08/29/2019	<i>Culiseta inornata</i>	1	0.1%
		Total	1,091	

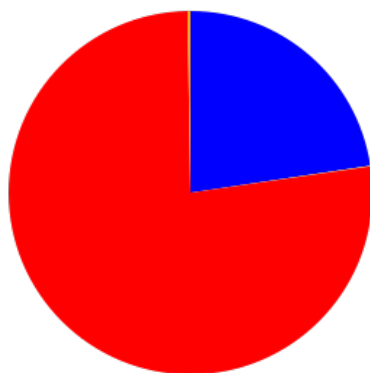
Trap #	Location	Date	Species	Count	Percent
FM-03	CDC Light Trap		Fort Morgan SW Jaycee Park		
		08/01/2019	<i>Aedes dorsalis</i>	1	0.7%
		08/01/2019	<i>Aedes vexans</i>	1	0.7%
		08/01/2019	<i>Culex pipiens</i>	1	0.7%
		08/01/2019	<i>Culex tarsalis</i>	15	9.9%
		08/08/2019	<i>Aedes vexans</i>	1	0.7%
		08/08/2019	<i>Culex tarsalis</i>	3	2.0%
		08/15/2019	<i>Aedes dorsalis</i>	1	0.7%
		08/15/2019	<i>Aedes nigromaculis</i>	5	3.3%
		08/15/2019	<i>Aedes vexans</i>	5	3.3%
		08/15/2019	<i>Culex tarsalis</i>	22	14.6%
		08/22/2019	<i>Aedes dorsalis</i>	4	2.6%
		08/22/2019	<i>Aedes vexans</i>	14	9.3%
		08/22/2019	<i>Culex pipiens</i>	1	0.7%
		08/22/2019	<i>Culex tarsalis</i>	34	22.5%
		08/22/2019	<i>Culiseta inornata</i>	1	0.7%
		08/29/2019	<i>Aedes hendersoni</i>	1	0.7%
		08/29/2019	<i>Aedes melanimon</i>	1	0.7%
		08/29/2019	<i>Aedes nigromaculis</i>	1	0.7%
		08/29/2019	<i>Aedes vexans</i>	1	0.7%
		08/29/2019	<i>Culex tarsalis</i>	38	25.2%
			Total	151	



- *Aedes-Oc*
- *Anopheles*
- *Culex*
- *Culiseta*
- *Other*

Trap #	Location	Date	Species	Count	Percent
FM-04	CDC Light Trap		Fort Morgan NE - United Presbyterian Church		

Trap #	Date	Species	Count	Percent
	08/01/2019	<i>Aedes dorsalis</i>	1	0.2%
	08/01/2019	<i>Aedes vexans</i>	1	0.2%
	08/01/2019	<i>Culex pipiens</i>	2	0.3%
	08/01/2019	<i>Culex tarsalis</i>	94	15.9%
	08/08/2019	<i>Aedes dorsalis</i>	1	0.2%
	08/08/2019	<i>Aedes vexans</i>	6	1.0%
	08/08/2019	<i>Culex pipiens</i>	2	0.3%
	08/08/2019	<i>Culex tarsalis</i>	113	19.2%
	08/15/2019	<i>Aedes dorsalis</i>	13	2.2%
	08/15/2019	<i>Aedes hendersoni</i>	2	0.3%
	08/15/2019	<i>Aedes vexans</i>	10	1.7%
	08/15/2019	<i>Culex pipiens</i>	1	0.2%
	08/15/2019	<i>Culex salinarius</i>	1	0.2%
	08/15/2019	<i>Culex tarsalis</i>	85	14.4%
	08/22/2019	<i>Aedes dorsalis</i>	11	1.9%
	08/22/2019	<i>Aedes nigromaculis</i>	1	0.2%
	08/22/2019	<i>Aedes trivittatus</i>	1	0.2%
	08/22/2019	<i>Aedes vexans</i>	13	2.2%
	08/22/2019	<i>Culex pipiens</i>	4	0.7%
	08/22/2019	<i>Culex salinarius</i>	3	0.5%
	08/22/2019	<i>Culex tarsalis</i>	129	21.9%
	08/29/2019	<i>Aedes vexans</i>	3	0.5%
	08/29/2019	<i>Culex pipiens</i>	1	0.2%
	08/29/2019	<i>Culex tarsalis</i>	92	15.6%
		Total	590	



	TOTAL	%
■ <i>Aedes-Oc</i>	459	22.6%
■ <i>Anopheles</i>	1	0.0%
■ <i>Culex</i>	1,563	77.1%
■ <i>Culiseta</i>	5	0.2%
■ <i>Other</i>	0	0.0%