CMMCP WEEKLY SURVEILLANCE REPORT



EPI week #29 July 18-24, 2021

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Central Mass. Mosquito Control Project Weekly Report- 7/18/21-7/24/21 EPI Week #29

Cumulative Surveillance Summary

Target Species	Ae. vex	Cq. per	Cs. mel	Oc. can	Culex	All Species
No. Pools	120	428	49	136	252	1730
Total Specimens	968	36799	134	1550	1619	45922
No. Pools WNV +	0	0	0	0	0	0
No. Pools EEE +	0	0	0	0	0	0

Weather Summary (Northborough, MA): The weather for this particular week averaged 70.19°F with a recorded high temperature of 88.3°F and a recorded low temperature of only 55.2°F. For this week there was also a total of 0.48 inches of rain observed. Compared to the previous week, it was approximately 1.65°F cooler on average, and rained about 1.45 inches less. There has already been 8.61 inches of rain accumulated in July, after 2.55 inches for the month of June.

CMMCP Mosquito Summary-

l arget Species	ΔFrom	ΔFrom	Predominant Trap Site(s)	
	Last Week	Last Year		
Aedes vexans	+176.8%	+77.11%	Littleton, Hopkinton	
Coquillettidia perturbans	+38.25%	+111.9%	Boxborough, Littleton, Bolton	
Culiseta melanura	+2.780%	-49.05%	Bolton, Boxborough	
Ochlerotatus canadensis	-65.92%	-38.30%	Gardner	
Culex Species	-45.50%	-11.45%	Ayer, Billerica	
All Species	+43.17%	+81.26%	Boxborough, Littleton, Bolton	

The predominant mosquito for the week was *Coquillettidia perturbans* followed by *Aedes vexans*.

General narrative:

Target Checies

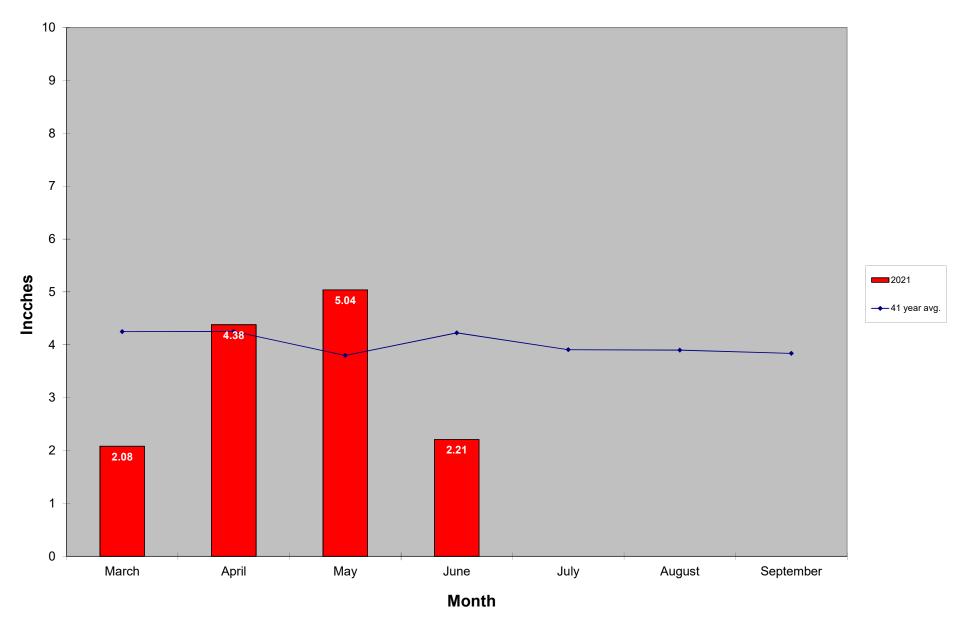
The temperatures for EPI week 29 averaged approximately 1.65°F cooler than the previous week, with 0.48 inches of precipitation observed. *Coquillettidia perturbans* was again the most abundant mosquito for the week, followed this week by *Aedes vexans*. All target mosquitoes were more abundant in EPI week 29 compared to the previous week, except for *Ochlerotatus canadensis* and *Culex species*. Compared to the 2020 season, overall mosquito surveillance numbers are up this year, primarily due to increases in *Coquillettidia perturbans* and *Aedes vexans*. All other target mosquitoes are lower this year than in 2020. Every submitted mosquito pool from EPI week 28 tested negative for mosquito-borne disease. *Aedes albopictus* surveillance using ovitraps has continued, with an additional 46 eggs submitted to the Massachusetts Department of Public Health.

Service requests are 16.7% greater than the 18-year average but a 30.9% decrease over 2020 numbers to date. However requests did increase 76% from the previous week as mosquito emergence from earlier rain events have appeared. Seasonal work crews are performing catch basins treatments for *Culex* control however full-time crews have been checking reflood areas for mosquito larvae and performing applications as needed. 4,681 catch basins were treated in Epi week 29, bringing the total to 63,678 basins to date.

Out Asian Tiger Mosquito (ATM) protocols are instituted in Epi week 28 in Lowell after confirmation of a positive specimen from one of our ovitraps. To date no additional ATM has been identified in this area, and we will continue to monitor for this invasive species throughout the remainder of the season.

Water sampling and bioassay results are still pending from the analysis laboratories for our enhanced control applications of spinosad in *Cs. melanura* crypt habitats. Data is being collected and analyzed from emergence traps in *Cq. perturbans* habitat.





*source: http://www.nrcc.cornell.edu/regional/tables/tables.html



