CMMCP WEEKLY SURVEILLANCE REPORT



EPI week #32 August 8-14, 2021

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Central Mass. Mosquito Control Project Weekly Report- 8/8/21-8/14/21 EPI Week #32

Cumulative Surveillance Summary

Target Species	Ae. vex	Cq. per	Cs. mel	Oc. can	Culex	All Species
No. Pools	247	645	91	260	538	3219
Total Specimens	2718	44439	260	3459	5552	65768
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 77.41°F with a recorded high temperature of 96.00°F and a recorded low temperature of only 65.00°F. For this week there was also a total of 0.12 inches of rain observed. Compared to the previous week, it was approximately 7.92°F warmer on average, and rained about 0.54 inches less. There has been 0.78 inches of rain accumulated in August, after 9.53 inches for the month of July.

CMMCP Mosquito Summary-

rarget Species	ΔFrom	ΔFrom	Predominant Trap Site(s)
	Last Week	Last Year	
Aedes vexans	+16.72%	+70.24%	Chelmsford, Dracut, Ashland
Coquillettidia perturbans	-14.29%	+44.71%	Wilmington, Lancaster, Ashland
Culiseta melanura	-63.01%	-8.450%	Ashland
Ochlerotatus canadensis	-21.82%	+34.51%	Northbridge, Holliston
Culex Species	+12.01%	+78.34%	Tewksbury, Ashland
All Species	-1.050%	+51.06%	Ashland, Wilmington, Tewksbury

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

General narrative:

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The temperatures for EPI week 32 averaged approximately 7.92°F warmer than the previous week, with only 0.12 inches of precipitation observed. *Coquillettidia perturbans* was again the most abundant mosquito for the week, followed by *Culex*. For target mosquitoes, only *Aedes vexans* and *Culex* were more abundant in EPI week 32 compared to the previous week, with overall numbers down slightly. Compared to the 2020 season, overall mosquito surveillance numbers are up this year, primarily due to increases in *Coquillettidia perturbans* and *Aedes vexans*. Every submitted mosquito pool from EPI week 31 tested negative for mosquito-borne disease. *Aedes albopictus* surveillance using ovitraps has continued, with an additional 546 eggs submitted to the Massachusetts Department of Public Health.

Ae. albopictus egg collections:

Epi week#	# eggs Collected	Epi week#	# eggs Collected			
23	0	28	362			
24	43	29	46			
25	530	30	21			
26*	512	31	928			
27	399	32	546			
TOTAL		3,387				
*ATM detected in Lowell						

Service requests are 39.5% greater than the 18-year average but a 9.9% decrease over 2020 numbers to date. Requests increased 3.4% from the previous week. Work crews are performing catch basins treatments for *Culex* control but seasonal staff have been switched to adult mosquito surveillance and this program is winding down for the season as *Culex* begin to enter diapause. 4,021 catch basins were treated in Epi week 32, bringing the total to 80,076 basins to date.

Out Asian Tiger Mosquito (ATM) protocols were 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.

Results of the water sampling and bioassays showed that *Spinosad* is only minimally penetrating the crypts, and the control effect declines quickly inside and outside of the crypts. Data is being collected and analyzed from emergence traps in *Cq. perturbans* habitat but initial results are showing efficacy.











