CMMCP WEEKLY SURVEILLANCE REPORT



EPI week #35 Aug. 25-31, 2019

Frank Cornine, Staff Biologist
Curtis Best, Staff Entomologist
David Mullins, Field Biologist
Tim McGlinchy, Director of Operations
Tim Deschamps, Executive Director

Central Mass. Mosquito Control Project Weekly Report- 8/25/19-8/31/19 EPI Week #35

Cumulative Surveillance Summary

| Target Species | Ae. vex | Cq. per | Cs. mel | Oc. can | Culex | All Species |
|-----------------|----------------|-----------------|---------|---------|-----------------------|-----------------|
| No. Pools | 200 | 1095 | 317 | 286 | 1038 | 5165 |
| Total Specimens | 1264 | 166597 | 2094 | 4446 | 16487 | 200345 |
| No. Pools WNV + | 0 | 0 | 0 | 0 | 9† | 9† |
| No. Pools EEE + | 2 [†] | 15 [†] | 0 | 0 | 3 [†] | 20 [†] |

[†]Pool of WNV+ *Culex* species collected in Worcester on 7/26/19

[†]Pool of WNV+ *Culex* species collected in Stow on 7/31/19

[†]Pool of EEE+ Coquillettidia perturbans collected in Southborough on 7/31/19

[†]Pool of EEE+ Coquillettidia perturbans collected in Southborough on 7/31/19

[†]Pool of EEE+ Coquillettidia perturbans collected in Westborough on 8/2/19

[†]Pool of EEE+ Coquillettidia perturbans collected in Westborough on 8/2/19

[†]Pool of WNV+ *Culex* species collected in Worcester on 8/6/19

[†]Pool of EEE+ Coquillettidia perturbans collected in Hopkinton on 8/6/19

[†]Pool of EEE+ Coquillettidia perturbans collected in Westborough on 8/8/19

[†]Pool of EEE+ Coquillettidia perturbans collected in Westborough on 8/8/19

[†]Pool of EEE+ Coquillettidia perturbans collected in Westborough on 8/8/19

[†]Pool of EEE+ Coquillettidia perturbans collected in Westborough on 8/8/19

[†]Pool of WNV+ *Culex* species collected in Worcester on 8/20/19

[†]Pool of WNV+ *Culex* species collected in Worcester on 8/20/19

[†]Pool of WNV+ *Culex* species collected in Leominster on 8/20/19

[†]Pool of EEE+ Coquillettidia perturbans collected in Southborough on 8/21/19

[†]Pool of EEE+ Coquillettidia perturbans collected in Southborough on 8/21/19

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[†]Pool of EEE+ Coquillettidia perturbans collected in Southborough on 8/21/19

[†]Pool of EEE+ Culex species collected in Southborough on 8/21/19

†Pool of EEE+ Aedes vexans collected in Southborough on 8/21/19

[†]Pool of EEE+ Aedes vexans collected in Southborough on 8/21/19

[†]Pool of EEE+ *Culex* species collected in Hudson on 8/21/19

[†]Pool of WNV+ *Culex* species collected in Holliston on 8/21/19

[†]Pool of EEE+ *Culex* species collected in Marlborough on 8/21/19

[†]Pool of WNV+ *Culex* species collected in Littleton on 8/22/19

[†]Pool of WNV+ *Culex* species collected in Auburn on 8/23/19

[†]Pool of EEE+ Coquillettidia perturbans collected in Sherborn on 8/25/19

Weather Summary (Northborough, MA): The weather for this particular week averaged 65.91°F with a recorded high temperature of 87.10°F and a recorded low temperature of only 46.20°F. For this week there was also a total of 1.42 inches of rain observed. Compared to the previous week, it was approximately 7.62°F cooler on average, and rained about 1.27 inches more. There has been 3.37 inches of rain accumulated in August, after 5.20 inches for the month of July.

CMMCP Mosquito Summary-

| rarget Species | Δ From | Δ From | Predominant Trap Site(s) | |
|---------------------------|-----------|-----------|--------------------------|--|
| | Last Week | Last Year | | |
| Aedes vexans | -21.54% | +7.940% | Devens, Natick | |
| Coquillettidia perturbans | -40.50% | +284.3% | Boxborough, Milford | |
| Culiseta melanura | +123.3% | +612.6% | Boxborough, Hopkinton | |
| Ochlerotatus canadensis | +140.0% | +135.2% | Millbury, Sherborn | |
| Culex Species | -34.74% | -50.07% | Hopkinton, Hopedale | |
| All Species | -24.84% | +133.3% | Hopkinton, Boxborough | |

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

General narrative: The temperatures for EPI week 35 averaged approximately 7.62°F cooler than the previous week, with 1.42 inches of precipitation observed. *Culiseta melanura* and *Ochlerotatus canadensis* were the only target mosquitoes that experienced an increase this surveillance week, while all others decreased. Overall there was significant reduction in the general mosquito population, influenced by a decrease in *Coquillettidia perturbans*. *Coquillettidia perturbans* was once again the most abundant mosquito species for the week, followed by *Culex*. All target species have been collected in higher numbers this year compared to last, except for *Culex*. *Coquillettidia perturbans* should continue to decrease as we enter the last weeks of the 2019 mosquito surveillance season. Surveillance for *Aedes albopictus* using ovitraps has been suspended per a request from MDPH.

Aedes albopictus Surveillance Data

| | # Ovitraps | # Eggs |
|--------------|------------|--------|
| EPI Week #22 | 31 | 4 |
| EPI Week #23 | 21 | 221 |
| EPI Week #24 | 33 | 530 |
| EPI Week #25 | 37 | 1294 |
| EPI Week #26 | 37 | 1100 |
| EPI Week #27 | - | • |
| EPI Week #28 | 35 | 3527 |
| EPI Week #29 | 35 | 1481 |
| EPI Week #30 | 35 | 1946 |
| EPI Week #31 | 35 | 2373 |
| EPI Week #32 | 25 | 941 |
| EPI Week #33 | - | |
| EPI Week #34 | - | - |
| EPI Week #35 | - | - |













