

Central Mass. Mosquito Control Project Weekly Report- 6/18/23-6/24/23 EPI Week #25

| Target Species | Ae. vex | Cq. per | Cs. mel | Oc. can | Culex | All Species |
|------------------------|---------|---------|---------|---------|-------|-------------|
| No. Pools | 82 | 54 | 26 | 122 | 148 | 1087 |
| Total Specimens | 687 | 537 | 74 | 2256 | 2265 | 9452 |
| No. Pools WNV + | 0 | 0 | 0 | 0 | 0 | 0 |
| No. Pools EEE + | 0 | 0 | 0 | 0 | 0 | 0 |

Cumulative Surveillance Summary

Weather Summary (Northborough, MA): The weather for this particular week averaged 66.26°F with a recorded high temperature of 83.70°F and a recorded low temperature of only 51.20°F. For this week there was also a total of 0.29 inches of rain observed. Compared to the previous week, it was approximately 1.55°F cooler on average, and rained about 0.51 inches less. There has been 1.29 inches of rain accumulated in June, after 2.04 inches for the month of May.

CMMCP Mosquito Summary-

| Target Species | ΔFrom | Δ From | Predominant Trap Site(s) | |
|---------------------------|-----------|-----------|----------------------------|--|
| | Last week | Last Year | | |
| Aedes vexans | -46.45% | +1591% | Lunenburg, Lancaster | |
| Coquillettidia perturbans | +222.4% | -88.77% | Shrewsbury, Dracut | |
| Culiseta melanura | -55.56% | -90.14% | Millbury, Webster, Webster | |
| Ochlerotatus canadensis | -17.43% | +164.5% | Boylston, Stow | |
| Culex Species | -71.97% | +87.35% | Marlborough, Hopedale | |
| All Species | -20 85% | -13 62% | Dracut Boylston Lunenburg | |

The predominant mosquito for the week was Ochlerotatus canadensis followed by Culex.

General narrative:

The temperatures for EPI week 25 averaged approximately 1.55°F cooler than the previous week, with 0.29 inches of precipitation observed. Overall surveillance trap collections decreased this period compared to the last, with only *Coquillettidia perturbans* showing an increase among the target species. *Coquillettidia perturbans* emergence remains much lower than in the previous year. *Ochlerotatus canadensis* became the most abundant mosquito for the week, followed by *Culex*. Increasing temperatures and the continued emergence of *Coquillettidia perturbans* should contribute to higher collections moving forward. *Aedes albopictus* surveillance using ovitraps has continued, with 649 eggs collected and submitted so far. All mosquito pools submitted in EPI week 24 to MDPH for arbovirus testing were negative.

Ae. albopictus egg collections:

| Epi week# | # eggs Collected | Epi week# | # eggs Collected | | | | |
|-------------------|---------------------|-----------|---------------------|--|--|--|--|
| | | | | | | | |
| 23 | 0 | 32 | | | | | |
| 24 | 0 | 33 | | | | | |
| 25 | 649 | 34 | | | | | |
| 26 | | 35 | | | | | |
| 27 | | 36 | | | | | |
| 28 | | 37 | | | | | |
| 29 | | 38 | | | | | |
| 30 | | 39 | | | | | |
| 31 | | 40 | | | | | |
| | | | | | | | |
| | TOTAL | 649 | | | | | |
| | | | | | | | |
| No ATM detections | | | | | | | |

Operational notes:

Service requests are 47.8% below the 20-year average and a 44.3% decrease over 2022 numbers to date. We began accepting service requests on May 29 and 3,378 requests have been closed from 4,604 total (36.2% open). Work crews began performing catch basins treatments for *Culex* control on May 22. 6,945 basins were treated in Epi week 25, with 38,075 catch basins treated to date intended to suppress *Culex* populations and lower risk of transmission from WNV by this species.





Precipitation in CMMCP Towns for EPI Week 25 (6/18-6/24/23)











Massachusetts West Nile Virus (WNV) Risk Map and Reporting

June 5, 2023

WNV Risk Level by Town





Massachusetts Eastern Equine Encephalitis (EEE) Risk Map and Reporting

June 5, 2023

EEE Risk Level by Town

