

**Central Mass. Mosquito Control Project**  
**Weekly Report- 9/30/18-10/6/18**  
**EPI Week #40**

**Cumulative Surveillance Summary**

| <b>Target Species</b>  | <b><i>Ae. vex</i></b> | <b><i>Cq. per</i></b> | <b><i>Cs. mel</i></b> | <b><i>Oc. can</i></b> | <b><i>Culex</i></b> | <b>All Species</b> |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|---------------------|--------------------|
| <b>No. Pools</b>       | 240                   | 566                   | 185                   | 195                   | 1497                | 5264               |
| <b>Total Specimens</b> | 3369                  | 47187                 | 507                   | 2240                  | 33589               | 96068              |
| <b>No. Pools WNV +</b> | 1 <sup>†</sup>        | 2 <sup>†</sup>        | 0                     | 1 <sup>†</sup>        | 155 <sup>†</sup>    | 160 <sup>†</sup>   |
| <b>No. Pools EEE +</b> | 0                     | 0                     | 0                     | 0                     | 0                   | 0                  |

- †Pool of WNV+ *Culex* species collected in Hopedale on 6/20/18
- †Pool of WNV+ *Culex* species collected in Worcester on 6/28/18
- †Pool of WNV+ *Culex* species collected in Auburn on 6/29/18
- †Pool of WNV+ *Culex* species collected in Millbury on 7/6/18
- †Pool of WNV+ *Culex* species collected in Worcester on 7/11/18
- †Pool of WNV+ *Culex* species collected in Northborough on 7/11/18
- †Pool of WNV+ *Culex* species collected in Worcester on 7/12/18
- †Pool of WNV+ *Culex* species collected in Acton on 7/12/18
- †Pool of WNV+ *Culex* species collected in Acton on 7/12/18
- †Pool of WNV+ *Culex* species collected in Auburn on 7/13/18
- †Pool of WNV+ *Culex* species collected in Ayer on 7/13/18
- †Pool of WNV+ *Culex* species collected in Blackstone on 7/17/18
- †Pool of WNV+ *Culex* species collected in Worcester on 7/19/18
- †Pool of WNV+ *Culex* species collected in Worcester on 7/19/18
- †Pool of WNV+ *Culex* species collected in Clinton on 7/19/18
- †Pool of WNV+ *Culex* species collected in Ashland on 7/19/18
- †Pool of WNV+ *Culex* species collected in Northbridge on 7/20/18
- †Pool of WNV+ *Culex* species collected in Devens on 7/20/18
- †Pool of WNV+ *Culex* species collected in Devens on 7/20/18
- †Pool of WNV+ *Culex* species collected in Berlin on 7/24/18
- †Pool of WNV+ *Culex* species collected in Webster on 7/24/18
- †Pool of WNV+ *Culex* species collected in Millville on 7/24/18
- †Pool of WNV+ *Culex* species collected in Hopedale on 7/25/18
- †Pool of WNV+ *Culex* species collected in Shrewsbury on 7/25/18
- †Pool of WNV+ *Culex* species collected in Northborough on 7/25/18
- †Pool of WNV+ *Culex* species collected in Northborough on 7/25/18
- †Pool of WNV+ *Culex* species collected in Northborough on 7/25/18
- †Pool of WNV+ *Culex* species collected in Northborough on 7/25/18
- †Pool of WNV+ *Culex* species collected in Worcester on 7/25/18
- †Pool of WNV+ *Culex* species collected in Worcester on 7/25/18
- †Pool of WNV+ *Culex* species collected in Worcester on 7/25/18
- †Pool of WNV+ *Culex* species collected in Worcester on 7/26/18
- †Pool of WNV+ *Culex* species collected in Clinton on 7/26/18
- †Pool of WNV+ *Culex* species collected in Clinton on 7/26/18
- †Pool of WNV+ *Culex* species collected in Natick on 7/26/18

†Pool of WNV+ *Culex* species collected in Lancaster on 7/20/18  
†Pool of WNV+ *Culex* species collected in Southborough on 8/1/18  
†Pool of WNV+ *Culex* species collected in Southborough on 8/1/18  
†Pool of WNV+ *Culex* species collected in Northborough on 8/1/18  
†Pool of WNV+ *Culex* species collected in Northborough on 8/1/18  
†Pool of WNV+ *Culex* species collected in Northborough on 8/1/18  
†Pool of WNV+ *Culex* species collected in Worcester on 8/1/18  
†Pool of WNV+ *Culex* species collected in Worcester on 8/1/18  
†Pool of WNV+ *Culex* species collected in Worcester on 8/1/18  
†Pool of WNV+ *Culex* species collected in Shrewsbury on 8/1/18  
†Pool of WNV+ *Culex* species collected in Hudson on 8/1/18  
†Pool of WNV+ *Culex* species collected in Clinton on 8/2/18  
†Pool of WNV+ *Culex* species collected in Worcester on 8/2/18  
†Pool of WNV+ *Culex* species collected in Worcester on 8/2/18  
†Pool of WNV+ *Culex* species collected in Boylston on 8/2/18  
†Pool of WNV+ *Culex* species collected in Auburn on 8/3/18  
†Pool of WNV+ *Culex* species collected in Ayer on 8/3/18  
†Pool of WNV+ *Culex* species collected in Ayer on 8/3/18  
†Pool of WNV+ *Culex* species collected in Wilmington on 8/7/18  
†Pool of WNV+ *Coquillettidia perturbans* collected in Sturbridge on 8/7/18  
†Pool of WNV+ *Culex* species collected in Gardner on 8/7/18  
†Pool of WNV+ *Culex* species collected in Leominster on 8/7/18  
†Pool of WNV+ *Culex* species collected in Leominster on 8/7/18  
†Pool of WNV+ *Culex* species collected in Berlin on 8/7/18  
†Pool of WNV+ *Culex* species collected in Worcester on 8/8/18  
†Pool of WNV+ *Culex* species collected in Worcester on 8/8/18  
†Pool of WNV+ *Culex* species collected in Hudson on 8/8/18  
†Pool of WNV+ *Culex* species collected in Milford on 8/8/18  
†Pool of WNV+ *Culex* species collected in Marlborough on 8/8/18  
†Pool of WNV+ *Culex* species collected in Northborough on 8/8/18  
†Pool of WNV+ *Culex* species collected in Northborough on 8/8/18  
†Pool of WNV+ *Culex* species collected in Shrewsbury on 8/8/18  
†Pool of WNV+ *Culex* species collected in Worcester on 8/9/18  
†Pool of WNV+ *Culex* species collected in Clinton on 8/9/18  
†Pool of WNV+ *Culex* species collected in Devens on 8/10/18  
†Pool of WNV+ *Culex* species collected in Devens on 8/10/18  
†Pool of WNV+ *Culex* species collected in Dracut on 8/10/18  
†Pool of WNV+ *Culex* species collected in Sturbridge on 8/14/18  
†Pool of WNV+ *Culex* species collected in Worcester on 8/15/18  
†Pool of WNV+ *Culex* species collected in Blackstone on 8/15/18  
†Pool of WNV+ *Culex* species collected in Blackstone on 8/15/18  
†Pool of WNV+ *Culex* species collected in Worcester on 8/15/18  
†Pool of WNV+ *Culex* species collected in Hopedale on 8/15/18  
†Pool of WNV+ *Culex* species collected in Hopedale on 8/15/18  
†Pool of WNV+ *Culex* species collected in Stow on 8/15/18  
†Pool of WNV+ *Culex* species collected in Southborough on 8/15/18



- †Pool of WNV+ *Culex* species collected in Shrewsbury on 8/29/18
- †Pool of WNV+ *Culex* species collected in Stow on 8/29/18
- †Pool of WNV+ *Culex* species collected in Clinton on 8/30/18
- †Pool of WNV+ *Culex* species collected in Clinton on 8/30/18
- †Pool of WNV+ *Culex* species collected in Littleton on 8/30/18
- †Pool of WNV+ *Culex* species collected in Acton on 8/30/18
- †Pool of WNV+ *Anopheles quadrimaculatus* collected in Acton on 8/30/18
- †Pool of WNV+ *Culex* species collected in Sherborn on 8/30/18
- †Pool of WNV+ *Culex* species collected in Ashland on 8/30/18
- †Pool of WNV+ *Culex* species collected in Ashland on 8/30/18
- †Pool of WNV+ *Culex* species collected in Ayer on 8/31/18
- †Pool of WNV+ *Culex* species collected in Ayer on 8/31/18
- †Pool of WNV+ *Culex* species collected in Ayer on 8/31/18
- †Pool of WNV+ *Culex* species collected in Auburn on 8/31/18
- †Pool of WNV+ *Culex* species collected in Northbridge on 8/31/18
- †Pool of WNV+ *Culex* species collected in Dracut on 8/31/18
- †Pool of WNV+ *Culex* species collected in Northbridge on 8/31/18
- †Pool of WNV+ *Culex* species collected in Hudson on 9/5/18
- †Pool of WNV+ *Culex* species collected in Worcester on 9/5/18
- †Pool of WNV+ *Culex* species collected in Worcester on 9/5/18
- †Pool of WNV+ *Culex* species collected in Shrewsbury on 9/5/18
- †Pool of WNV+ *Culex* species collected in Littleton on 9/6/18
- †Pool of WNV+ *Culex* species collected in Boylston on 9/6/18
- †Pool of WNV+ *Coquillettidia perturbans* collected in Boxborough on 9/6/18
- †Pool of WNV+ *Aedes vexans* collected in Boxborough on 9/6/18
- †Pool of WNV+ *Ochlerotatus canadensis* collected in Boxborough on 9/6/18
- †Pool of WNV+ *Culex* species collected in Lunenburg on 9/7/18
- †Pool of WNV+ *Culex* species collected in Dracut on 9/7/18
- †Pool of WNV+ *Culex* species collected in Worcester on 9/12/18
- †Pool of WNV+ *Culex* species collected in Worcester on 9/12/18
- †Pool of WNV+ *Culex* species collected in Auburn on 9/14/18
- †Pool of WNV+ *Culex* species collected in Millbury on 9/14/18
- †Pool of WNV+ *Culex* species collected in Lancaster on 9/14/18

**Weather Summary (Northborough, MA):** The weather for this particular week averaged 56.9°F with a recorded high temperature of 75.2°F and a recorded low temperature of only 43.3°F. For this week there was also a total of 0.42 inches of rain observed. Compared to the previous week, it was approximately 1.09°F cooler on average, and rained about 2.47 inches less. There has been 0.42 inches of rain accumulated in October, after 6.93 inches for the month of September.

**CMMCP Mosquito Summary-**

| Target Species      | Δ From<br>Last Week* | Δ From<br>Last Year | Predominant Trap Site(s)     |
|---------------------|----------------------|---------------------|------------------------------|
| <i>Aedes vexans</i> | -63.83%              | +528.3%             | Tewksbury, Billerica, Hudson |

|                                  |         |         |                         |
|----------------------------------|---------|---------|-------------------------|
| <i>Coquillettidia perturbans</i> | -93.75% | +145.9% | Tewksbury               |
| <i>Culiseta melanura</i>         | +55.00% | +106.3% | Westborough, Wilmington |
| <i>Ochlerotatus canadensis</i>   | -50.00% | -40.43% | Wilmington              |
| <i>Culex</i> Species             | -38.71% | +85.66% | Auburn, Wilmington      |
| All Species                      | -67.61% | +87.44% | Tewksbury, Westborough  |

The predominant mosquito for the week was *Aedes vexans*, followed by *Culex*.

\*Low late season numbers may contribute to these comparisons being not as significant as they appear

**General narrative:** The temperatures for EPI week 40 averaged approximately 1.09°F cooler than the previous week, with 0.42 inches of precipitation observed. The overall collection numbers decreased compared to the previous week, with the cumulative collections remaining significantly higher compared to last season. All target species experienced decreases this week, except for *Culiseta melanura*. The most abundant mosquito was once again *Aedes vexans* followed now by *Culex*. None of the pools from EPI week 39 tested positive for West Nile virus. The season total of WNV positive collections from the CMMCP service area remains at 160. The final number of eggs collected for *Aedes albopictus* surveillance during EPI week 39 was 2031.