Central Mass. Mosquito Control Project Weekly Report- 9/16/18-9/22/18 EPI Week #38

Cumulative Surveillance Summary

Target Species	Ae. vex	Cq. per	Cs. mel	Oc. can	Culex	All Species
No. Pools	200	558	168	191	1456	4976
Total Specimens	2985	47170	456	2234	33489	95136
No. Pools WNV +	1 [†]	2 [†]	0	1 [†]	155 [†]	160 [†]
No. Pools EEE +	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 7/1218

[†]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 7/1918

[†]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

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

```
<sup>†</sup>Pool of WNV+ Culex species collected in Hopedale on 8/15/18
<sup>†</sup>Pool of WNV+ Culex species collected in Worcester on 8/16/18
<sup>†</sup>Pool of WNV+ Culex species collected in Worcester on 8/16/18
<sup>†</sup>Pool of WNV+ Culex species collected in Natick on 8/16/18
<sup>†</sup>Pool of WNV+ Culex species collected in Littleton on 8/16/18
<sup>†</sup>Pool of WNV+ Culex species collected in Worcester on 8/16/18
<sup>†</sup>Pool of WNV+ Culex species collected in Worcester on 8/16/18
<sup>†</sup>Pool of WNV+ Culex species collected in Ashland on 8/16/18
<sup>†</sup>Pool of WNV+ Culex species collected in Northbridge on 8/17/18
<sup>†</sup>Pool of WNV+ Culex species collected in Lunenburg on 8/17/18
<sup>†</sup>Pool of WNV+ Culex species collected in Lunenburg on 8/17/18
<sup>†</sup>Pool of WNV+ Culex species collected in Lunenburg on 8/17/18
<sup>†</sup>Pool of WNV+ Culex species collected in Westborough on 8/17/18
<sup>†</sup>Pool of WNV+ Culex species collected in Westborough on 8/17/18
<sup>†</sup>Pool of WNV+ Culex species collected in Auburn on 8/17/18
<sup>†</sup>Pool of WNV+ Culex species collected in Leominster on 8/21/18
<sup>†</sup>Pool of WNV+ Culex species collected in Wilmington on 8/21/18
<sup>†</sup>Pool of WNV+ Culex species collected in Berlin on 8/21/18
<sup>†</sup>Pool of WNV+ Culex species collected in Milford on 8/22/18
<sup>†</sup>Pool of WNV+ Culex species collected in Stow on 8/22/18
<sup>†</sup>Pool of WNV+ Culex species collected in Northborough on 8/22/18
<sup>†</sup>Pool of WNV+ Culex species collected in Marlborough on 8/22/18
<sup>†</sup>Pool of WNV+ Culex species collected in Worcester on 8/22/18
<sup>†</sup>Pool of WNV+ Culex species collected in Worcester on 8/22/18
<sup>†</sup>Pool of WNV+ Culex species collected in Westborough on 8/24/18
<sup>†</sup>Pool of WNV+ Culex species collected in Auburn on 8/24/18
<sup>†</sup>Pool of WNV+ Culex species collected in Lowell on 8/24/18
<sup>†</sup>Pool of WNV+ Culex species collected in Lancaster on 8/24/18
<sup>†</sup>Pool of WNV+ Culex species collected in Ayer on 8/24/18
<sup>†</sup>Pool of WNV+ Culex species collected in Chelmsford on 8/28/18
<sup>†</sup>Pool of WNV+ Culex species collected in Billerica on 8/28/18
<sup>†</sup>Pool of WNV+ Culex species collected in Tewksbury on 8/28/18
<sup>†</sup>Pool of WNV+ Culex species collected in Tewksbury on 8/28/18
<sup>†</sup>Pool of WNV+ Culex species collected in Wilmington on 8/28/18
<sup>†</sup>Pool of WNV+ Culex species collected in Millville on 8/28/18
<sup>†</sup>Pool of WNV+ Culex species collected in Marlborough on 8/29/18
†Pool of WNV+ Culex species collected in Worcester on 8/29/18
<sup>†</sup>Pool of WNV+ Culex species collected in Worcester on 8/29/18
<sup>†</sup>Pool of WNV+ Culex species collected in Southborough on 8/29/18
<sup>†</sup>Pool of WNV+ Culex species collected in Southborough on 8/29/18
<sup>†</sup>Pool of WNV+ Culex species collected in Southborough on 8/29/18
†Pool of WNV+ Culex species collected in Southborough on 8/29/18
<sup>†</sup>Pool of WNV+ Culex species collected in Southborough on 8/29/18
<sup>†</sup>Pool of WNV+ Culex species collected in Southborough on 8/29/18
<sup>†</sup>Pool of WNV+ Culex species collected in Southborough on 8/29/18
<sup>†</sup>Pool of WNV+ Culex species collected in Southborough on 8/29/18
```

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

Weather Summary (Northborough, MA): The weather for this particular week averaged 66.5°F with a recorded high temperature of 91.4°F and a recorded low temperature of only 49.7°F. For this week there was also a total of 2.98 inches of rain observed. Compared to the previous week, it was approximately 2.45°F warmer on average, and rained about 2.04 inches more. There has been 4.04 inches of rain accumulated in September, after 2.30 inches for the month of August.

CMMCP Mosquito Summary-

. 5	Δ From Last Week	Δ From Last Year	Predominant Trap Site(s)
Aedes vexans	-80.18%	+563.2%	Dracut, Lowell

Coquillettidia perturbans	-92.25%	+146.4%	Gardner, Sturbridge
Culiseta melanura	-54.02%	+88.94%	Webster, Stow
Ochlerotatus canadensis	+809.1%	-40.54%	Tewksbury, Hopedale
Culex Species	-69.40%	+87.06%	Lowell, Tewksbury
All Species	-61.09%	+87.67%	Sturbridge, Hopedale

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

The temperatures for EPI week 38 averaged approximately 2.5°F warmer than the previous week, with 2.98 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 *Ochlerotatus canadensis*. The most abundant mosquito was once again *Aedes vexans* followed now by *Anopheles punctipennis*. Five pools from EPI week 37 tested positive for West Nile virus, all *Culex* mosquitoes. These pools were collected from Auburn, Lancaster, Millbury, and Worcester. The season total of WNV positive collections from the CMMCP service area is currently 160. The final number of eggs collected for *Aedes albopictus* surveillance during EPI week 37 was 1649.