## Central Mass. Mosquito Control Project Weekly Report- 9/2/18-9/818 EPI Week #36

## **Cumulative Surveillance Summary**

Target Species	Ae. vex	Cq. per	Cs. mel	Oc. can	Culex	All Species
No. Pools	147	536	132	167	1366	4426
<b>Total Specimens</b>	1653	47028	329	2103	32962	91849
No. Pools WNV +	0	1 <sup>†</sup>	0	0	142 <sup>†</sup>	144 <sup>†</sup>
No. Pools EEE +	0	0	0	0	0	0

<sup>†</sup>Pool of WNV+ *Culex* species collected in Hopedale on 6/20/18

<sup>†</sup>Pool of WNV+ *Culex* species collected in Worcester on 6/28/18

<sup>†</sup>Pool of WNV+ *Culex* species collected in Auburn on 6/29/18

<sup>†</sup>Pool of WNV+ *Culex* species collected in Millbury on 7/6/18

<sup>†</sup>Pool of WNV+ Culex species collected in Worcester on 7/11/18

<sup>†</sup>Pool of WNV+ *Culex* species collected in Northborough on 7/11/18

<sup>†</sup>Pool of WNV+ *Culex* species collected in Worcester on 7/12/18

<sup>†</sup>Pool of WNV+ Culex species collected in Acton on 7/1218

<sup>†</sup>Pool of WNV+ *Culex* species collected in Acton on 7/12/18

<sup>†</sup>Pool of WNV+ *Culex* species collected in Auburn on 7/13/18

<sup>†</sup>Pool of WNV+ *Culex* species collected in Ayer on 7/13/18

<sup>†</sup>Pool of WNV+ *Culex* species collected in Blackstone on 7/17/18

<sup>†</sup>Pool of WNV+ *Culex* species collected in Worcester on 7/19/18

<sup>†</sup>Pool of WNV+ *Culex* species collected in Worcester on 7/19/18

<sup>†</sup>Pool of WNV+ *Culex* species collected in Clinton on 7/19/18

<sup>†</sup>Pool of WNV+ Culex species collected in Ashland on 7/1918

<sup>†</sup>Pool of WNV+ *Culex* species collected in Northbridge on 7/20/18

<sup>†</sup>Pool of WNV+ Culex species collected in Devens on 7/20/18

<sup>†</sup>Pool of WNV+ *Culex* species collected in Devens on 7/20/18

<sup>†</sup>Pool of WNV+ *Culex* species collected in Berlin on 7/24/18

<sup>†</sup>Pool of WNV+ Culex species collected in Webster on 7/24/18

†Pool of WNV+ Culex species collected in Millville on 7/24/18

<sup>†</sup>Pool of WNV+ *Culex* species collected in Hopedale on 7/25/18

<sup>†</sup>Pool of WNV+ *Culex* species collected in Shrewsbury on 7/25/18

<sup>†</sup>Pool of WNV+ Culex species collected in Northborough on 7/25/18

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<sup>†</sup>Pool of WNV+ *Culex* species collected in Worcester on 7/26/18

<sup>†</sup>Pool of WNV+ *Culex* species collected in Clinton on 7/26/18

<sup>†</sup>Pool of WNV+ *Culex* species collected in Clinton on 7/26/18

<sup>†</sup>Pool of WNV+ *Culex* species collected in Natick on 7/26/18

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<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
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<sup>†</sup>Pool of WNV+ Culex species collected in Worcester on 8/1/18
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<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
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<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
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<sup>†</sup>Pool of WNV+ Culex species collected in Shrewsbury on 8/29/18
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**Weather Summary (Northborough, MA):** The weather for this particular week averaged 73.9°F with a recorded high temperature of 94.9°F and a recorded low temperature of only 52.3°F. For this week there was also a total of 0.12 inches of rain observed. Compared to the previous week, it was approximately 1.5°F cooler on average, and rained about 0.08 inches more. There has been 0.12 inches of rain accumulated in September, after 2.30 inches for the month of August.

## CMMCP Mosquito Summary-

rarget Species	Δ ΓΙΌΙΙΙ	Δ FIOIII	Predominant Trap Site(s)	
	Last Week	Last Year		
Aedes vexans	+141.7%	+516.3%	Lowell, Chelmsford	
Coquillettidia perturbans	-86.75%	+151.1%	Littleton	
Culiseta melanura	+30.43%	+83.24%	Northbridge	
Ochlerotatus canadensis	+300.0%	-42.89%	Devens, Boylston	
Culex Species	-67.80%	+98.27%	Worcester, Shrewsbury	
All Species	-51.64%	+93.52%	Lowell, Chelmsford	

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

**General narrative**: The temperatures for EPI week 36 averaged approximately 1.5°F cooler than the previous week, with only 0.12 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 increases this week, except for *Coquillettidia perturbans*, and *Culex* mosquitoes. The most abundant mosquito was Aedes vexans followed by *Culex* species. Thirty-four pools from EPI week 35 tested positive for West Nile virus, all *Culex* mosquitoes aside from one pool of *Anopheles quadrimaculatus*. These pools were

<sup>&</sup>lt;sup>†</sup>Pool of WNV+ Culex species collected in Stow on 8/29/18

<sup>&</sup>lt;sup>†</sup>Pool of WNV+ *Culex* species collected in Clinton on 8/30/18

<sup>&</sup>lt;sup>†</sup>Pool of WNV+ *Culex* species collected in Clinton on 8/30/18

<sup>&</sup>lt;sup>†</sup>Pool of WNV+ *Culex* species collected in Littleton on 8/30/18

<sup>&</sup>lt;sup>†</sup>Pool of WNV+ *Culex* species collected in Acton on 8/30/18

<sup>&</sup>lt;sup>†</sup>Pool of WNV+ *Anopheles quadrimaculatus* collected in Acton on 8/30/18

<sup>&</sup>lt;sup>†</sup>Pool of WNV+ *Culex* species collected in Sherborn on 8/30/18

<sup>&</sup>lt;sup>†</sup>Pool of WNV+ *Culex* species collected in Ashland on 8/30/18

<sup>&</sup>lt;sup>†</sup>Pool of WNV+ *Culex* species collected in Ashland on 8/30/18

<sup>&</sup>lt;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>lt;sup>†</sup>Pool of WNV+ Culex species collected in Aver on 8/31/18

<sup>&</sup>lt;sup>†</sup>Pool of WNV+ Culex species collected in Auburn on 8/31/18

<sup>&</sup>lt;sup>†</sup>Pool of WNV+ *Culex* species collected in Northbridge on 8/31/18

<sup>&</sup>lt;sup>†</sup>Pool of WNV+ Culex species collected in Dracut on 8/31/18

<sup>&</sup>lt;sup>†</sup>Pool of WNV+ *Culex* species collected in Northbridge on 8/31/18

collected from Acton, Ashland, Auburn, Ayer, Billerica, Chelmsford, Clinton, Dracut, Littleton, Marlborough, Millville, Northbridge, Sherborn, Shrewsbury, Southborough, Stow, Tewksbury, Wilmington, and Worcester. The season total of WNV positive collections from the CMMCP service area is currently 144. The final number of eggs collected for *Aedes albopictus* surveillance during EPI week 35 was 1638.