Central Mass. Mosquito Control Project Weekly Report- 8/12/18-8/18/18 EPI Week #33

Cumulative Surveillance Summary

Target Species	Ae. vex	Cq. per	Cs. mel	Oc. can	Culex	All Species
No. Pools	81	460	97	152	1111	3491
Total Specimens	538	44644	254	2020	29474	82644
No. Pools WNV +	0	1 [†]	0	0	71 [†]	72 [†]
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

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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
<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
<sup>†</sup>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
<sup>†</sup>Pool of WNV+ Culex species collected in Dracut on 8/10/18
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Weather Summary (Northborough, MA): The weather for this particular week averaged 73.5°F with a recorded high temperature of 93.0°F and a recorded low temperature of only 64.6°F. For this week there was also a total of 0.58 inches of rain observed. Compared to the previous week, it was approximately 4.16°F cooler on average, and rained about 0.20 inches less. There has been 2.12 inches of rain accumulated in August, after 4.55 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	-91.61%	+71.80%	Hudson, Lancaster		
Coquillettidia perturbans	-82.00%	+156.2%	Devens, Chelmsford, Boxborough		
Culiseta melanura	-71.93%	+87.60%	Lowell, Acton, Lunenburg		
Ochlerotatus canadensis	-89.47%	-44.10%	Boylston, Boxborough, Gardner		
Culex Species	-2.310%	+101.8%	Lunenburg, Westborough		
All Species	-62.66%	+92.76%	Devens, Chelmsford, Boxborough		

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

General narrative: The temperatures for EPI week 33 averaged approximately 4.16 degrees cooler than the previous week, with 0.58 inches of precipitation observed. Overall collection numbers significantly decreased compared to the previous week, although the cumulative collections remained significantly higher compared to last season. All of the target mosquitoes experienced decreases this week compared to EPI week 32. The most abundant mosquito was now *Culex* species, followed by *Coquillettidia perturbans*. Eighteen pools of *Culex* mosquitoes from EPI week 32 tested positive for West Nile virus. These pools were collected from Berlin, Clinton, Devens, Dracut, Gardner, Hudson, Leominster, Marlborough, Milford, Northborough, Shrewsbury, Wilmington, and Worcester. There was also one West Nile virus pool of *Coquillettidia perturbans* collected from Sturbridge, bringing the season total to seventy-two WNV positive collections from the CMMCP service area. The final number of eggs collected for Aedes albopictus surveillance during EPI week 32 was 1,133.