

Central Mass. Mosquito Control Project
Weekly Report- 9/24/17-9/30/17
EPI Week #39

Cumulative Surveillance Summary

Target Species	<i>Ae. vex</i>	<i>Cq. per</i>	<i>Cs. mel</i>	<i>Oc. can</i>	<i>Culex</i>	All Species
No. Pools	140	438	87	217	1150	4099
Total Specimens	572	17792	266	3476	18323	49656
No. Pools WNV +	0	0	0	0	20 [†]	20 [†]
No. Pools EEE +	0	0	0	0	0	0

[†]Pool of WNV+ *Culex* species collected in Milford on 7/27/17

[†]Pool of WNV+ *Culex* species collected in Ashland on 7/27/17

[†]Pool of WNV+ *Culex* species collected in Chelmsford on 8/1/17

[†]Pool of WNV+ *Culex* species collected in Millbury on 8/4/17

[†]Pool of WNV+ *Culex* species collected in Webster on 8/8/17

[†]Pool of WNV+ *Culex* species collected in Sturbridge on 8/8/17

[†]Pool of WNV+ *Culex* species collected in Millbury on 8/11/17

[†]Pool of WNV+ *Culex* species collected in Billerica on 8/15/17

[†]Pool of WNV+ *Culex* species collected in Milford on 8/17/17

[†]Pool of WNV+ *Culex* species collected in Fitchburg on 8/22/17

[†]Pool of WNV+ *Culex* species collected in Leominster on 8/22/17

[†]Pool of WNV+ *Culex* species collected in Dracut on 8/25/17

[†]Pool of WNV+ *Culex* species collected in Acton on 8/31/17

[†]Pool of WNV+ *Culex* species collected in Natick on 8/31/17

[†]Pool of WNV+ *Culex* species collected in Billerica on 9/6/17

[†]Pool of WNV+ *Culex* species collected in Chelmsford on 9/6/17

[†]Pool of WNV+ *Culex* species collected in Stow on 9/13/17

[†]Pool of WNV+ *Culex* species collected in Lancaster on 9/14/17

[†]Pool of WNV+ *Culex* species collected in Ayer on 9/15/17

[†]Pool of WNV+ *Culex* species collected in Devens on 9/15/17

Weather Summary (Northborough, MA): The weather for this particular week averaged 66.24°F with a recorded high temperature of 89.40°F and a recorded low temperature of only 43.10°F. For this week there was also a total of 0.04 inches of rain observed. Compared to the previous week, it was approximately 0.40°F cooler on average, and rained about 0.13 inches less. There has been 2.06 inches of rain accumulated in September, after 1.15 inches for the month of August.

CMMCP Mosquito Summary*-

Target Species	Δ From Last Week	Δ From Last Year	Predominant Trap Site(s)
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<i>Aedes vexans</i>	+21.13%	-55.10%	Gardner
<i>Coquilleltidia perturbans</i>	-62.14%	-64.42%	Gardner
<i>Culiseta melanura</i>	-70.59%	-58.51%	Holliston, Northbridge
<i>Ochlerotatus canadensis</i>	-63.64%	-33.38%	Gardner, Hopedale
<i>Culex</i> Species	-44.71%	+40.21%	Lancaster, Milford
All Species	-31.66%	-37.02%	Gardner

The predominant mosquito for the week was *Culex spp.* followed by *Oc. japonicus*

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

Epi week #38 narrative: The temperatures for EPI week 39 averaged approximately 0.40 degrees cooler than the previous week, with only 0.04 inches of precipitation observed. Overall collection numbers decreased by 31.66% from EPI week 38. All target mosquito species were collected in lower numbers from the prior surveillance period, except for *Aedes vexans*. To this point in the season, *Culex* remains the only target mosquito that has been collected in higher numbers compared to 2016. *Culex* is still the most abundant mosquito in the CMMCP service area, followed this week by *Ochlerotatus japonicus*. There were zero collections last week that tested positive for mosquito-borne disease. This was the last week of adult mosquito surveillance for the 2017 season. CMMCP ovitraps produced 421 eggs for *Aedes albopictus* surveillance.

Submitted by **Frank Cornine**, CMMCP Staff Biologist

**Central Mass. Mosquito Control Project
Weekly Report- 9/17/17-9/23/17
EPI Week #38**

Cumulative Surveillance Summary

Target Species	<i>Ae. vex</i>	<i>Cq. per</i>	<i>Cs. mel</i>	<i>Oc. can</i>	<i>Culex</i>	All Species
No. Pools	118	421	84	215	1089	3853
Total Specimens	474	17753	261	3472	18130	49059
No. Pools WNV +	0	0	0	0	20 [†]	20 [†]
No. Pools EEE +	0	0	0	0	0	0

[†]Pool of WNV+ *Culex* species collected in Milford on 7/27/17

[†]Pool of WNV+ *Culex* species collected in Ashland on 7/27/17

[†]Pool of WNV+ *Culex* species collected in Chelmsford on 8/1/17

[†]Pool of WNV+ *Culex* species collected in Millbury on 8/4/17

[†]Pool of WNV+ *Culex* species collected in Webster on 8/8/17

[†]Pool of WNV+ *Culex* species collected in Sturbridge on 8/8/17

[†]Pool of WNV+ *Culex* species collected in Millbury on 8/11/17

[†]Pool of WNV+ *Culex* species collected in Billerica on 8/15/17

[†]Pool of WNV+ *Culex* species collected in Milford on 8/17/17

[†]Pool of WNV+ *Culex* species collected in Fitchburg on 8/22/17

[†]Pool of WNV+ *Culex* species collected in Leominster on 8/22/17

[†]Pool of WNV+ *Culex* species collected in Dracut on 8/25/17

[†]Pool of WNV+ *Culex* species collected in Acton on 8/31/17

[†]Pool of WNV+ *Culex* species collected in Natick on 8/31/17

[†]Pool of WNV+ *Culex* species collected in Billerica on 9/6/17

[†]Pool of WNV+ *Culex* species collected in Chelmsford on 9/6/17

[†]Pool of WNV+ *Culex* species collected in Stow on 9/13/17

[†]Pool of WNV+ *Culex* species collected in Lancaster on 9/14/17

[†]Pool of WNV+ *Culex* species collected in Ayer on 9/15/17

[†]Pool of WNV+ *Culex* species collected in Devens on 9/15/17

Weather Summary (Northborough, MA): The weather for this particular week averaged 66.64°F with a recorded high temperature of 84.00°F and a recorded low temperature of only 59.90°F. For this week there was also a total of 0.17 inches of rain observed. Compared to the previous week, it was approximately 0.36°F cooler on average, and rained about 0.12 inches more. There has been 2.02 inches of rain accumulated in September, after 1.15 inches for the month of August.

CMMCP Mosquito Summary*-

Target Species	Δ From Last Week	Δ From Last Year	Predominant Trap Site(s)
<i>Aedes vexans</i>	+153.6%	-60.78%	Ayer, Chelmsford
<i>Coquilleltidia perturbans</i>	-52.53%	-64.50%	Stow, Holliston, Westford
<i>Culiseta melanura</i>	-59.52%	-59.38%	Webster
<i>Ochlerotatus canadensis</i>	-57.69%	-33.45%	Gardner, Hopedale
<i>Culex</i> Species	-46.46%	+39.57%	Ayer, Natick
All Species	-37.02%	-37.61%	Ayer, Natick, Stow

The predominant mosquito for the week was *Culex spp.* followed by *Cq. perturbans*

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

Epi week #38 narrative: The temperatures for EPI week 38 averaged approximately 0.36 degrees cooler than the previous week, with only 0.17 inches of precipitation observed. Overall collection numbers decreased by 37.02% from EPI week 37. All target mosquito species were collected in lower numbers from the prior surveillance period, except for *Aedes vexans*. To this point in the season, *Culex* remains the only target mosquito that has been collected in higher numbers compared to 2016. *Culex* is still the most abundant mosquito in the CMMCP service area, followed again by *Coquilleltidia perturbans*. Four additional mosquito pools collected in EPI week 37 were determined to be WNV positive. These collections were all *Culex* mosquitoes, sourced from Ayer, Devens, Lancaster, and Stow. It was the first WNV positive collection for each of these towns this season. There were 103 eggs collected from CMMCP ovitraps for *Aedes albopictus* surveillance.

For the year, we received 175% more service requests than the 14 year average (16,108 in 2017 v. 9,185 14 yr. avg.), and 5.4% more than 2016 (16,108 in 2017 v. 15,281 in 2016). The standard adulticiding program has ended due to lower nighttime temperatures, declining mosquito populations and fewer service requests. Vector spraying was done September 21 after consultation with the LBOH in Ayer, Devens, Lancaster & Stow after confirmation of WNV in *Culex*. Monitoring continues at the sites where *Ae. albopictus* was identified.

Submitted by **Frank Cornine**, CMMCP Staff Biologist

**Central Mass. Mosquito Control Project
Weekly Report- 9/10/17-9/16/17
EPI Week #37**

Cumulative Surveillance Summary

Target Species	<i>Ae. vex</i>	<i>Cq. per</i>	<i>Cs. mel</i>	<i>Oc. can</i>	<i>Culex</i>	All Species
No. Pools	97	400	79	210	1041	3623
Total Specimens	389	17648	244	3462	17757	48127
No. Pools WNV +	0	0	0	0		

For the year, we received 175% more service requests than the 14 year average (16,108 in 2017 v. 9,185 14 yr. avg.), and 5.4% more than 2016 (16,108 in 2017 v. 15,281 in 2016). The standard adulticiding program has ended due to lower nighttime temperatures, declining mosquito populations and fewer service requests. Vector spraying was done September 13 after consultation with the LBOH in Billerica and Chelmsford after confirmation of WNV in *Culex*. Monitoring continues at the sites where *Ae. albopictus* was identified.

Central Mass. Mosquito Control Project
Weekly Report- 9/3/17-9/9/17
EPI Week #36

Target Species	<i>Ae. vex</i>	<i>Cq. per</i>	<i>Cs. mel</i>	<i>Oc. can</i>	<i>Culex</i>	All Species
No. Pools	80	371	68	200	970	3363
Total Specimens	350	17431	199	3435	17104	46772
No. Pools WNV +	0	0	0	0	14 [†]	14 [†]
No. Pools EEE +	0	0	0	0	0	0

Weather Summary (Northborough, MA): The weather for this particular week averaged 63.36°F with a recorded high temperature of 87.40°F and a recorded low temperature of only 48.90°F. For this week there was also a total of 1.80 inches of rain observed. Compared to the previous week, it was approximately 3.45°F warmer on average, and rained about 1.77 inches more. There has been 1.80 inches of rain accumulated in September, after 1.15 inches for the month of August.

Target Species	Δ From Last Week	Δ From Last Year	Predominant Trap Site(s)
<i>Aedes vexans</i>	+50.00%	-52.62%	Ayer, Hopedale
<i>Coquillettidia perturbans</i>	+00.00%	-65.25%	Westborough, Hopedale, Devens
<i>Culiseta melanura</i>	+200.0%	-69.24%	Gardner

<i>Ochlerotatus canadensis</i>	+00.00%	-34.51%	Hopedale
<i>Culex</i> Species	-43.67%	+40.05%	Chelmsford, Lowell
All Species	-13.58%	-39.29%	Hopedale, Chelmsford

The predominant mosquito for the week was *Culex* spp. followed by *Oc. japonicus*

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

Epi week 36 narrative: The temperatures for EPI week 36 averaged approximately 3.45 degrees warmer than the previous week, with 1.80 inches of precipitation observed. Overall collection numbers decreased by 13.58% from EPI week 35. The only target mosquito that were collected in lower numbers from the prior surveillance period was *Culex*. To this point in the season, *Culex* remains the only target mosquito that has been collected in higher numbers compared to 2016. *Culex* is still the most abundant mosquito in the CMMCP service area, followed by *Ochlerotatus japonicus* this week. Two additional mosquito pools collected in EPI week 35 were determined to be WNV positive. These collections were all *Culex* mosquitoes, sourced from the towns of Acton and Natick. EPI week 36 also saw CMMCP ovitraps produce 163 mosquito eggs, which will be used for *Aedes albopictus* surveillance.

For the year, we received 175% more service requests than the 14 year average (16,108 in 2017 v. 9,185 14 yr. avg.), and 5.4% more than 2016 (16,108 in 2017 v. 15,281 in 2016). The standard adulticiding program has ended due to lower nighttime temperatures, declining mosquito populations and fewer service requests. Vector spraying was done September 7 after consultation with the LBOH in Acton and Natick after confirmation of WNV in *Culex*. Monitoring continues at the sites where *Ae. albopictus* was identified.

Submitted by **Frank Cornine**, CMMCP Staff Biologist

Central Mass. Mosquito Control Project Weekly Report- 8/27/17-9/2/17 EPI Week #35

Cumulative Surveillance Summary

Target Species	<i>Ae. vex</i>	<i>Cq. per</i>	<i>Cs. mel</i>	<i>Oc. can</i>	<i>Culex</i>	All Species
No. Pools	76	356	67	197	921	3233
Total Specimens	333	17369	196	3421	16808	47604
No. Pools WNV +	0	0	0	0	12 [†]	12 [†]
No. Pools EEE +	0	0	0	0	0	0

[†]Pool of WNV+ *Culex* species collected in Milford on 7/27/17

[†]Pool of WNV+ *Culex* species collected in Ashland on 7/27/17

[†]Pool of WNV+ *Culex* species collected in Chelmsford on 8/1/17

[†]Pool of WNV+ *Culex* species collected in Millbury on 8/4/17

[†]Pool of WNV+ *Culex* species collected in Webster on 8/8/17

[†]Pool of WNV+ *Culex* species collected in Sturbridge on 8/8/17

[†]Pool of WNV+ *Culex* species collected in Millbury on 8/11/17

[†]Pool of WNV+ *Culex* species collected in Billerica on 8/15/17

[†]Pool of WNV+ *Culex* species collected in Milford on 8/17/17

[†]Pool of WNV+ *Culex* species collected in Fitchburg on 8/22/17

[†]Pool of WNV+ *Culex* species collected in Leominster on 8/22/17

†Pool of WNV+ *Culex* species collected in Dracut on 8/25/17

Weather Summary (Northborough, MA): The weather for this particular week averaged 59.91°F with a recorded high temperature of 77.20°F and a recorded low temperature of only 40.70°F. For this week there was also a total of 0.03 inches of rain observed. Compared to the previous week, it was approximately 9.18°F cooler on average, and rained about 0.29 inches less. There has been 1.15 inches of rain accumulated in August, after 2.04 inches for the month of July.

CMMCP Mosquito Summary*-

Target Species **Δ From** **Δ From** **Predominant Trap Site(s)**
 Last Week **Last Year**

<i>Aedes vexans</i>	+83.33%	-48.37%	Holliston, Natick
<i>Coquillettidia perturbans</i>	+00.00%	-65.22%	Ayer
<i>Culiseta melanura</i>	-90.91%	-69.56%	Marlborough
<i>Ochlerotatus canadensis</i>	-100.0%	-34.52%	N/A
<i>Culex</i> Species	-42.75%	+42.97%	Webster, Milford
All Species	-32.27%	-39.77%	Webster, Milford, Fitchburg

The predominant mosquito for the week was *Culex* spp. followed by *Oc. triseriatus*

Epi week #35 narrative:

The temperatures for EPI week 35 averaged approximately 9.18 degrees cooler than the previous week, with only 0.03 inches of precipitation observed. Overall collection numbers decreased by 32.27% from EPI week 34. All target mosquitoes were collected in equal or lower numbers from the prior surveillance period except *Aedes vexans*. To this point in the season, *Culex* is the only target mosquito that has been collected in higher numbers compared to 2016. *Culex* has remained the most abundant mosquito in the CMMCP service area, followed by *Ochlerotatus triseriatus* this week. Three additional mosquito pools collected in EPI week 34 were determined to be WNV positive. These collections were all *Culex* mosquitoes, sourced from the towns of Dracut, Fitchburg, and Leominster. Surveillance has increased in these areas of mosquito-borne disease.

We received 175% more service requests than the 14 year average (16,108 in 2017 v. 9,185 14 yr. avg.), and 5.4% more than 2016 (16,108 in 2017 v. 15,281 in 2016). Service requests decreased 170% from Epi week 34. 155 service requests were received and 445 requests were performed in Epi week 34 with favorable weather conditions. Vector spraying was done August 31 after consultation with the LBOH in Dracut, Fitchburg & Leominster after confirmation of WNV in *Culex*. Monitoring continues at the sites where *Ae. albopictus* was identified.

Submitted by **Frank Cornine**, CMMCP Staff Biologist

Central Mass. Mosquito Control Project
Weekly Report- 8/20/17-8/26/17
EPI Week #34

Cumulative Surveillance Summary

Target Species	<i>Ae. vex</i>	<i>Cq. per</i>	<i>Cs. mel</i>	<i>Oc. can</i>	<i>Culex</i>	All Species
No. Pools	65	355	66	196	844	2965
Total Specimens	320	17368	195	3420	16265	45038
No. Pools WNV +	0	0	0	0	g†	g†

No. Pools EEE +	0	0	0	0	0	0
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†Pool of WNV+ *Culex* species collected in Milford on 7/27/17

†Pool of WNV+ *Culex* species collected in Ashland on 7/27/17

†Pool of WNV+ *Culex* species collected in Chelmsford on 8/1/17

†Pool of WNV+ *Culex* species collected in Millbury on 8/4/17

†Pool of WNV+ *Culex* species collected in Webster on 8/8/17

†Pool of WNV+ *Culex* species collected in Sturbridge on 8/8/17

†Pool of WNV+ *Culex* species collected in Millbury on 8/11/17

†Pool of WNV+ *Culex* species collected in Billerica on 8/15/17

†Pool of WNV+ *Culex* species collected in Milford on 8/17/17

Weather Summary (Northborough, MA): The weather for this particular week averaged 69.09°F with a recorded high temperature of 90.10°F and a recorded low temperature of only 47.10°F. For this week there was also a total of 0.32 inches of rain observed. Compared to the previous week, it was approximately 2.12°F cooler on average, and rained about 0.27 inches more. There has been 1.12 inches of rain accumulated in August, after 2.04 inches for the month of July.

CMMCP Mosquito Summary*-

Target Species Δ From Δ From Predominant Trap Site(s)
Last Week Last Year

<i>Aedes vexans</i>	-86.00%	-7.88%	Hudson, Millville
<i>Coquilleltidia perturbans</i>	-44.96%	-65.01%	Sturbridge, Holliston, Hopedale
<i>Culiseta melanura</i>	+43.33%	-69.68%	Holliston, Millville
<i>Ochlerotatus canadensis</i>	+16.18%	-34.53%	Millville, Hopedale
<i>Culex</i> Species	+39.49%	+50.22%	Wilmington, Sturbridge
All Species	-13.50%	-39.64%	Sturbridge, Wilmington

The predominant mosquito for the week was *Culex* spp. followed by *Cq. perturbans*

Epi week #34 narrative:

The temperatures for EPI week 34 averaged approximately 2.12 degrees cooler than the previous week, with only 0.32 inches of precipitation observed. Overall collection numbers decreased by 13.50% from EPI week 33. Despite the general decrease in mosquito population, the only target mosquitoes collected in lower numbers from the prior surveillance period were *Aedes vexans* and *Coquilleltidia perturbans*. To this point in the season, *Culex* is the only target mosquito that has been collected in higher numbers compared to 2016. *Culex* has now become the most abundant mosquito in the CMMCP service area followed by *Cq. perturbans*, which should continue to decrease moving forward. Two additional mosquito pools collected in EPI week 33 were determined to be WNV positive. These two collections were both *Culex* mosquitoes, sourced from the towns of Billerica and Milford. Milford had a previous WNV positive collection in EPI week 30, but it was from a different trap site. Recent ovitrap collections from Lowell produced three individual *Aedes albopictus* eggs.

We have received 179% more service requests than the 14 year average (15,953 in 2017 v. 8,928 14 yr. avg.), and 3.7% more than this time in 2016 (15,580 in 2017 v. 15,020 in 2016). Service requests decreased 38% from Epi week 33. 373 service requests were received and 603 requests were performed in Epi week 34 with favorable weather conditions. Vector spraying was done after consultation with the LBOH in Billerica & Milford after confirmation of WNV in *Culex*. Monitoring continues at the sites where *Ae. albopictus* was identified.

Submitted by **Frank Cornine**, CMMCP Staff Biologist

Central Mass. Mosquito Control Project
Weekly Report- 8/13/17-8/19/17
EPI Week #33

Cumulative Surveillance Summary

Target Species	<i>Ae. vex</i>	<i>Cq. per</i>	<i>Cs. mel</i>	<i>Oc. can</i>	<i>Culex</i>	All Species
No. Pools	59	342	54	191	753	2687
Total Specimens	307	16090	152	3342	14774	42618
No. Pools WNV +	0	0	0	0	7 [†]	7 [†]
No. Pools EEE +	0	0	0	0	0	0

[†]Pool of WNV+ *Culex* species collected in Milford on 7/27/17

[†]Pool of WNV+ *Culex* species collected in Ashland on 7/27/17

[†]Pool of WNV+ *Culex* species collected in Chelmsford on 8/1/17

[†]Pool of WNV+ *Culex* species collected in Millbury on 8/4/17

[†]Pool of WNV+ *Culex* species collected in Webster on 8/8/17

[†]Pool of WNV+ *Culex* species collected in Sturbridge on 8/8/17

[†]Pool of WNV+ *Culex* species collected in Millbury on 8/11/17

Weather Summary (Northborough, MA): The weather for this particular week averaged 71.21°F with a recorded high temperature of 88.70°F and a recorded low temperature of only 52.00°F. For this week there was also a total of 0.05 inches of rain observed. Compared to the previous week, it was approximately 2.30°F warmer on average, and rained about 0.07 inches less. There has been 0.80 inches of rain accumulated in August, after 2.04 inches for the month of July.

CMMCP Mosquito Summary*-

Target Species **Δ From** **Δ From** **Predominant Trap Site(s)**
 Last Week **Last Year**

<i>Aedes vexans</i>	+36.99%	+60.22%	Westford, Stow, Milford
<i>Coquilleltidia perturbans</i>	-13.94%	-67.28%	Devens, Hopkinton
<i>Culiseta melanura</i>	+15.38%	-77.18%	Stow
<i>Ochlerotatus canadensis</i>	-75.89%	-36.17%	Sturbridge, Acton, Westford
<i>Culex</i> Species	-60.09%	+57.85%	Shrewsbury, Gardner
All Species	-38.63%	-42.90%	Devens, Hopkinton

The predominant mosquito for the week was *Cq. perturbans* followed by *Culex spp.*

Epi week #33 narrative:

The temperatures for EPI week 33 averaged approximately 2.30 degrees warmer than the previous week, with only 0.05 inches of precipitation observed. Overall collection numbers decreased by 38.63% from EPI week 32. The only target mosquitoes to increase from the prior collection period were *Aedes vexans* and *Culiseta melanura*. To this point in the season, all target species have been collected in lower numbers compared to 2016 aside from *Ae. vexans* and *Culex*. This week *Coquilleltidia perturbans* was the most abundant mosquito in the CMMCP service area followed by *Culex*, although it is predicted that *Cq. perturbans* will continue to decrease as the season progresses. Three additional mosquito pools collected in EPI week 32 were determined to be WNV positive. These collections were all *Culex* mosquitoes from the towns of Webster, Sturbridge, and Millbury, which also had a WNV positive collection in EPI week 31, albeit from a different trap site.

We have received 181% more service requests than the 14 year average (15,580 in 2017 v. 8,588 14 yr. avg.), and 6.3% more than this time in 2016 (15,580 in 2017 v. 14,646 in 2016). Service requests decreased 4.27% from Epi week 32. 518 service requests were received and 432 requests were performed in Epi week 33 with favorable weather conditions. Wide area spraying was done after consultation with the LBOH in Auburn due to concerns about WNV spillover from the city of Worcester. Vector spraying was done in Millbury, Sturbridge and Webster after confirmation of WNV in *Culex* and coordination with local health officials. Monitoring continues at the site where *Ae. albopictus* was identified.

Submitted by **Frank Cornine**, CMMCP Staff Biologist

Central Mass. Mosquito Control Project Weekly Report- 8/6/17-8/12/17 EPI Week #32

Cumulative Surveillance Summary

Target Species	<i>Ae. vex</i>	<i>Cq. per</i>	<i>Cs. mel</i>	<i>Oc. can</i>	<i>Culex</i>	All Species
No. Pools	48	296	45	182	671	2396
Total Specimens	206	13762	122	3274	13681	38343
No. Pools WNV +	0	0	0	0	4 [†]	4 [†]
No. Pools EEE +	0	0	0	0	0	0

[†]Pool of WNV+ *Culex* species collected in Milford on 7/27/17

[†]Pool of WNV+ *Culex* species collected in Ashland on 7/27/17

[†]Pool of WNV+ *Culex* species collected in Chelmsford on 8/1/17

[†]Pool of WNV+ *Culex* species collected in Millbury on 8/4/17

Weather Summary (Northborough, MA): The weather for this particular week averaged 68.91°F with a recorded high temperature of 88.20°F and a recorded low temperature of only 54.50°F. For this week there was also a total of 0.12 inches of rain observed. Compared to the previous week, it was approximately 2.78°F cooler on average, and rained about 0.51 inches less. There has been 0.75 inches of rain accumulated in August, after 2.04 inches for the month of July.

CMMCP Mosquito Summary*-

Target Species	Δ From Last Week	Δ From Last Year	Predominant Trap Site(s)
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<i>Aedes vexans</i>	+192.0%	+100.0%	Lunenburg, Lowell, Westford
<i>Coquillettidia perturbans</i>	-25.08%	-71.22%	Tewksbury, Westford, Billerica
<i>Culiseta melanura</i>	+73.33%	-82.31%	Hopkinton, Lowell, Ayer
<i>Ochlerotatus canadensis</i>	+193.8%	-37.51%	Acton, Westford, Lowell
<i>Culex</i> Species	-22.91%	+85.44%	Westford, Webster
All Species	-13.91%	-46.20%	Westborough, Westford, Tewksbury

The predominant mosquito for the week was *Cq. perturbans* followed by *Culex spp.*

Epi week #32 narrative:

The temperatures for EPI week 32 averaged approximately 2.78 degrees cooler than the previous week, with 0.12 inches of precipitation observed. Overall collection numbers decreased by 13.91% from EPI week 31. The only target mosquitoes not to increase from the prior collection period were *Coquilleltidia perturbans* and *Culex*. To this point in the season, all target species have been collected in lower numbers compared to 2016 aside from *Ae. vexans* and *Culex*. This week *Cq. perturbans* was the most abundant mosquito in the CMMCP service area followed by *Culex*. *Cq. perturbans* may continue to decrease as the season progresses. Two additional mosquito pools collected in EPI week 31 were determined to be WNV positive. One collection was from a trap site in Chelmsford, with the other originating from Millbury. Additionally, *Aedes albopictus* was detected in Ayer through mosquito eggs collected in CMMCP ovitraps.

We have received 183% more service requests than the 14 year average (15,065 in 2017 v. 8,236 14 yr. avg.), and 5% more than this time in 2016 (15,065 in 2017 v. 14,340 in 2016). Service requests decreased 2.17% from Epi week 31. 537 service requests were received and 630 requests were performed in Epi week 32 with favorable weather conditions. Vector spraying was done in Chelmsford on August 9 after confirmation of WNV in *Culex* and coordination with local health officials.

Submitted by **Frank Cornine**, CMMCP Staff Biologist

Central Mass. Mosquito Control Project Weekly Report- 7/30/17-8/5/17 EPI Week #31

Cumulative Surveillance Summary

Target Species	<i>Ae. vex</i>	<i>Cq. per</i>	<i>Cs. mel</i>	<i>Oc. can</i>	<i>Culex</i>	All Species
No. Pools	41	250	38	164	579	2099
Total Specimens	133	11064	96	2992	10960	30278
No. Pools WNV +	0	0	0	0	2 [†]	2 [†]
No. Pools EEE +	0	0	0	0	0	0

[†]Pool of WNV+ *Culex* species collected in Milford on 7/27/17

[†]Pool of WNV+ *Culex* species collected in Ashland on 7/27/17

CMMCP Mosquito Summary*-

Target Species Δ From Δ From Predominant Trap Site(s)
Last Week Last Year

<i>Aedes vexans</i>	+150.0%	+116.7%	Westford, Littleton, Shrewsbury
<i>Coquilleltidia perturbans</i>	+39.95%	-75.65%	Chelmsford, Tewksbury, Marlborough
<i>Culiseta melanura</i>	-11.76%	-86.96%	Acton, Millville, Wilmington
<i>Ochlerotatus canadensis</i>	+134.2%	-43.07%	Westford, Littleton
<i>Culex</i> Species	+36.63%	+64.60%	Westford, Chelmsford
All Species	+32.29%	-54.16%	Westford, Tewksbury, Chelmsford

The predominant mosquito for the week was *Cq. perturbans* followed by *Culex spp.*

Epi week #31 narrative:

Overall collection numbers increased by 32.29% from EPI week 30. The only target mosquito species not to increase from the prior collection period were *Culiseta melanura*. To this point in

the season, all target species have been collected in lower numbers compared to 2016 aside from *Aedes vexans* and *Culex*. This week *Coquilleltidia perturbans* was the most abundant mosquito in the CMMCP service area followed by *Culex*. It is anticipated that *Cq. perturbans* will remain the most abundant mosquito for EPI week 32. Surveillance collections from the previous week resulted in the first two CMMCP mosquito pools positive for WNV, one from Ashland, the other from Milford. Both of these pools were comprised solely of *Culex* mosquitoes. Ovitrap collections by CMMCP this week produced 627 eggs for *Aedes albopictus* surveillance with no confirmations to date of the presence of this species.

We have received 185% more service requests than the 14 year average (14,528 in 2017 v. 7,864 14 yr. avg.), and 4.7% more than this time in 2016 (14,528 in 2017 v. 13,870 in 2016). Service requests increased 17.8% from Epi week 30 likely due to the news of WNV confirmations in Ashland, Milford and Worcester. 654 service requests were received and 830 requests were performed in Epi week 31 with favorable weather conditions most of the week. Additional surveillance traps have been set up in Auburn, Millbury and Shrewsbury after confirmation of WNV in Worcester. Vector spraying was done in Ashland and Milford on August 3 after confirmation of WNV in *Culex* and coordination with local health officials.

Submitted by **Frank Cornine**, CMMCP Staff Biologist

Central Mass. Mosquito Control Project Weekly Report- 7/23/17-7/29/17 EPI Week #30

Cumulative Surveillance Summary

Target Species	<i>Ae. vex</i>	<i>Cq. per</i>	<i>Cs. mel</i>	<i>Oc. can</i>	<i>Culex</i>	All Species
No. Pools	35	197	31	156	493	1798
Total Specimens	108	7463	81	2896	7545	22560
No. Pools WNV +	0	0	0	0	0	0
No. Pools EEE +	0	0	0	0	0	0

Weather Summary (Northborough, MA): The weather for this particular week averaged 65.17°F with a recorded high temperature of 83.5°F and a recorded low temperature of only 50.30°F. For this week there was also a total of 0.94 inches of rain observed. Compared to the previous week, it was approximately 11.49°F cooler on average, and rained about 0.91 inches more. There has been 2.04 inches of rain accumulated in July, after 0.54 inches for the month of June.

CMMCP Mosquito Summary*-

Target Species	Δ From Last Week	Δ From Last Year	Predominant Trap Site(s)
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<i>Aedes vexans</i>	-9.09%	+338.1%	Ayer, Hopedale
<i>Coquilleltidia perturbans</i>	+29.23%	-81.93%	Ayer, Littleton, Hopkinton
<i>Culiseta melanura</i>	+41.67%	-89.04%	Shrewsbury
<i>Ochlerotatus canadensis</i>	-73.55%	-44.20%	Hopedale
<i>Culex</i> Species	+117.7%	+28.62%	Acton, Westford
All Species	+72.80%	-63.69%	Boxborough, Westford, Ayer

The predominant mosquito for the week was *Cq. perturbans* followed by *Culex spp.*

Epi week #30 narrative:

The temperatures for EPI week 29 averaged approximately 6.97 degrees warmer than the previous week, with 0.03 inches of precipitation observed. Overall collection numbers increased by 56.54% from EPI week 28, although the only target mosquito increasing from the prior collection period was *Culex*. To this point in the season, all target species have been collected in lower numbers compared to 2016 aside from *Aedes vexans* and *Culex*. This week *Culex* was the most abundant mosquito in the CMMCP service area. It is anticipated that *Cq. perturbans* will become the most abundant mosquito for EPI week 30. Ovitrap collected by CMMCP this week produced 259 eggs for *Aedes albopictus* (ATM) surveillance – no ATM have been identified in the CMMCP service area in 2017.

We have received 193% more service requests than the 14 year average (13,319 in 2017 v. 6,913 14 yr. avg.), and 3.7% more than this time in 2016 (13,319 in 2017 v. 12,838 in 2016). Service requests increased 12.3% from Epi week 29 v week 28. 657 service requests were received and 1,508 requests were performed in Epi week 29 with favorable weather conditions all week.

Submitted by **Frank Cornine**, CMMCP Staff Biologist

Central Mass. Mosquito Control Project Weekly Report- 7/9/17-7/15/17 EPI Week #28

Cumulative Surveillance Summary

Target Species	<i>Ae. vex</i>	<i>Cq. per</i>	<i>Cs. mel</i>	<i>Oc. can</i>	<i>Culex</i>	All Species
No. Pools	29	134	21	145	317	1319
Total Specimens	97	4882	59	2857	4143	15181
No. Pools WNV +	0	0	0	0	0	0
No. Pools EEE +	0	0	0	0	0	0

Weather Summary (Northborough, MA): The weather for this particular week averaged 69.69°F with a recorded high temperature of 87.10°F and a recorded low temperature of only 56.70°F. For this week there was also a total of 0.53 inches of rain observed. Compared to the previous week, it was approximately 1.61°F cooler on average, and rained about 0.01 inches fewer. There has been 1.07 inches of rain accumulated in July, after 0.54 inches for the month of June.

CMMCP Mosquito Summary*-

Target Species Δ From Δ From Predominant Trap Site(s)
Last Week Last Year

<i>Aedes vexans</i>	+57.14%	+485.7%	Billerica, Hopedale, Marlborough
<i>Coquillettidia perturbans</i>	+53.98%	-83.46%	Tewksbury, Sturbridge
<i>Culiseta melanura</i>	+140.0%	-93.03%	Marlborough
<i>Ochlerotatus canadensis</i>	-14.84%	-42.37%	Billerica, Tewksbury
<i>Culex</i> Species	+268.7%	+16.23%	Billerica, Marlborough
All Species	+63.01%	-67.54%	Tewksbury, Billerica, Marlborough

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

Epi week 27 narrative:

The temperatures for EPI week 28 averaged approximately 1.61 degrees cooler than the previous week, with 0.53 inches of precipitation observed. Overall collection numbers increased

We have received 201% more service requests than the 14 year average (12,662 in 2017 v. 6,334 14 yr. avg.), and 4.4% more than this time in 2016 (12,662 in 2017 v. 12,127 in 2016). Service requests dropped 20% from Epi week 28 v week 27. 585 service requests were received and 1,818 requests were performed in Epi week 28 with favorable weather conditions all week.

Central Mass. Mosquito Control Project
Weekly Report- 7/2/17-7/8/17
EPI Week #27

Target Species	<i>Ae. vex</i>	<i>Cq. per</i>	<i>Cs. mel</i>	<i>Oc. can</i>	<i>Culex</i>	All Species
No. Pools	26	105	20	134	239	1120
Total Specimens	86	2891	47	2702	2978	11698
No. Pools WNV +	0	0	0	0	0	0
No. Pools EEE +	0	0	0	0	0	0

Target Species	Δ From Last Week	Δ From Last Year	Predominant Trap Site(s)
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<i>Aedes vexans</i>	+250.0%	+407.1%	Leominster, Gardner
<i>Coquillettidia perturbans</i>	+141.2%	-88.55%	Billerica, Millville
<i>Culiseta melanura</i>	+400.0%	-94.93%	Hudson, Hopedale
<i>Ochlerotatus canadensis</i>	-19.82%	-38.37%	Leominster, Hopedale
<i>Culex</i> Species	-56.83%	+15.97%	Marlborough, Hopedale
All Species	+12.54%	-71.67%	Billerica

The temperatures for EPI week 27 averaged approximately 2.87 degrees warmer than the previous week, with 0.54 inches of precipitation observed. Overall collection numbers increased by 12.54% from EPI week 26, with all target species increasing from the prior collection with the exception of *Ochlerotatus canadensis* and *Culex*. Compared to the 2016, all target species have been collected in lower numbers to this point in the season aside from *Aedes vexans* and *Culex*.

Coquillettidia perturbans is now the most abundant mosquito in the CMMCP service area, with *Culex* the second most abundant. *Cq. perturbans* will likely remain the most abundant mosquito during the month of July. Early season mosquito species continue to decline as the season moves forward.

We have received 213% more service requests than the 14 year average (12,077 in 2017 v. 5,672 14 yr. avg.), and 4.8% more than this time in 2016 (12,077 in 2017 v. 11,513 in 2016). Service requests dropped 58% from Epi week 27 v week 26. 703 service requests were received and 1,376 requests were performed in Epi week 27 with favorable weather conditions and despite a shortened week due to the holiday.

*Submitted by **Frank Cornine**, CMMCP Staff Biologist*

Central Mass. Mosquito Control Project
Weekly Report- 6/25/17-7/1/17
EPI Week #26

Cumulative Surveillance Summary

Target Species	<i>Ae. vex</i>	<i>Cq. per</i>	<i>Cs. mel</i>	<i>Oc. can</i>	<i>Culex</i>	All Species
No. Pools	24	78	15	120	205	954
Total Specimens	79	1598	42	2520	2662	9562
No. Pools WNV +	0	0	0	0	0	0
No. Pools EEE +	0	0	0	0	0	0

Weather Summary (Northborough, MA): The weather for this particular week averaged 68.43°F with a recorded high temperature of 89.20°F and a recorded low temperature of only 49.40°F. For this week there was also a total of 0.34 inches of rain observed. Compared to the previous week, it was approximately 6.16°F cooler on average, and rained about 0.23 inches more. There was 0.54 inches of rain accumulated in June, after 4.68 inches for the month of May.

CMMCP Mosquito Summary*-

Target Species	Δ From Last Week	Δ From Last Year	Predominant Trap Site(s)
<i>Aedes vexans</i>	-75.00%	+200.0%	Tewksbury, Hudson
<i>Coquilleltidia perturbans</i>	+267.1%	-95.36%	Tewksbury, Westborough
<i>Culiseta melanura</i>	-100.0%	-100.0%	N/A
<i>Ochlerotatus canadensis</i>	-25.08%	-63.45%	Auburn, Hopedale
<i>Culex</i> Species	-12.65%	+25.34%	Auburn, Natick
All Species	+25.12%	-86.97%	Tewksbury, Auburn

The predominant mosquito for the week was *Culex spp.* followed by *Coquilleltidia perturbans*.

Week 26 narrative:

The temperatures for EPI week 26 averaged approximately 6.16 degrees cooler than the previous week, with only 0.34 inches of precipitation observed. Overall collection numbers increased by 25.12% from EPI week 25, with the only target species increasing from the prior collection period being *Coquillettidia perturbans*. All other target species, *Aedes vexans*, *Culiseta melanura*, *Culex*, and *Ochlerotatus canadensis*, were collected in lower number from EPI week 25. *Culex* is now the most abundant mosquito in the CMMCP service area, with *Cq. perturbans* remaining the second most abundant. *Cq. perturbans* will likely become the most

abundant mosquito during the month of July. Early season mosquito species continue to decline as the season moves forward.

We have received 227% more service requests than the 15 year average (11,374 in 2017 v. 5,005 15 yr. avg.), and 5.2% more than this time in 2016 (11,374 in 2017 v. 10,810 in 2016). Service requests dropped 25.1% from Epi week 26 v week 25. 1,111 service requests were received and 2,215 requests were performed in Epi week 26 with favorable weather conditions.

Early season catch basin treatments totaling 28,308 have ended in all member communities. We applied in last year's WNV areas and continued into our urban centers. Standard in-season treatments will begin in a few weeks. Our tire program is on hiatus, but we collected 1,432 tires so far this year. Our ditch maintenance and beaver mitigation programs are also on hiatus but a few projects are planned for this summer.

Submitted by **Frank Cornine**, CMMCP Staff Biologist

**Central Mass. Mosquito Control Project
Weekly Report- 6/18/17-6/24/17
EPI Week #25**

Cumulative Surveillance Summary

Target Species	<i>Ae. vex</i>	<i>Cq. per</i>	<i>Cs. mel</i>	<i>Oc. can</i>	<i>Culex</i>	All Species
No. Pools	22	56	15	103	131	728
Total Specimens	77	1062	42	2293	1929	7664
No. Pools WNV +	0	0	0	0	0	0
No. Pools EEE +	0	0	0	0	0	0

Weather Summary (Northborough, MA): The weather for this particular week averaged 74.59°F with a recorded high temperature of 90.50°F and a recorded low temperature of only 54.70°F. For this week there was also a total of 0.11 inches of rain observed. Compared to the previous week, it was approximately 2.59°F warmer on average, and rained about 0.05 inches more. There has been 0.20 inches of rain accumulated in June, after 4.68 inches for the month of May.

CMMCP Mosquito Summary*-

Target Species Δ From Δ From Predominant Trap Site(s)
Last Week Last Year

<i>Aedes vexans</i>	+29.63%	+600.0%	Millbury
<i>Coquillettidia perturbans</i>	+820.2%	-81.80%	Lowell, Littleton
<i>Culiseta melanura</i>	-76.92%	-97.73%	Hopkinton, Leominster
<i>Ochlerotatus canadensis</i>	+120.0%	+47.53%	Lowell, Millbury
<i>Culex</i> Species	-7.330%	-5.810%	Berlin, Hopedale
All Species	+52.98%	-52.30%	Lowell, Millbury

The predominant mosquito for the week was *Ochlerotatus canadensis* followed by *Coquillettidia perturbans*.

Week 25 narrative:

The temperatures for EPI week 25 averaged approximately 2.59 degrees warmer than the previous week, with only 0.11 inches of precipitation observed. Overall collection numbers increased by 52.98% from EPI week 24, with *Aedes vexans*, *Coquillettidia perturbans*, and

We have received 240% more service requests than the 14 year average (10,263 in 2017 v. 4,263 14 yr. avg.), and 4.8% more than this time in 2016 (10,263 in 2017 v. 9,784 in 2016). Service requests dropped 67.9% from Epi week 25 v week 24. 1,390 service requests were received and 1,812 requests were performed in Epi week 25 despite rain that cancelled some spray operations.

Submitted by **Frank Cornine**, CMMCP Staff Biologist

Cumulative Surveillance Summary

Weather Summary (Northborough, MA): The weather for this particular week averaged 72.00°F with a recorded high temperature of 96.20°F and a recorded low temperature of only 48.90°F. For this week there was also a total of 0.06 inches of rain observed. Compared to the previous week, it was approximately 12.16°F warmer on average, and rained about 0.05 inches more. There has been 0.09 inches of rain accumulated in June, after 4.68 inches for the month of May.

Target Species	Δ From Last Week	Δ From Last Year	Predominant Trap Site(s)
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The predominant mosquito for the week was *Culex spp.* followed by *Ochlerotatus canadensis*.

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

Week 24 Narrative:

The temperatures for EPI week 24 averaged approximately 12.16 degrees warmer than the previous week, with only 0.06 inches of precipitation observed. Overall collection numbers were significantly higher than EPI week 23, but lower than last season for the long-term historical trap sites. All target species experienced significant increases this week. *Culex species* was the most abundant mosquito, followed by *Ochlerotatus canadensis*. *Coquillettidia perturbans* has now been collected in the CMMCP surveillance traps and should continue to increase over the next several weeks. Overall collections numbers should also increase because of this additional *Cq. perturbans* emergence.

We have received 259% more service requests than the 14 year average (8,873 in 2017 v. 3,427 14 yr. avg.), and 1.5% more than this time in 2016 (8,873 in 2017 v. 8,738 in 2016). The standard adulticiding program is underway but rain and cool temperatures have cancelled some spray operations.

Early season catch basin treatments totaling 28,308 have ended in all member communities. We applied in last year's WNV areas and continued into our urban centers. Standard in-season treatments will begin in a few weeks. Our tire program is on hiatus, but we collected 1,432 tires so far this year. Our ditch maintenance and beaver mitigation programs are also on hiatus but a few projects are planned for this summer.

Submitted by **Frank Cornine**, CMMCP Staff Biologist

Central Mass. Mosquito Control Project Weekly Report- 6/4/17-6/10/17 EPI Week #23

Cumulative Surveillance Summary

Target Species	<i>Ae. vex</i>	<i>Cq. per</i>	<i>Cs. mel</i>	<i>Oc. can</i>	<i>Culex</i>	All Species
No. Pools	4	1	8	29	19	206
Total Specimens	15	1	26	424	140	1503
No. Pools WNV +	0	0	0	0	0	0
No. Pools EEE +	0	0	0	0	0	0

Weather Summary (Northborough, MA): The weather for this particular week averaged 59.84°F with a recorded high temperature of 85.70°F and a recorded low temperature of only 45.40°F. For this week there was also a total of 0.01 inches of rain observed. Compared to the previous week, it was approximately 1.05°F warmer on average, and rained about 0.34 inches less. There has been 0.03 inches of rain accumulated in June, after 4.68 inches for the month of May.

CMMCP Mosquito Summary*-

Target Species	Δ From Last Week	Δ From Last Year	Predominant Trap Site(s)
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<i>Aedes vexans</i>	+00.00%	+00.00%	N/A
<i>Coquillettidia perturbans</i>	+00.00%	-100.0%	N/A
<i>Culiseta melanura</i>	+100.0%	-91.67%	Tewksbury, Stow

<i>Ochlerotatus canadensis</i>	-78.57%	-99.39%	Chelmsford, Natick
<i>Culex</i> Species	+100.0%	+200.0%	Hopedale, Webster
All Species	-66.44%	-96.04%	Chelmsford

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

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

Week 23 Narrative:

The temperatures for EPI week 23 averaged approximately 1.05 degrees warmer than the previous week, with 0.01 inches of precipitation observed. Overall collection numbers were lower than EPI week 22, and also lower than last season for the long-term historical trap sites. *Culiseta melanura* and *Culex spp.* experienced increases this week. *Ochlerotatus canadensis* was the most abundant species, followed by *Ochlerotatus abserratus*. *Coquillettidia perturbans* should begin to be collected in the CMMCP surveillance traps. Overall collections numbers will increase with additional emergence along with the high temperatures anticipated for EPI week 24.

During our first 2 weeks we received 255% more service requests than the 14 year average (6,539 in 2017 v. 2,564 14 yr. avg.), but 16.3% less than this time in 2016 (6,539 in 2017 v. 7,611 in 2016). The standard adulticiding program began June 5 but weather (rain and cool temps) cancelled the first 2 night's applications. 7 crews came in for overtime on Friday night to make up some of the backlog.

Early season catch basin treatments totaling 28,308 have ended in all member communities. We applied in last year's WNV areas and continued into our urban centers. Standard in-season treatments will begin in a few weeks. Our tire program is on hiatus, but we collected 1,432 tires so far this year. Our ditch maintenance and beaver mitigation programs are also on hiatus but a few projects are planned for this summer.

Submitted by **Frank Cornine**, CMMCP Staff Biologist

Central Mass. Mosquito Control Project Weekly Report- 5/28/17-6/3/17 EPI Week #22

Cumulative Surveillance Summary

Target Species	<i>Ae. vex</i>	<i>Cq. per</i>	<i>Cs. mel</i>	<i>Oc. can</i>	<i>Culex</i>	All Species
No. Pools	0	0	6	4	15	62
Total Specimens	0	0	24	16	132	538
No. Pools WNV +	0	0	0	0	0	0
No. Pools EEE +	0	0	0	0	0	0

Weather Summary (Northborough, MA): The weather for this particular week averaged 58.79°F with a recorded high temperature of 76.70°F and a recorded low temperature of only 43.70°F. For this week there was also a total of 0.35 inches of rain observed. Compared to the previous week, it was approximately 2.58°F cooler on average, and rained about 1.30 inches less. There has been 0.02 inches of rain accumulated in June, after 4.68 inches for the month of May.

CMMCP Mosquito Summary*-

Target Species	Δ From Last Week	Δ From Last Year	Predominant Trap Site(s)
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<i>Aedes vexans</i>		+00.00%	N/A
<i>Coquillettidia perturbans</i>		-100.0%	N/A
<i>Culiseta melanura</i>		+500.0%	Blackstone, Holliston
<i>Ochlerotatus canadensis</i>		-92.20%	Holliston, Tewksbury
<i>Culex</i> Species		+1000%	Hudson
All Species		-68.03%	Tewksbury, Hudson

The predominant mosquito for the week was *Culiseta morsitans* followed by *Culex* species.

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

Week 22 Narrative:

This was the first week of the 2017 CMMCP Mosquito Surveillance Program. The temperatures for EPI week 22 averaged 58.79°F, which was approximately three degrees cooler than the previous week. It also rained 0.35 inches, putting the final precipitation total for the month of May at 4.68 inches. Currently *Culiseta morsitans* is the predominant mosquito in the CMMCP service area, with *Culex species* second. There were significant *Ochlerotatus abserratus* collected in the surveillance traps as well. Increases in temperature coupled with additional emergence will likely cause surveillance collection numbers to rise as the season continues. Specimens collected in EPI week 23 will be pooled for arbovirus testing by the MDPH.

During our first week we received 270% more service requests than the 14 year average, but 44% less than this time in 2016. The standard adulticiding program will begin June 5 weather permitting.

Early season catch basin treatments totaling 18,613 have begun in all member communities. We started in 2016 WNV areas, continued into our urban centers, and will spread out from there. Our tire program is on hiatus, but we collected 1,432 tires so far this year.

Submitted by **Frank Cornine**, CMMCP Staff Biologist
