## CMMCP WEEKLY SURVEILLANCE REPORT



> EPI week \#34 Aug. $17-23,2014$

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## Central Mass. Mosquito Control Project <br> Weekly Report- 8/17/14-8/23/14 <br> EPI Week \#34

Cumulative Surveillance Summary

| Target Species | Ae. vex | Cq. per | Cs. mel | Oc. can | Culex | All <br> Species |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| No. Pools | 10 | 145 | 43 | 39 | 614 | 1152 |
| Total Specimens | 112 | 6815 | 227 | 342 | 11196 | 20472 |
| No. Pools WNV + | 0 | 0 | 0 | 0 | $1^{\dagger}$ | $1^{\dagger}$ |
| No. Pools EEE + | 0 | 0 | 0 | 0 | 0 | 0 |

${ }^{\dagger}$ Pool of WNV+ Culex Species collected in Clinton on 7/3/13

Weather Summary (Northborough, MA): The weather for this particular week averaged $65.64^{\circ} \mathrm{F}$ with a recorded high temperature of $83.8^{\circ} \mathrm{F}$ and a recorded low temperature of only $48.9^{\circ} \mathrm{F}$. For this week there was also a total of 0.20 inches of rain observed. Compared to the previous week, it was approximately $1.99^{\circ} \mathrm{F}$ cooler on average, and rained about 1.56 inches less. There has been 2.10 inches of rain accumulated in August, while the total rainfall for the month of July was 3.26 inches.

Service Request Summary: For the year we have received 60\% more requests than average; 13,544 requests to date compared to the 11 year average of 8,479 . Requests were $15.3 \%$ more than the 2013 totals for the same time frame, 11,739 in 2013 against 13,544 in 2014. Service requests decreased 20\% from EPI week 33 to Epi week 34 for 2014 (328 vs. 274).

CMMCP Mosquito Summary*-

| Target Species |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| $\boldsymbol{\Delta}$ From <br> Last Week |  |  |  | $\boldsymbol{\Delta}$ From <br> Last Year | Predominant Trap Site(s) |
| Aedes vexans $+100.0 \%$ $+00.00 \%$ Tewksbury, Webster <br> Coquillettidia perturbans $-66.16 \%$ $-66.50 \%$ Webster <br> Culiseta melanura $+50.00 \%$ $-25.00 \%$ Holliston <br> Ochlerotatus canadensis $-66.67 \%$ $+00.00 \%$ Leominster <br> Culex Species $-51.95 \%$ $-62.63 \%$ Holliston, Auburn <br> All Species $-55.63 \%$ $-60.57 \%$ Holliston, Webster, Auburn |  |  |  |  |  |

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

General narrative: The cooling trend continued this week with EPI week 34 being several degrees lower than the previous week, while experiencing only 0.20 inches of rain. This accumulated rainfall was significantly lower than EPI week 33, which had approximately 1.76 inches. Unlike the previous week, the overall collection numbers
decreased at historical trap sites, primarily due to lower observations of Coquillettidia perturbans and Culex mosquitoes. There were multiple Aedes vexans collected at these sites during EPI week 34, which may be a result of the heavy rains experienced the prior surveillance period. All of our target species were present in lower or equal levels compared to the corresponding 2013 collection period. At the historical CDC trap locations, Cq. perturbans was again the principal species followed by Culex, but when all trap types are taken into consideration, these two switch predominance. Ae. vexans and similar species may continue to emerge following the significant rain event of the previous week, while Cq. perturbans are expected to continue their decline. Supplemental CO2 baited CDC traps are continuing to be deployed throughout the CMMCP service area.

2014 Mass. Rainfall Data vs. 34 Year Average*

*Source: Northeast Regional Climate Center: http://www.nrcc.cornell.edu/page_summaries.html

*Source: CMMCP Weather Station - Northborough, MA


Error bars show approx. number of requests if we had 40 cities and towns over the 10 year average

2014 Rainfall vs. Requests


