

CMMCP WEEKLY SURVEILLANCE REPORT



EPI week #24
Jun. 12 – 18, 2016

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Central Mass. Mosquito Control Project
Weekly Report- 6/12/16-6/18/16
EPI Week #24

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 | 61 | 6 | 33 | 61 | 223 |
| Total Specimens | 0 | 2298 | 22 | 1523 | 1160 | 7539 |
| 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 66.83°F with a recorded high temperature of 85.50°F and a recorded low temperature of only 51.00°F. There was no significant precipitation observed this week. Compared to the previous week, it was approximately 3.24°F warmer on average, and rained about 1.20 inches less. There has been 1.20 inches of rain accumulated in June, after 2.25 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> | +00.00% | -100.0% | N/A |
| <i>Coquillettidia perturbans</i> | +4.450% | +334.6% | Dracut, Milford, Shrewsbury |
| <i>Culiseta melanura</i> | -61.54% | -95.50% | Berlin, Tewksbury |
| <i>Ochlerotatus canadensis</i> | -50.93% | +109.7% | Webster, Westborough |
| <i>Culex</i> Species | -100.0% | -100.0% | Berlin, Clinton, Northbridge |
| All Species | -15.59% | +193.5% | Webster, Leominster, Berlin |

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

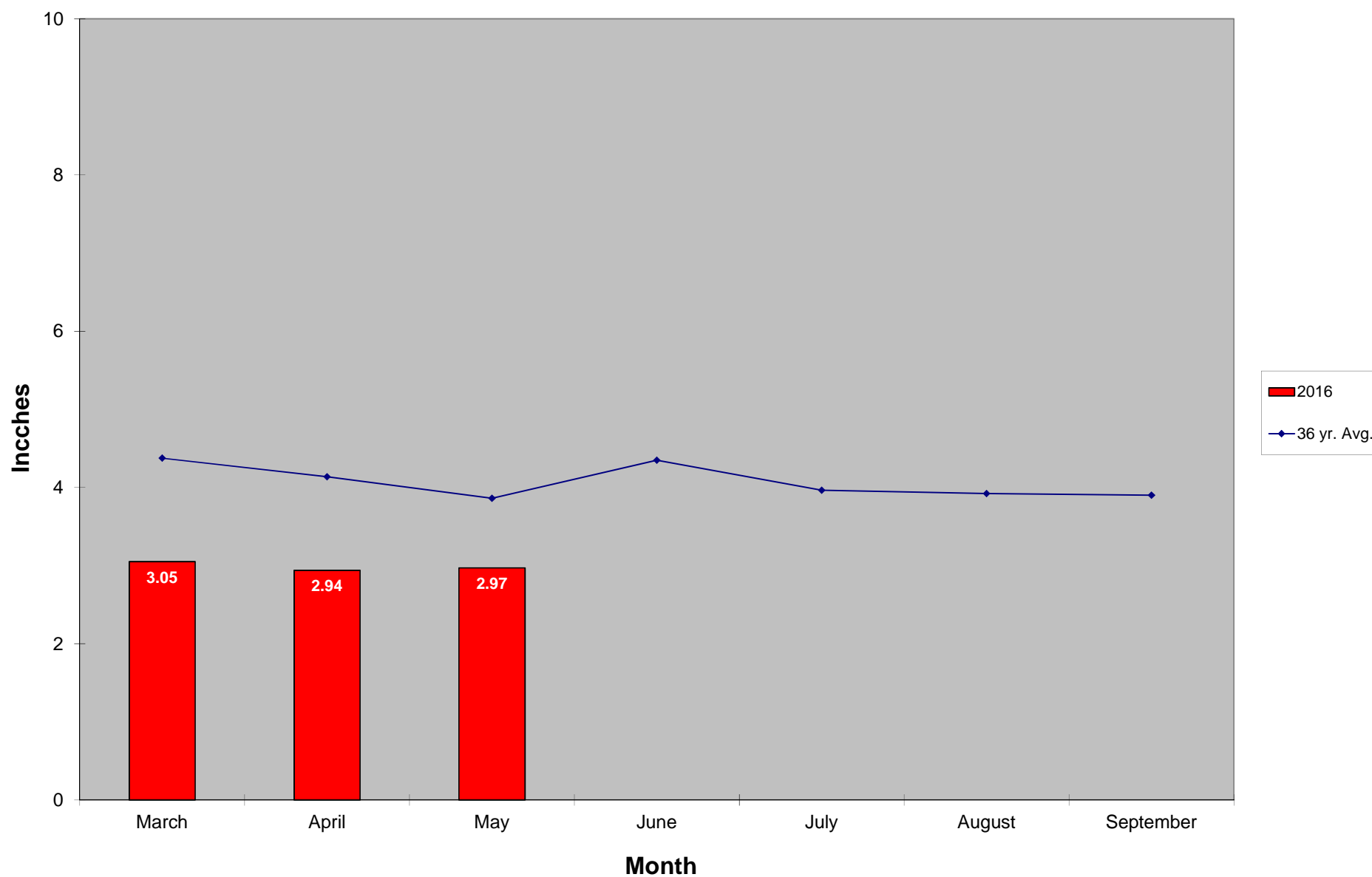
*Low early season numbers may contribute to these comparisons being not as significant as they appear

The temperatures for EPI week 24 averaged approximately 3.25 degrees warmer than the previous week, with no significant precipitation observed. Overall collection numbers were lower than EPI week 23, with only *Coquillettidia perturbans* displaying increases from the prior collection period. *Culiseta melanura*, *Ochlerotatus canadensis*, and *Culex spp.* were all present in lower numbers from the previous week. *Cq. perturbans* has overtaken *Oc. canadensis* as the most abundant species in the CMMCP service area, with *Oc. canadensis* now becoming the second most abundant species. With additional emergence, *Cq. perturbans* should remain a predominant species for the majority of the season. Overall collections numbers will likely increase with further emergence of this

species as well. *Aedes vexans* has yet to be collected by the CMMCP surveillance program this season.

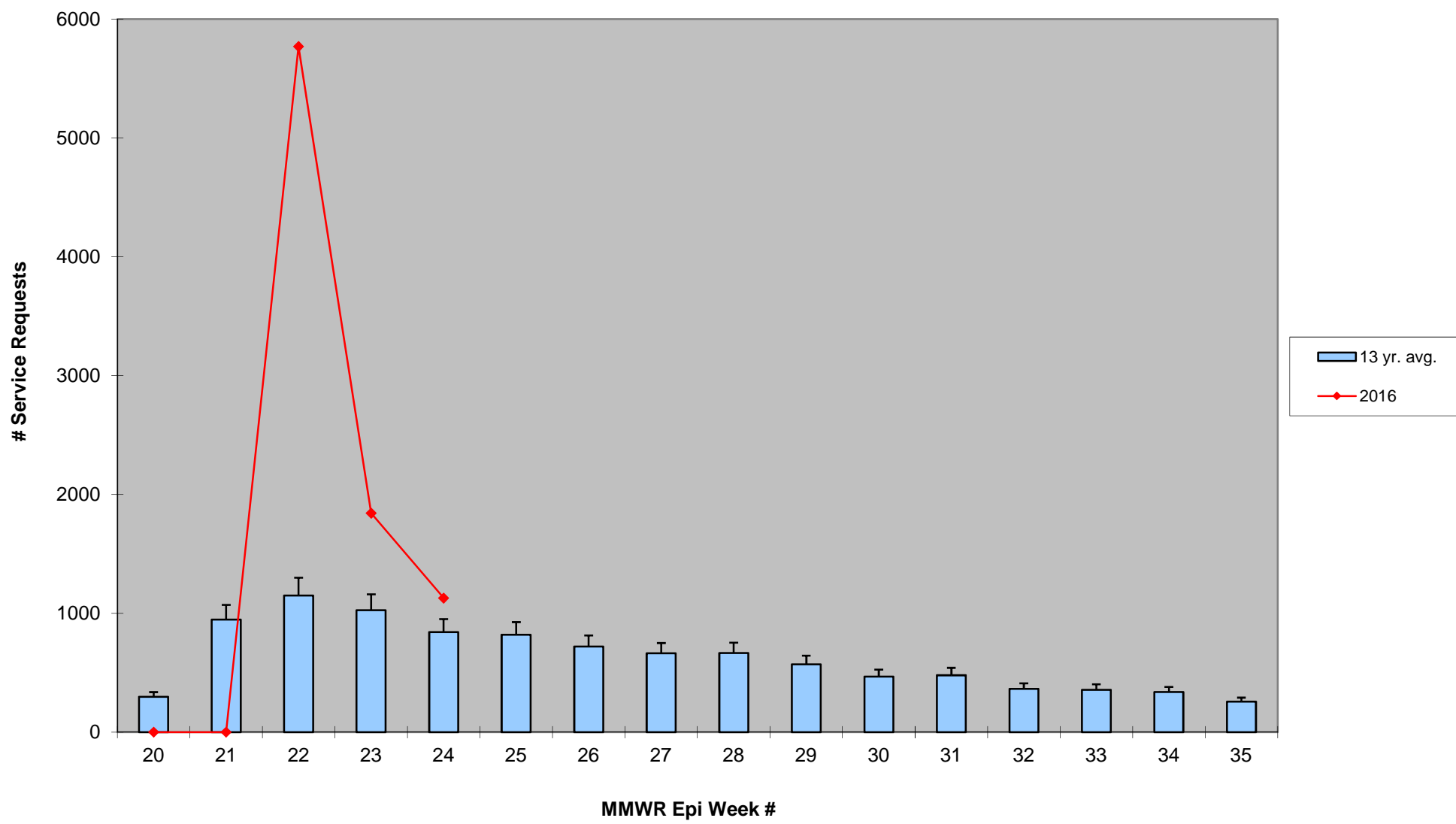
For the year we received 205% more service requests than average; 8,738 requests compared to the 13 year average of 4,264. Service requests are 7.4% behind 2015 numbers, 8,736 in Epi week 24 compared to 9,386 in the same week in 2015. Early season catch basin treatments were performed in 2015 WNV virus areas, as well as in our inner cities, totaling 23,538. Basin treatments will continue in a few weeks. Our tire collection and ditch maintenance programs are currently on hiatus.

2016 Mass. Rainfall Data vs. 36 Year Average*



*source: <http://www.nrcc.cornell.edu/regional/tables/tables.html>

ULV Service Request History Comparison 2003-2016



2016 Rainfall vs. Requests

