

CMMCP WEEKLY SURVEILLANCE REPORT



EPI week #25
Jun. 19 – 25, 2016

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Central Mass. Mosquito Control Project
Weekly Report- 6/19/16-6/25/16
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	1	113	10	49	96	361
Total Specimens	5	7557	154	2394	2073	15336
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 69.10°F with a recorded high temperature of 87.70°F and a recorded low temperature of only 49.60°F. There was only 0.07 inches of precipitation observed this week. Compared to the previous week, it was approximately 2.27°F warmer on average, and rained 0.07 inches more. There has been 1.27 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)
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<i>Aedes vexans</i>	+500.0%	-37.50%	Holliston
<i>Coquillettidia perturbans</i>	+884.4%	+1146%	Webster, Leominster, Berlin
<i>Culiseta melanura</i>	+1660%	+252.0%	Tewksbury, Wilmington, Holliston
<i>Ochlerotatus canadensis</i>	+114.8%	+544.3%	Webster, Berlin, Hopedale
<i>Culex</i> Species	+13000%	+351.7%	Leominster, Westborough, Holliston
All Species	+326.3%	+893.6%	Webster, Berlin, Leominster

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

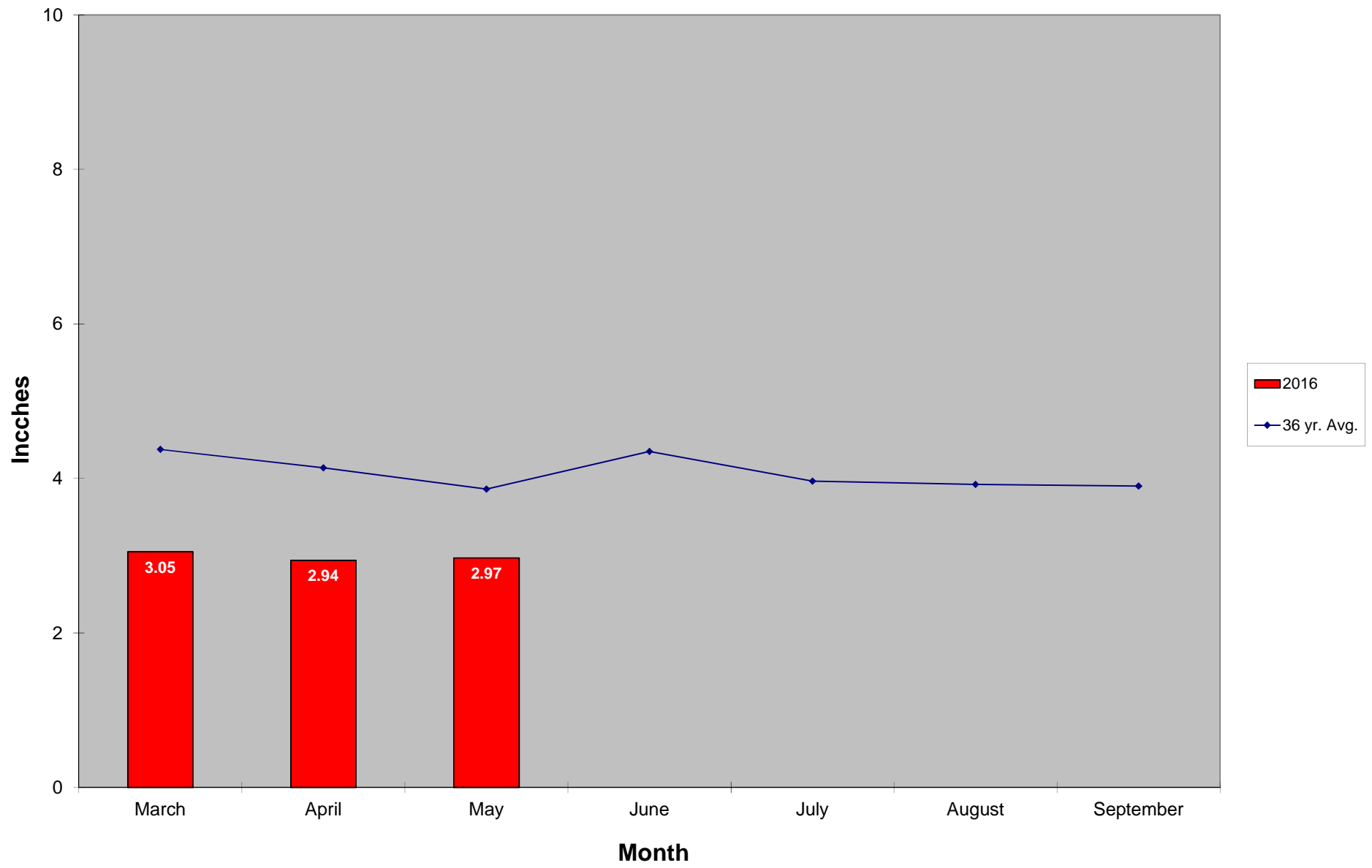
*Low early season numbers may contribute to these comparisons being not as significant as they appear.

The temperatures for EPI week 25 averaged approximately 2.27 degrees warmer than the previous week, with only 0.07 inches of precipitation observed. Overall collection numbers increased by 326% from EPI week 24, with all target species displaying increases from the prior collection period. Those targets with the largest weekly increases were *Culiseta melanura*, *Coquillettidia perturbans*, and *Culex*. *Cq. perturbans* remains the most abundant species in the CMMCP service area, with *Culex* species now becoming the second most abundant. *Cq. perturbans* will likely remain the predominant species for the greater part of the season. Continued emergence of *Cq. perturbans* should also cause the overall collections numbers to increase. A small number of *Aedes vexans* were collected in EPI week 25, marking the first observation of this species this

season. Floodwater species of mosquitoes will remain suppressed until the area experiences a significant precipitation event.

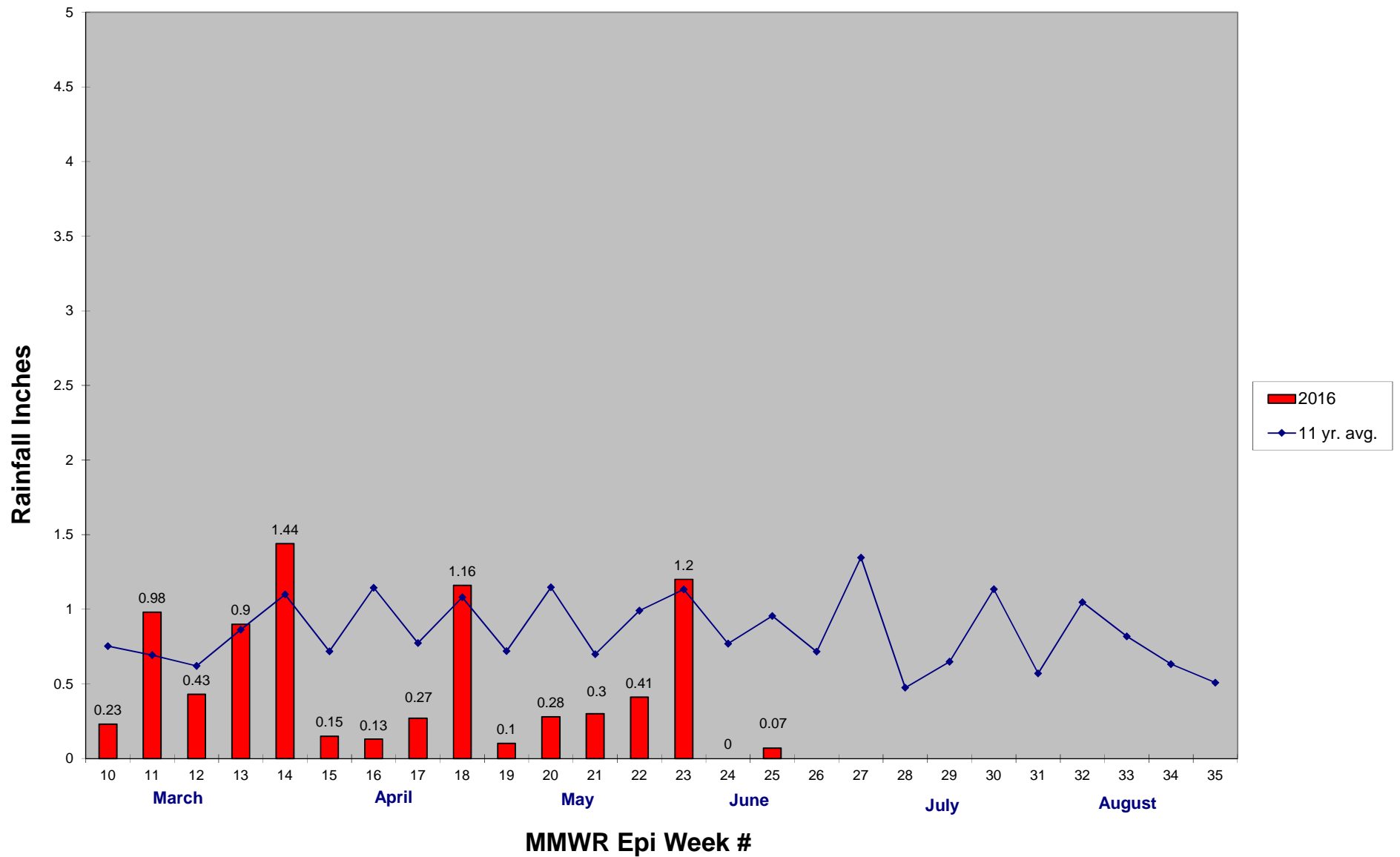
For the year we received 192% more service requests than average; 9,784 requests compared to the 13 year average of 5,084. Service requests decreased slightly (7.7%) from last week 1,127 in Epi week 24 compared to 1,046 in Epi week 25. Early season catch basin treatments were performed in 2015 WNV virus 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*



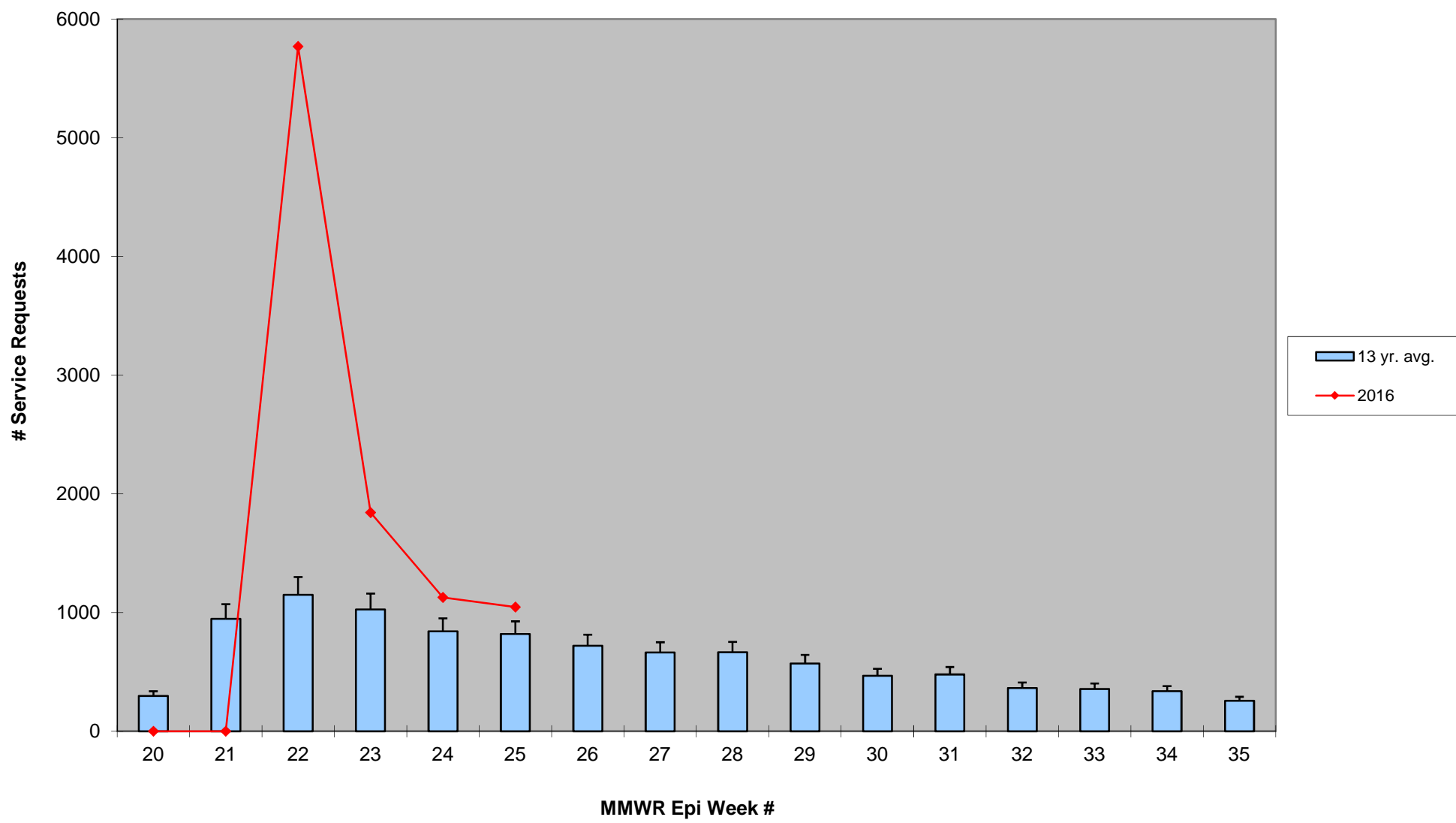
*source: <http://www.nrcc.cornell.edu/regional/tables/tables.html>

2016 CMMCP Weekly Rainfall vs. 11 Year Average*



*source: CMMCP weather station Northborough, MA

ULV Service Request History Comparison 2003-2016



2016 Rainfall vs. Requests

