

CMMCP WEEKLY SURVEILLANCE REPORT



EPI week #26
June 22-28, 2014

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Central Mass. Mosquito Control Project
Weekly Report- 6/22/14-6/28/14
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	1	18	19	17	204	417
Total Specimens	1	402	99	184	3023	4298
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 69.60°F with a recorded high temperature of 87.5°F and a recorded low temperature of only 48.4°F. For this week there was also a total of 0.27 inches of rain observed. Compared to the previous week, it was approximately 0.13°F warmer on average, and rained about 0.22 inches more. There has been 1.46 inches of rain accumulated in June, while the total rainfall for the month of May was 1.79 inches. For the year we have received 81% more requests than average; 8,567 requests to date compared to the 11 year average of 4,711. Requests were 81% more than the 2013 totals for the same time frame, 4,712 in 2013 against 8,567 in 2014. Service requests decreased 19% from EPI week 25 to Epi week 26 for 2014 (1,387 vs. 1,164).

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>	+520.8%	-79.70%	Webster, Tewksbury
<i>Culiseta melanura</i>	+100.0%	-87.18%	Holliston, Webster
<i>Ochlerotatus canadensis</i>	-31.82%	-60.53%	Webster
<i>Culex</i> Species	+37.50%	-78.00%	Blackstone, Northborough
All Species	+147.8%	-78.18%	Webster

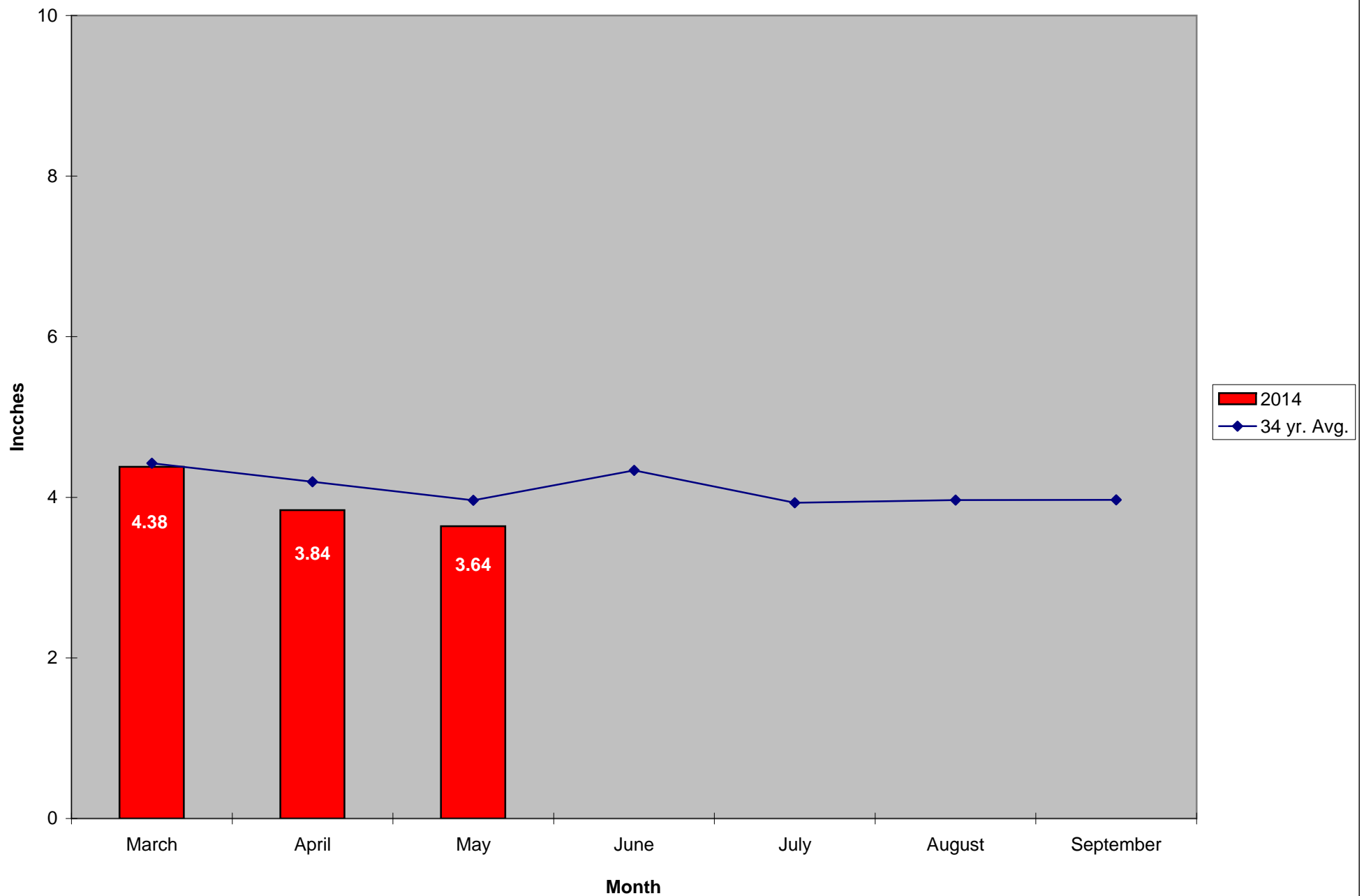
The predominant mosquito for the week was *Culex*,
followed by *Coquillettidia perturbans*.

General narrative:

Temperatures remained steady during EPI week 26, with around a quarter inch of rain. For the second consecutive week, *Coquillettidia perturbans* displayed the greatest increase at the CMMCP historical trap sites, with both *Culiseta melanura* and *Culex* mosquitoes showing increases as well. A reduction was observed for *Ochlerotatus canadensis*, while *Aedes vexans* still has not been collected at a historical trap site. The additional *Cq. perturbans* propelled a significant increase in overall collection

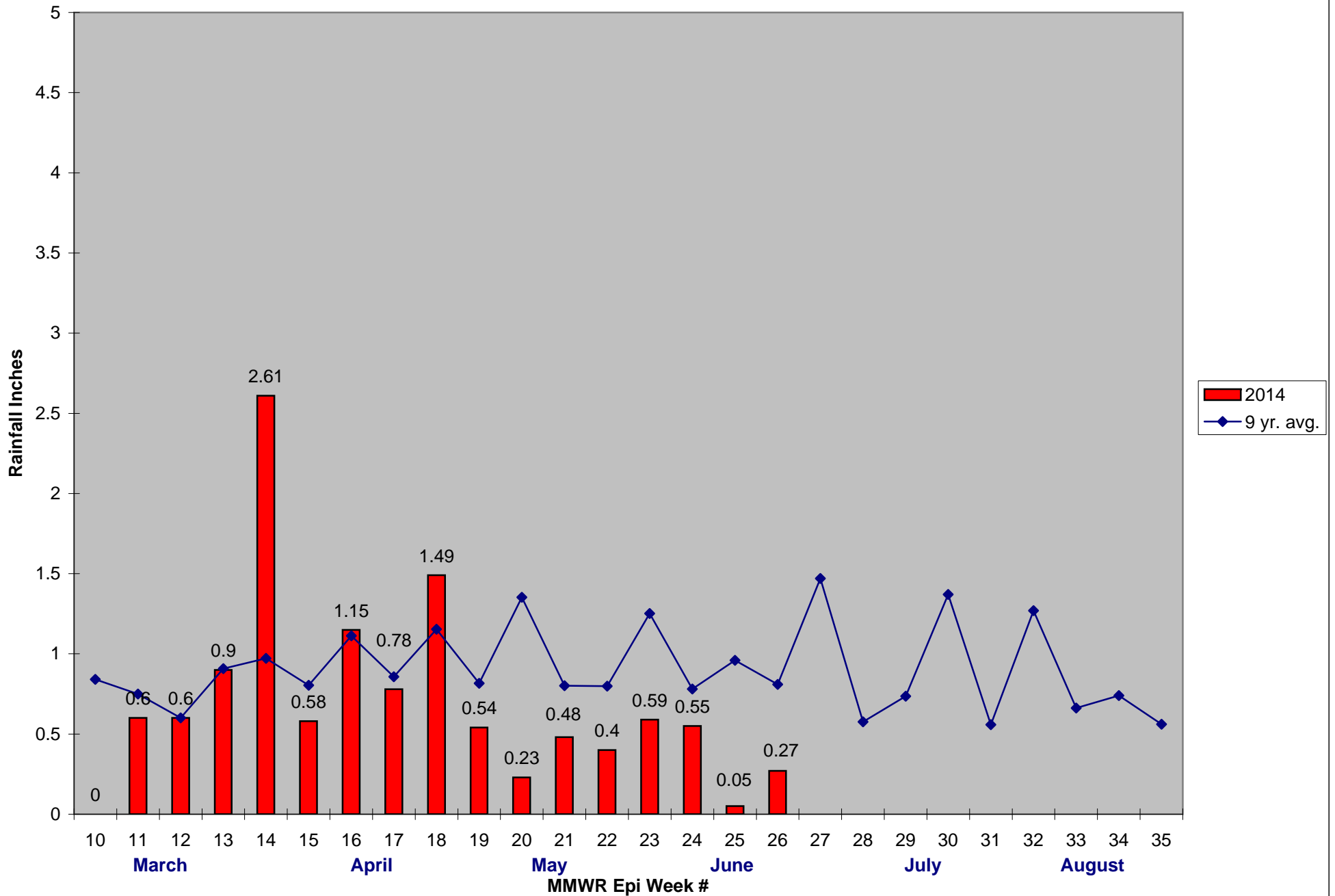
numbers at the historical sites. All target species are currently present in lower levels than during EPI week 26 last year. At the historical CDC trap locations, *Cq. perturbans* was the predominant species followed by *Oc. canadensis*. This was the same hierarchy as EPI week 25. When all trap types are taken into consideration, *Culex* becomes the primary mosquito within the CMMCP service area, followed by *Cq. perturbans*. This species may eventually overtake *Culex* through further emergence over the upcoming weeks.

2014 Mass. Rainfall Data vs. 34 Year Average*



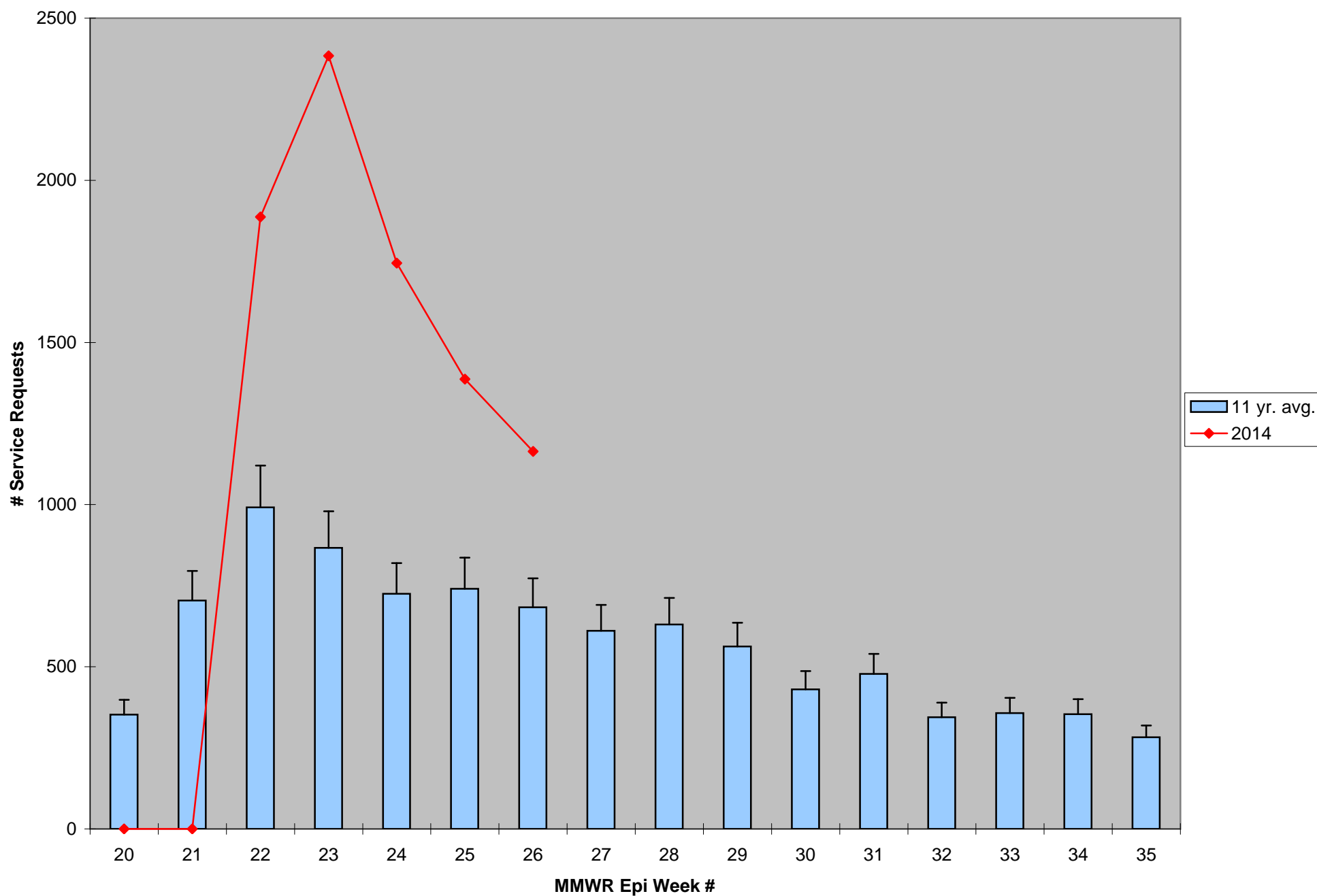
*Source: Northeast Regional Climate Center: http://www.nrcc.cornell.edu/page_summaries.html

2014 CMMCP Weekly Rainfall vs. 9 Year Average*



*Source: CMMCP Weather Station - Northborough, MA

ULV Service Request History Comparison 2003-2014



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

2014 Rainfall vs. Requests

