

CMMCP WEEKLY SURVEILLANCE REPORT



EPI week #35
Aug. 24 – 30, 2014

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Central Mass. Mosquito Control Project
Weekly Report- 8/24/14-8/30/14
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	16	174	47	40	638	1235
Total Specimens	216	7478	241	343	11500	21650
No. Pools WNV +	0	0	0	0	1 [†]	1 [†]
No. Pools EEE +	0	0	0	0	0	0

[†]Pool of WNV+ *Culex* Species collected in Clinton on 7/3/13

Weather Summary (Northborough, MA): The weather for this particular week averaged 69.69°F with a recorded high temperature of 89.4°F and a recorded low temperature of only 51.4°F. For this week there was also a total of 0.55 inches of rain observed. Compared to the previous week, it was approximately 4.05°F warmer on average, and rained about 0.35 inches more. There has been 2.65 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 received 57% more requests than average; 13,778 requests to date compared to the 11 year average of 8,761. Requests were 13.49% more than the 2013 totals for the same time frame, 12,140 in 2013 against 13,778 in 2014. Service requests decreased 17% from EPI week 34 to Epi week 35 for 2014 (274 vs. 234).

CMMCP Mosquito Summary*-

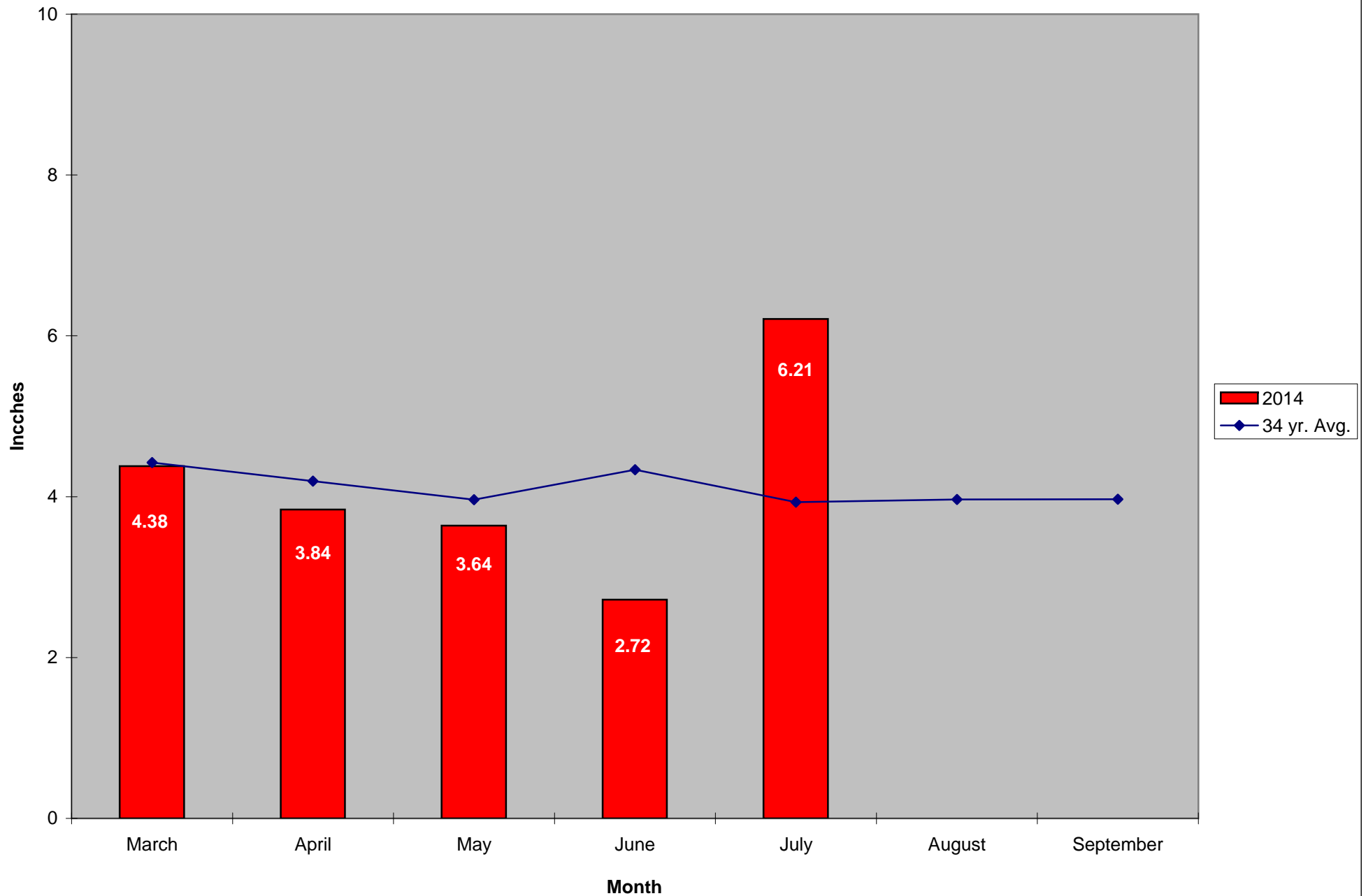
Target Species	Δ From Last Week	Δ From Last Year	Predominant Trap Site(s)
<i>Aedes vexans</i>	-100.0%	-100.0%	N/A
<i>Coquillettidia perturbans</i>	-16.42%	-71.57%	Webster, Tewksbury
<i>Culiseta melanura</i>	-58.33%	-86.11%	Holliston, Webster
<i>Ochlerotatus canadensis</i>	+00.00%	+00.00%	Webster
<i>Culex</i> Species	-56.76%	-44.83%	Shrewsbury, Hopedale
All Species	-35.51%	-68.99%	Webster, Tewksbury

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

General narrative: Temperatures rose this past week after several weeks of cooling. EPI week 35 also experienced approximately 0.55 inches of rain. The overall collection numbers continued to decrease at historical trap sites, again primarily due to lower observations of *Coquillettidia perturbans* and *Culex* mosquitoes. All of our target

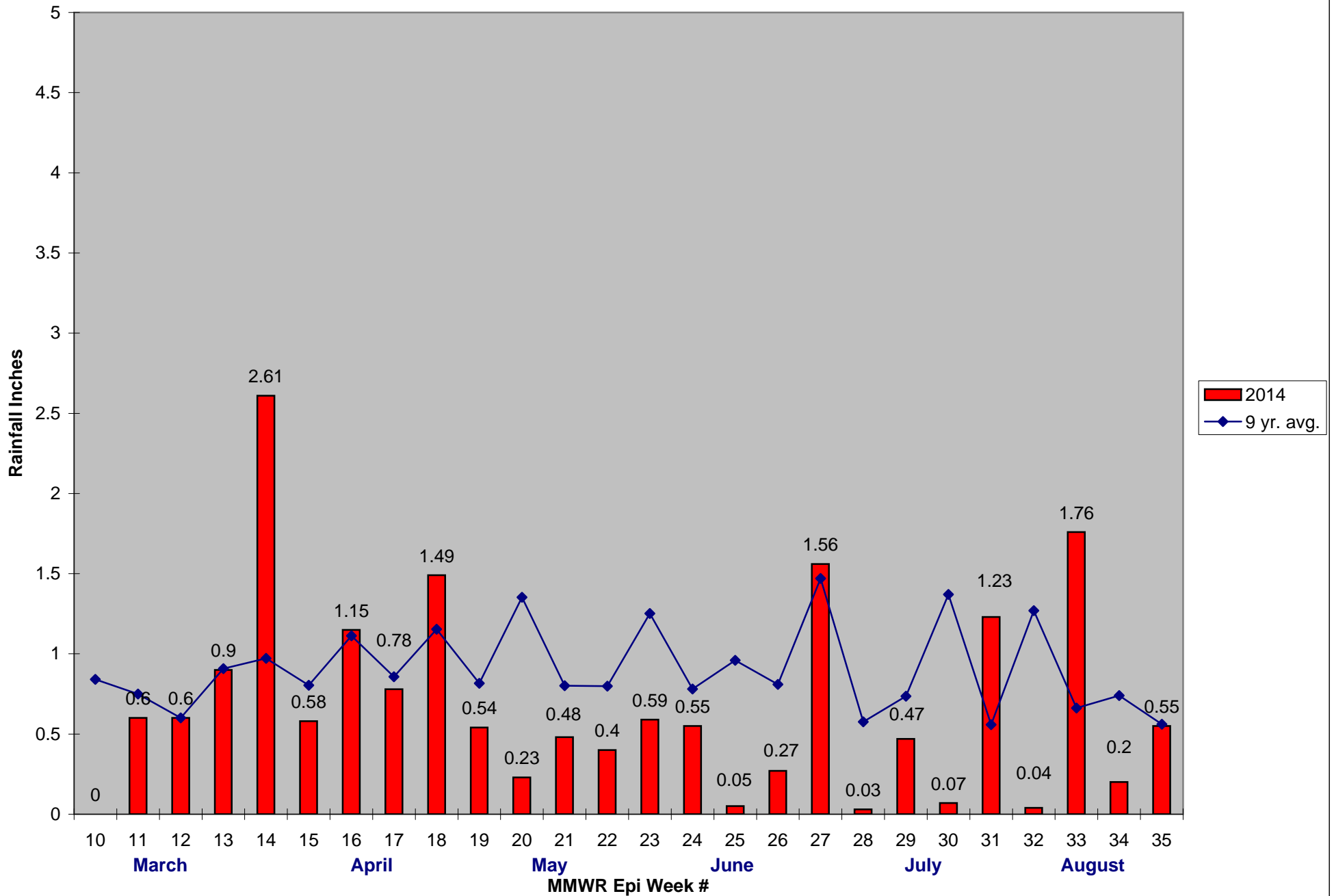
species were present in lower or equal levels compared to EPI week 34 and also when compared to the corresponding 2013 collection period. At the historical CDC trap locations, *Cq. perturbans* was again the principal species followed by *Culex*, but when all trap types are taken into consideration, these two switch predominance. Although *Aedes vexans* were not collected at the historical trap sites this week, we may begin to observe them and similar species resulting from the significant rain event of EPI week 33. *Cq. perturbans* are expected to continue their decline through the end of the season. Warm temperatures are predicted to remain for EPI week 36, which may cause a rebound in collection numbers.

2014 Mass. Rainfall Data vs. 34 Year Average*



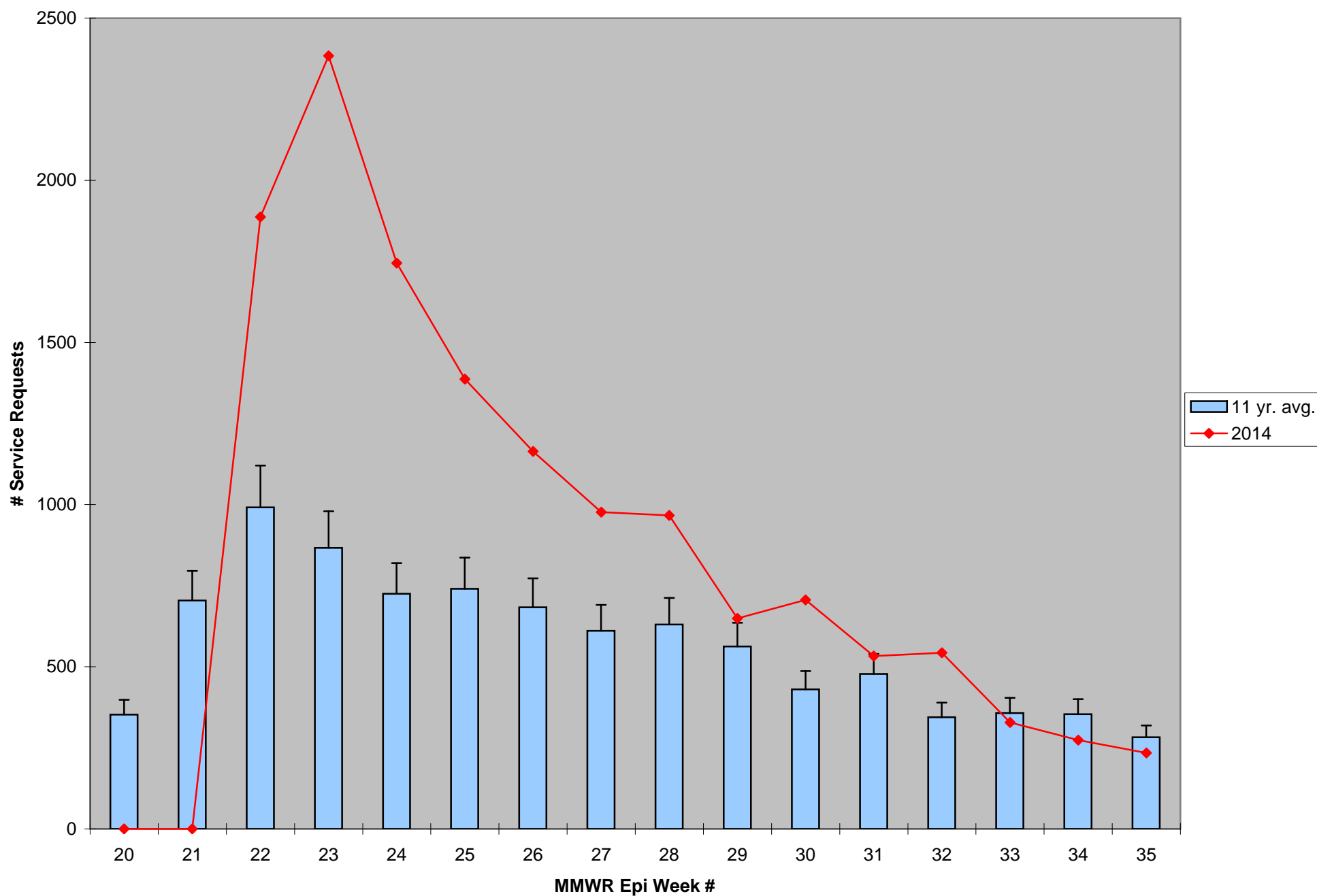
*Source: Northeast Regional Climate Center: http://www.nrcc.cornell.edu/page_summaries.html

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

