

CMMCP WEEKLY SURVEILLANCE REPORT



EPI week #34
Aug. 23-29, 2015

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Central Mass. Mosquito Control Project
Weekly Report- 8/23/15-8/29/15
EPI Week #34

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	172	537	136	224	730	3115
Total Specimens	1502	34918	1091	4777	14968	69205
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 EPI Week 34 averaged 69.9°F with a recorded high temperature of 86.8°F and a recorded low temperature of only 54.5°F. There was 0.10 inches of precipitation observed this week. Compared to the previous week, it was approximately 5.92°F cooler on average, and rained about 1.18 inches less. There has been 1.45 inches of rain accumulated in August, after 0.17 inches for the month of July.

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>	-100.0%	-100.0%	N/A
<i>Coquillettidia perturbans</i>	-43.27%	-11.94%	Sturbridge, Ashland
<i>Culiseta melanura</i>	-37.50%	-58.33%	Westford, Tewksbury, Auburn
<i>Ochlerotatus canadensis</i>	+00.00%	-100.0%	N/A
<i>Culex</i> Species	-36.36%	-24.32%	Westford, Clinton
All Species	-43.45%	-31.16%	Westford, Sturbridge

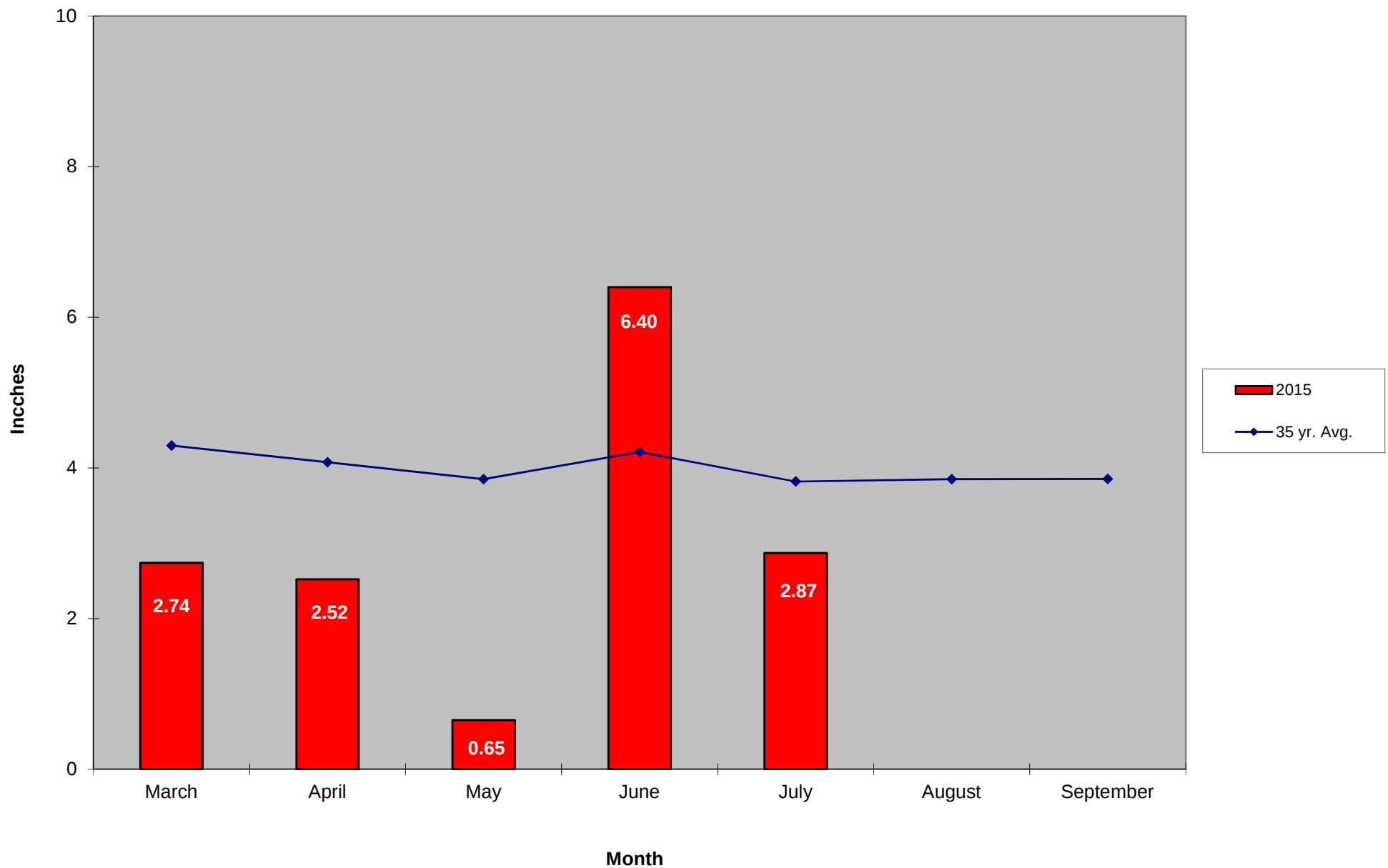
The predominant mosquito for the week was *Culex*
followed by *Coquillettidia perturbans*.

General narrative:

The temperatures for EPI Week 34 averaged approximately 6°F cooler than the previous week, with only 0.10 inches of precipitation. Overall collection numbers decreased by approximately 43% from EPI Week 33 at the historical surveillance trap sites. Once again, a significant decrease in *Coquillettidia perturbans* was the primary factor behind this reduction. The other target species, *Aedes vexans*, *Culiseta melanura*, *Culex* spp., *Ochlerotatus canadensis*, also experienced reductions. Compared to the 2014 season, the long-term surveillance locations showed an overall decrease of approximately 31%. *Culex* spp. has surpassed *Cq. perturbans* as the most abundant species in the CMMCP service area. Populations will likely continue to decrease as we approach the end of the season.

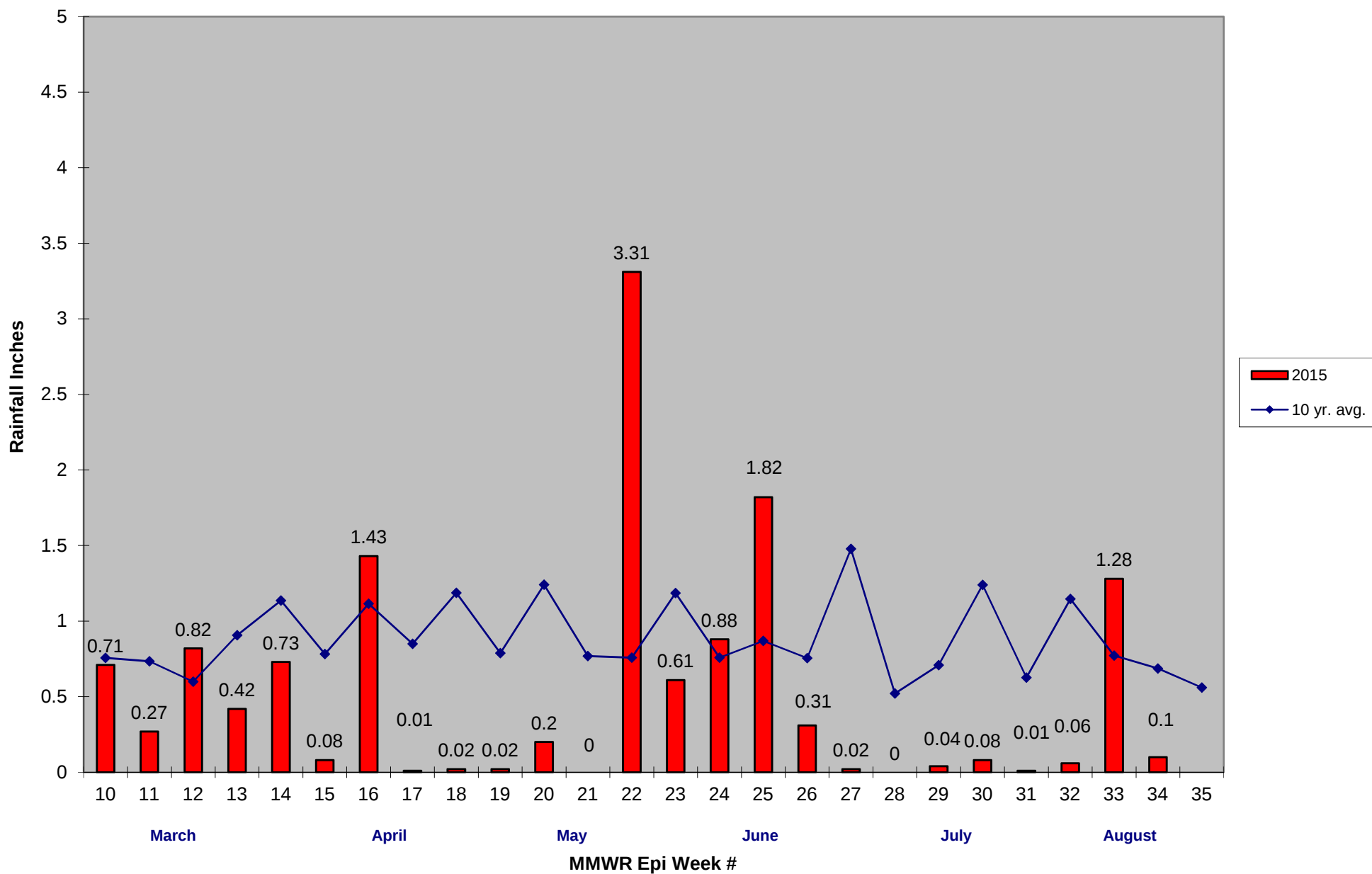
For the year we have received 173% more service requests than average; 15,477 requests to date compared to the 12 year average of 8,901. Requests were 14.2% more than the 2014 totals for the same time frame, 13,544 in 2014 against 15,477 in 2015. Service requests decreased 6.7% from EPI week 33 to Epi week 34 for 2015 (366 v. 219). 458 service calls were completed this week with no weather events impacting operations. To date 15,561 service calls have been completed despite weather conditions earlier in the season that cancelled or postponed operations. Catch basin treatments are underway in all member communities as a preemptive control for *Culex* and West Nile Virus. Our tire collection and ditch maintenance programs have restarted as time and personnel allow. This is the last week of the residential adulticide program. One human case of West Nile Virus was identified in Middlesex county but after further investigation by MDPH it was determined that exposure most likely occurred in New Jersey. As a precaution we have set out extra traps in the area and catch basins treatments were performed to lower populations of *Culex*.

2015 Mass. Rainfall Data vs. 35 Year Average*



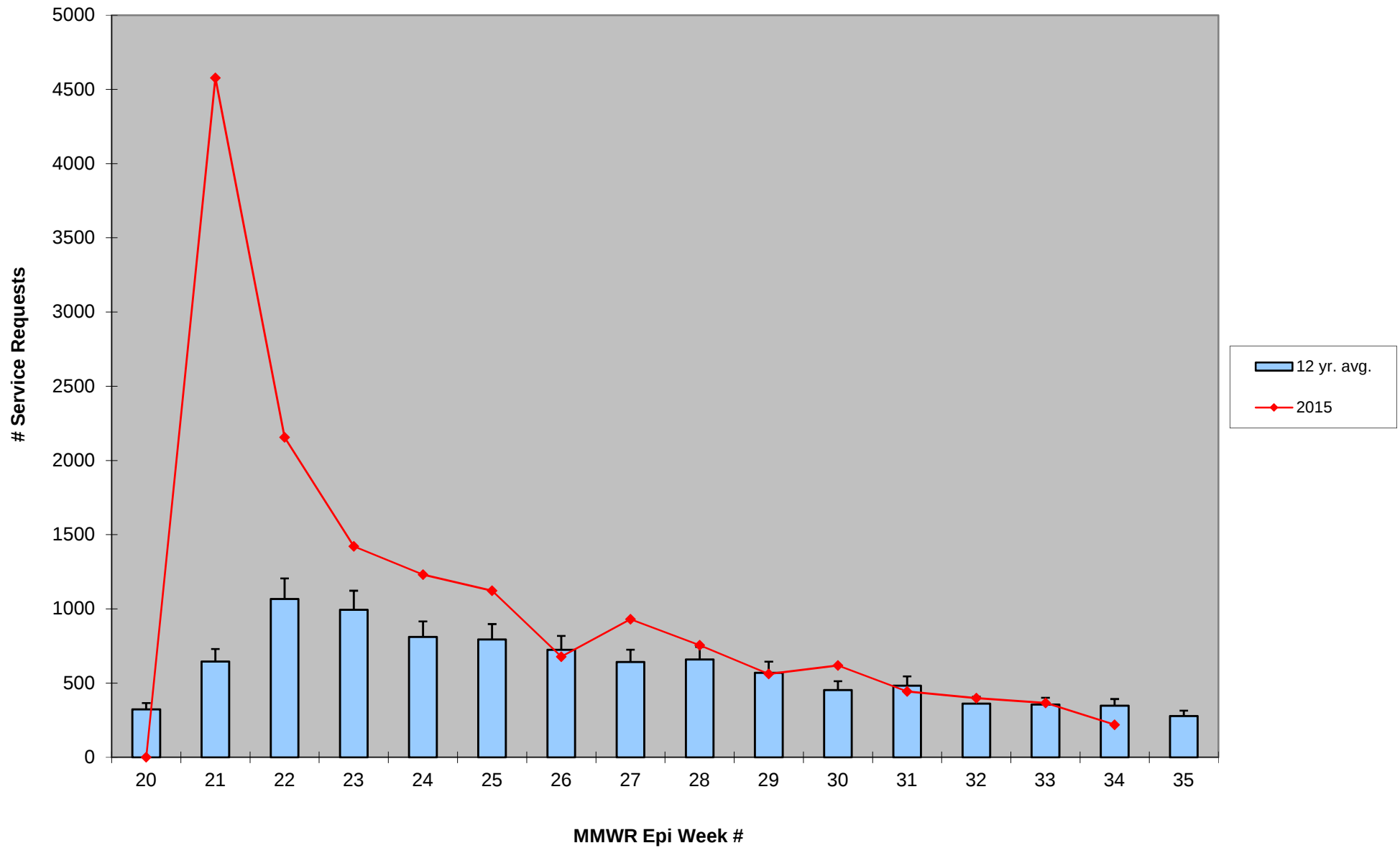
*Source: http://www.nrcc.cornell.edu/page_summaries.html

2015 CMMCP Weekly Rainfall vs. 10 Year Average*



*Source: CMMCP weather station - Northborough, MA 01532

ULV Service Request History Comparison 2003-2015



Error bars show approx. number of requests if we had 40 communities over the 12 year average

2015 Rainfall vs. Requests

