

CMMCP WEEKLY SURVEILLANCE REPORT



EPI week #29
July 19-25, 2015

Frank Cornine, *Field Biologist*
Curtis Best, *Staff Entomologist*
Todd Duval, *Field Biologist*
Tim McGlinchy, *Director of Operations*
Tim Deschamps, *Executive Director*

Central Mass. Mosquito Control Project
Weekly Report- 7/19/15-7/25/15
EPI Week #29

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	102	303	91	192	441	1975
Total Specimens	788	25151	835	4594	8934	49747
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 29 averaged 72.8°F with a recorded high temperature of 90.0°F and a recorded low temperature of only 55.3°F. There was only 0.04 inches of precipitation observed this week. Compared to the previous week, it was approximately 0.85°F warmer on average, and rained about 0.04 inches more. There has been 0.09 inches of rain accumulated in July, after 5.17 inches for the month of June.

CMMCP Mosquito Summary-

Target Species	Δ From Last Week	Δ From Last Year	Predominant Trap Site(s)
----------------	---------------------	---------------------	--------------------------

<i>Aedes vexans</i>	+00.00%	+200.0%	Gardner, Hudson
<i>Coquillettidia perturbans</i>	-45.07%	-81.09%	Milford, Acton
<i>Culiseta melanura</i>	+40.00%	-41.67%	Gardner
<i>Ochlerotatus canadensis</i>	-14.29%	-90.16%	Hudson, Gardner
<i>Culex</i> Species	-40.00%	-46.43%	Gardner
All Species	-36.08%	-77.06%	Gardner, Milford

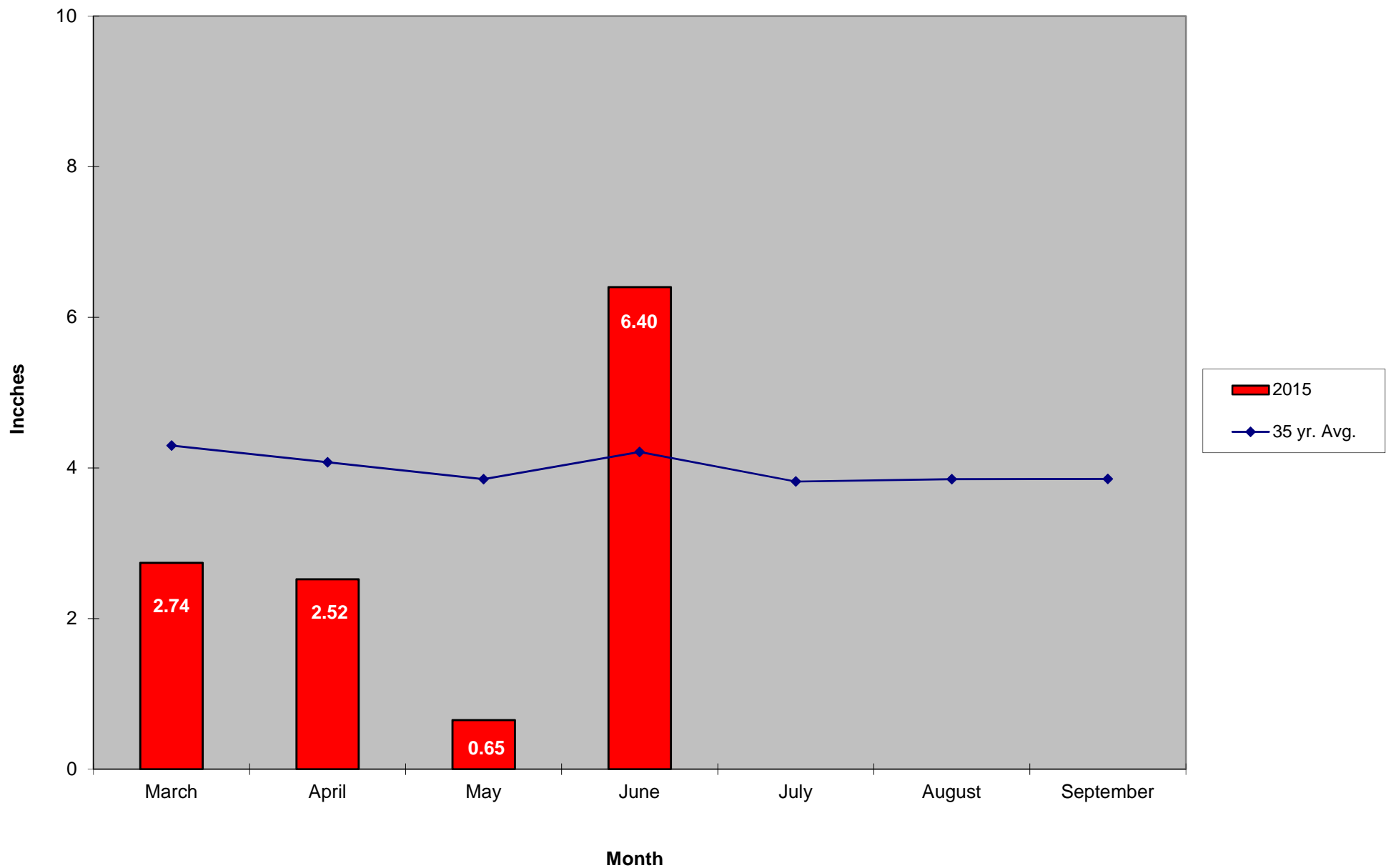
The predominant mosquito for the week was *Coquillettidia perturbans*
followed by *Culex*.

General narrative

The temperatures for EPI Week 29 averaged approximately 1°F warmer than the previous week, with only 0.04 inches of precipitation. July has been extremely dry with only 0.09 inches observed at the CMMCP weather station. Overall collection numbers decreased by 36% from EPI Week 28 at historical surveillance trap sites. This decrease was likely due to a significant drop in the *Coquillettidia perturbans* population. Despite this reduction, *Cq. perturbans* remained the most abundant species in the CMMCP service area. The only target species to experience an increase from the previous week was *Culiseta melanura*, by approximately 40%. Compared to the 2014 season, the long-term surveillance locations showed an overall decrease of almost 77%. As with the weekly comparison, this reduction was primarily due to a significant drop in the *Cq. perturbans* population.

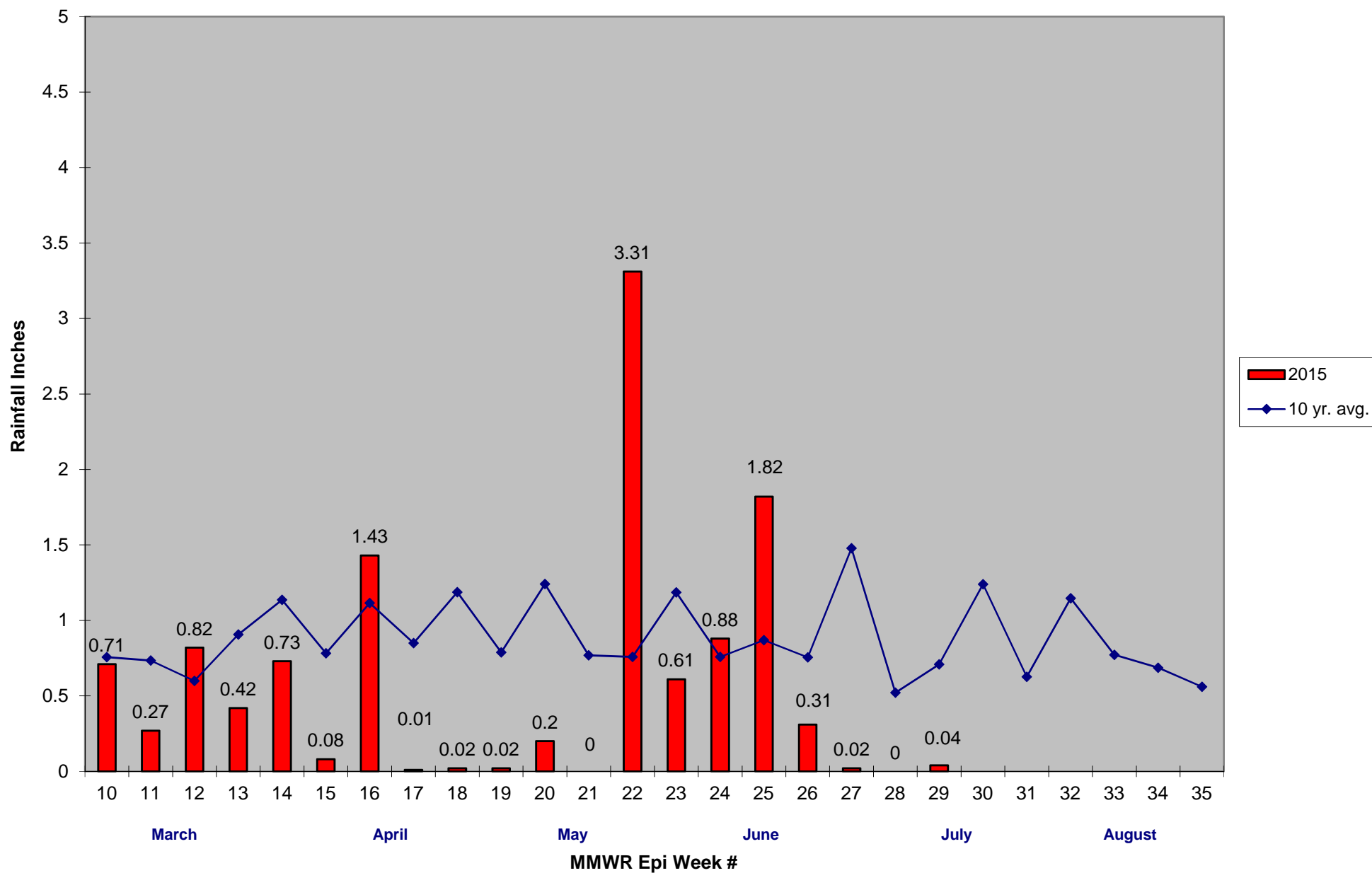
For the year we have received 194% more service requests than average; 13,432 requests to date compared to the 12 year average of 6,902. Requests were 20% more than the 2014 totals for the same time frame, 11,160 in 2014 against 13,432 in 2015. Service requests decreased 35% from EPI week 26 to Epi week 27 for 2015 (755 v.561). 1,008 service calls were completed this week with no weather events impacting operations. To date 13,001 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.

2015 Mass. Rainfall Data vs. 35 Year Average*



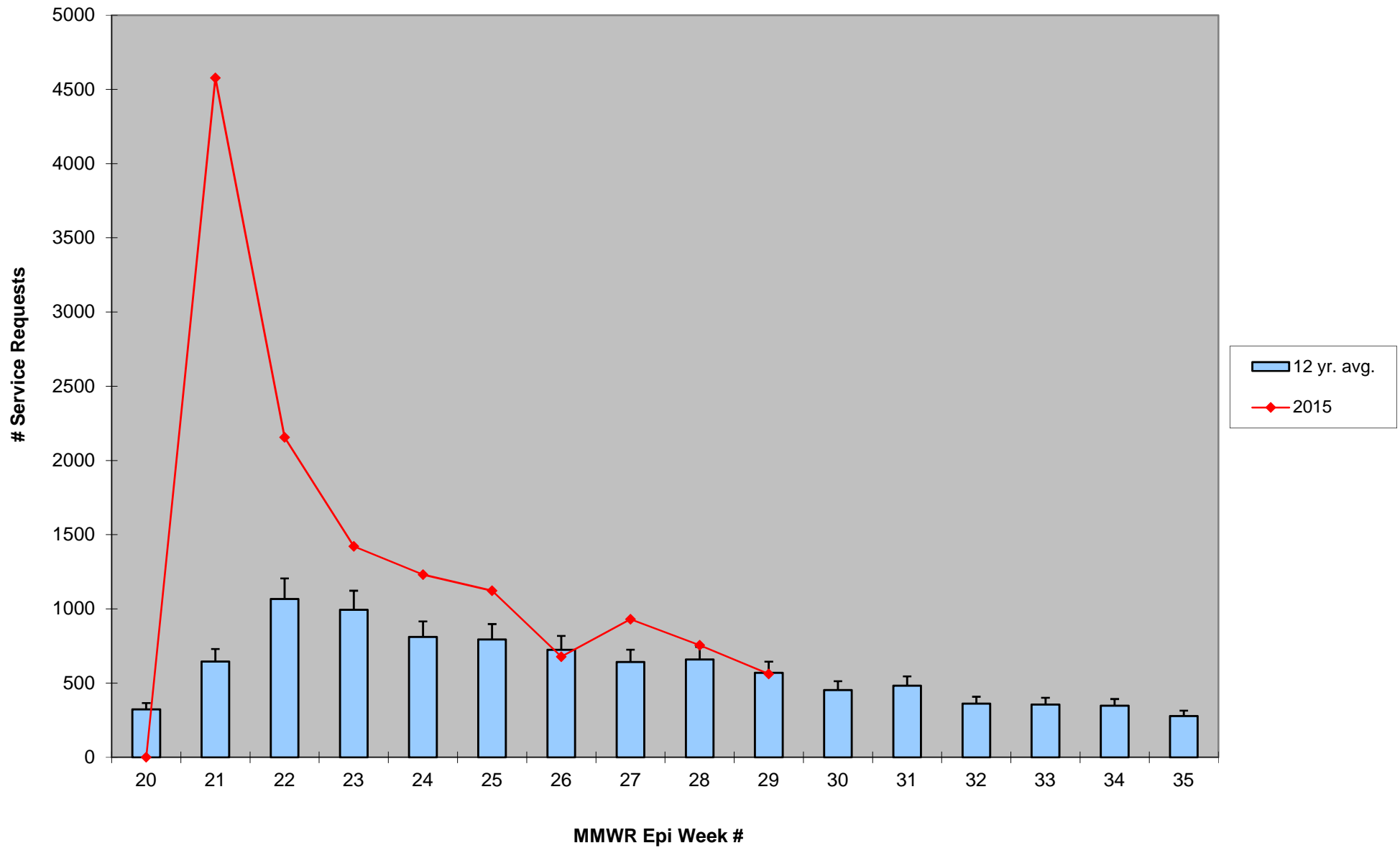
*Source: http://www.nrcc.cornell.edu/page_summaries.html

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

