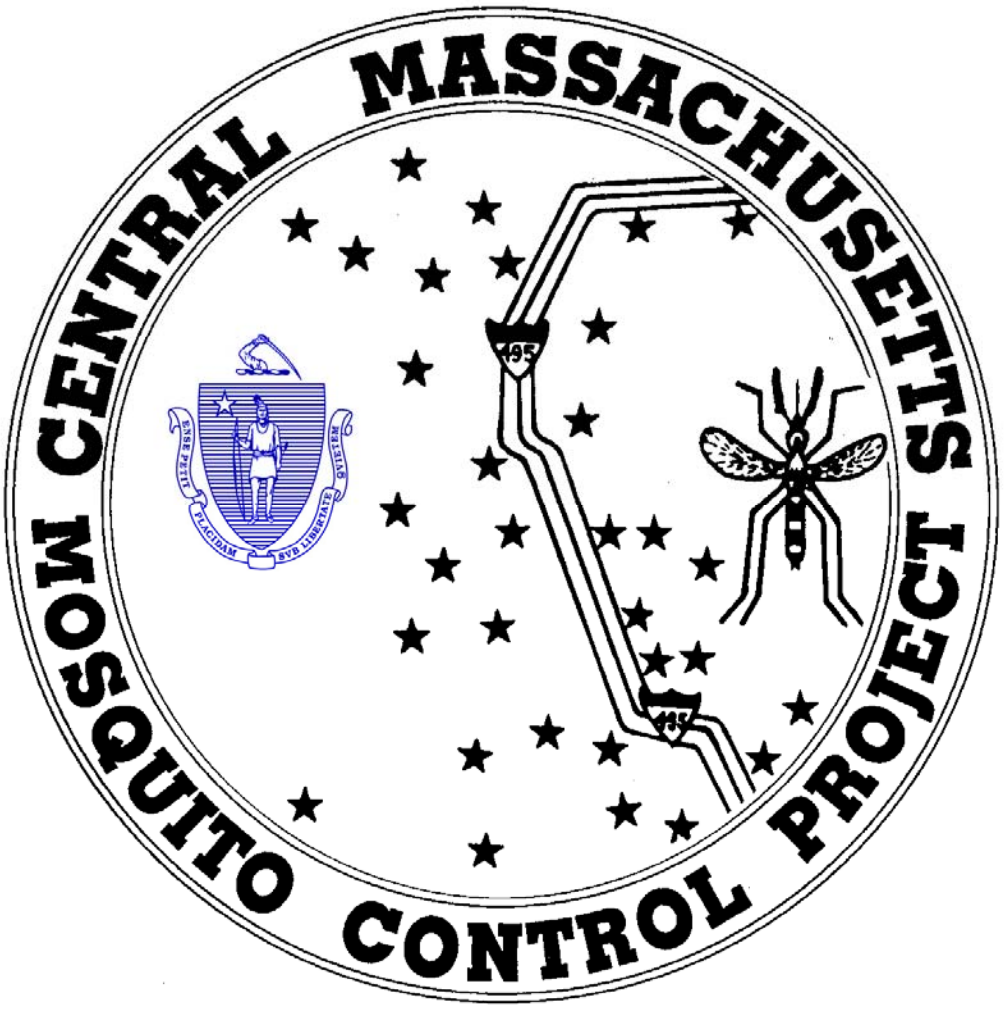
CMMCP WEEKLY SURVEILLANCE REPORT



EPI week #22
May 31 – June 6, 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- 5/31/15-6/6/15
EPI Week #22

Cumulative Surveillance Summary

Target Species	*Ae. vex*	*Cq. per*	*Cs. mel*	*Oc. can*	*Culex*	All Species
No. Pools	9	4	17	39	31	260
Total Specimens	44	5	300	1067	106	5236
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 56.8°F with a recorded high temperature of 78.4°F and a recorded low temperature of only 45.6°F. For this week there was also a total of 3.31 inches of rain observed. Compared to the previous week, it was approximately 14.26°F cooler on average, and rained about 3.31 inches more. There has been 1.58 inches of rain accumulated in June, after 1.97 inches for the month of May.

CMMCP Mosquito Summary*-

Target Species	Δ From Last Week	Δ From Last Year	Predominant Trap Site(s)
Aedes vexans	+00.00%	+00.00%	Westborough, Shrewsbury, Westford
Coquillettidia perturbans	-100.00%	+00.00%	N/A
Culiseta melanura	+54.84%	+269.2%	Tewksbury, Wilmington
Ochlerotatus canadensis	-97.37%	-90.00%	Stow, Hopedale, Millbury
Culex Species	+1800.0%	+260.0%	Webster, Tewksbury, Millbury
All Species	-33.44%	+190.3%	Westford, Stow, Millbury

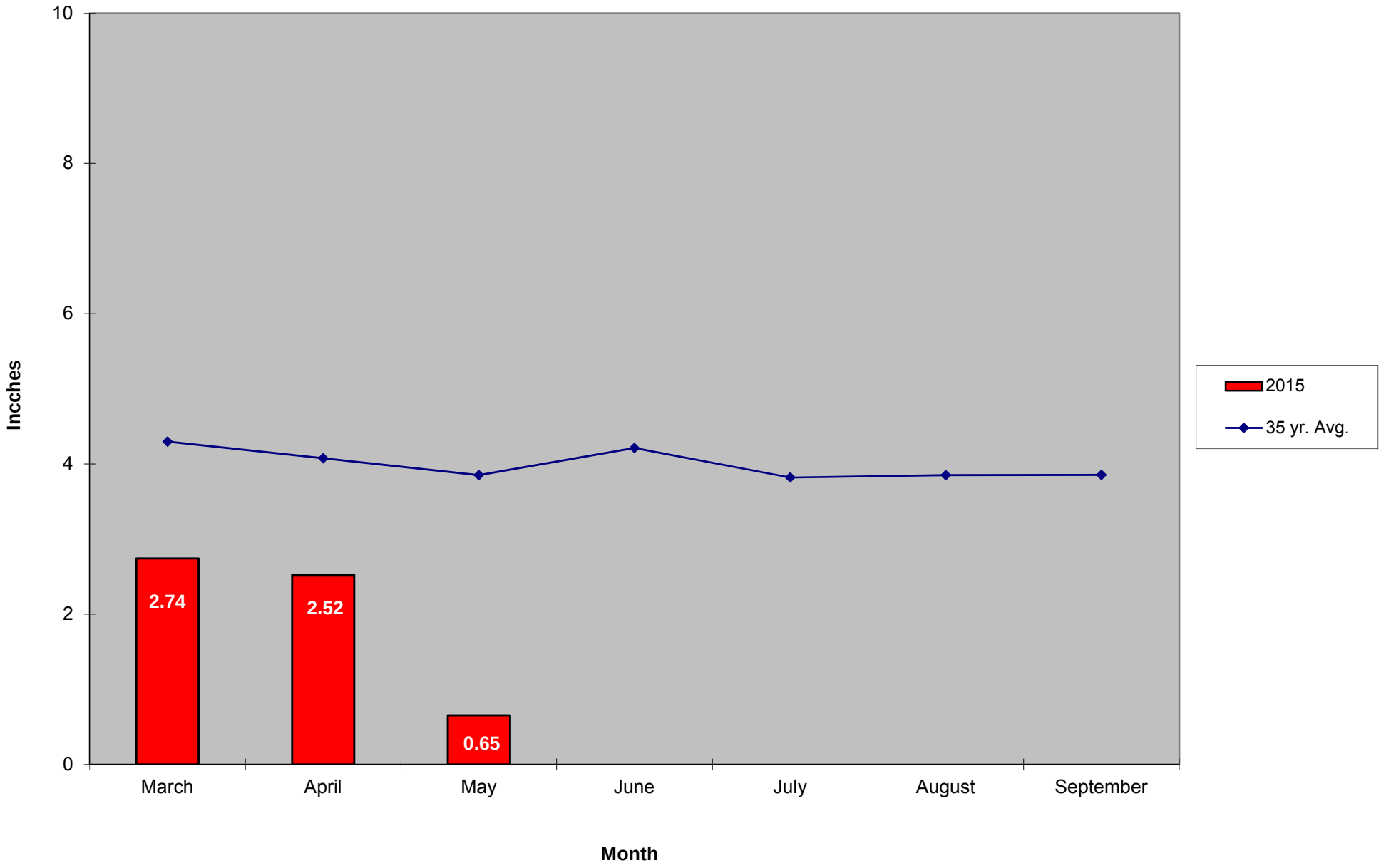
The predominant mosquito for the week was *Ochlerotatus abserratus* followed by *Ochlerotatus excrucians*.

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

General narrative: The temperatures for EPI week 22 averaged 14 degrees cooler than the previous week, and 3.31 inches of precipitation was observed. Overall collection numbers were lower than EPI week 21, with *Ochlerotatus abserratus* remaining the most abundant species, followed now by *Oc. excrucians*. These two species accounted for over half of all mosquitoes collected and are likely responsible for the volume of adulticide requests. *Culiseta melanura* and *Culex* spp. experienced increases which is important to note as they are important vectors of Eastern Equine Encephalitis and West Nile virus respectively. More seasonable temperatures should increase collections numbers. The heavy rains observed this week may cause an additional emergence of flood water species over the next couple of weeks.

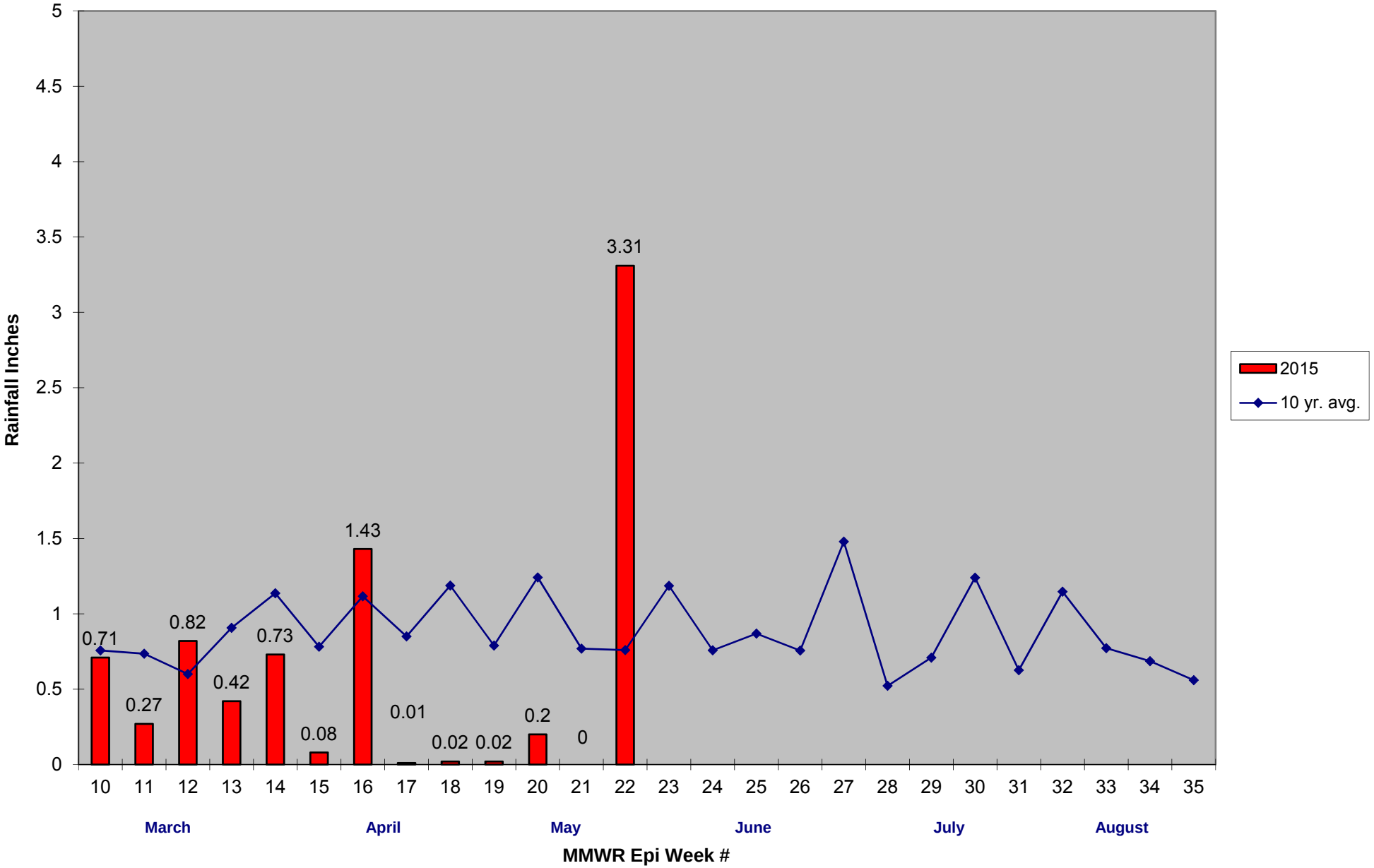
The catch basin program for *Culex* control continued, with an additional 9,083 basins treated; this brings the total to 26,241 basins treated as part of our early season WNV control program. Rain events in early Epi week 22 delayed responses to service requests for spraying. 2,136 service requests were received in Epi week 22, a 212% reduction from Epi week 21 (4,578 v 2,156). This is a 201% increase from the 12 year average of 1,066, and a 114% increase from the same Epi week in 2014 (1,887). Despite the rain and cool temperatures we were able to service 1,343 requests with some creative scheduling and 8 crews working overtime Friday June 5. No tires were collected in our source reduction program, this program is on a brief hiatus while we concentrate in our areas of service, but we continue to database any information received from residents.

2015 Mass. Rainfall Data vs. 35 Year Average*



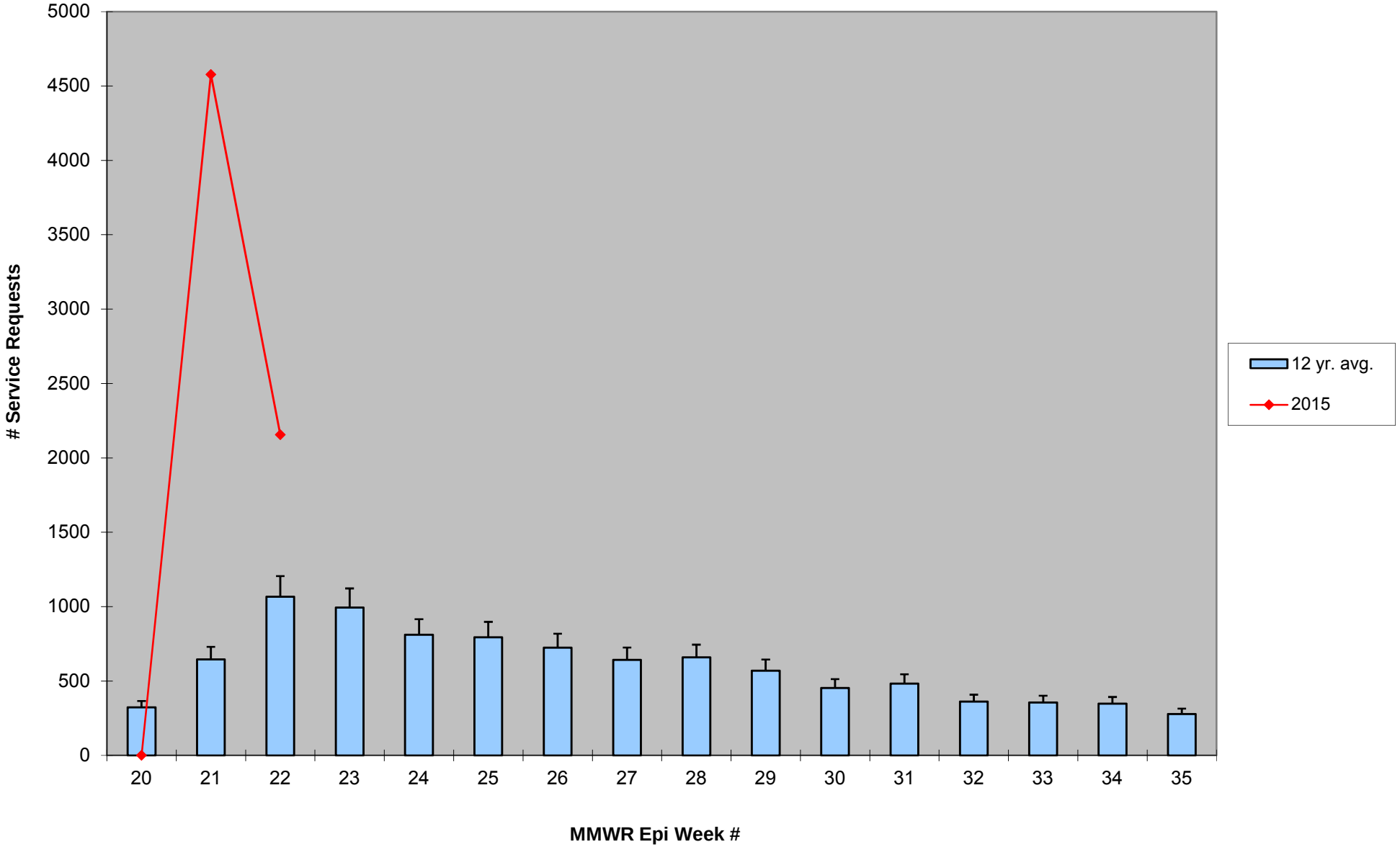
*Source: http://www.nrcc.cornell.edu/page_summaries.html

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