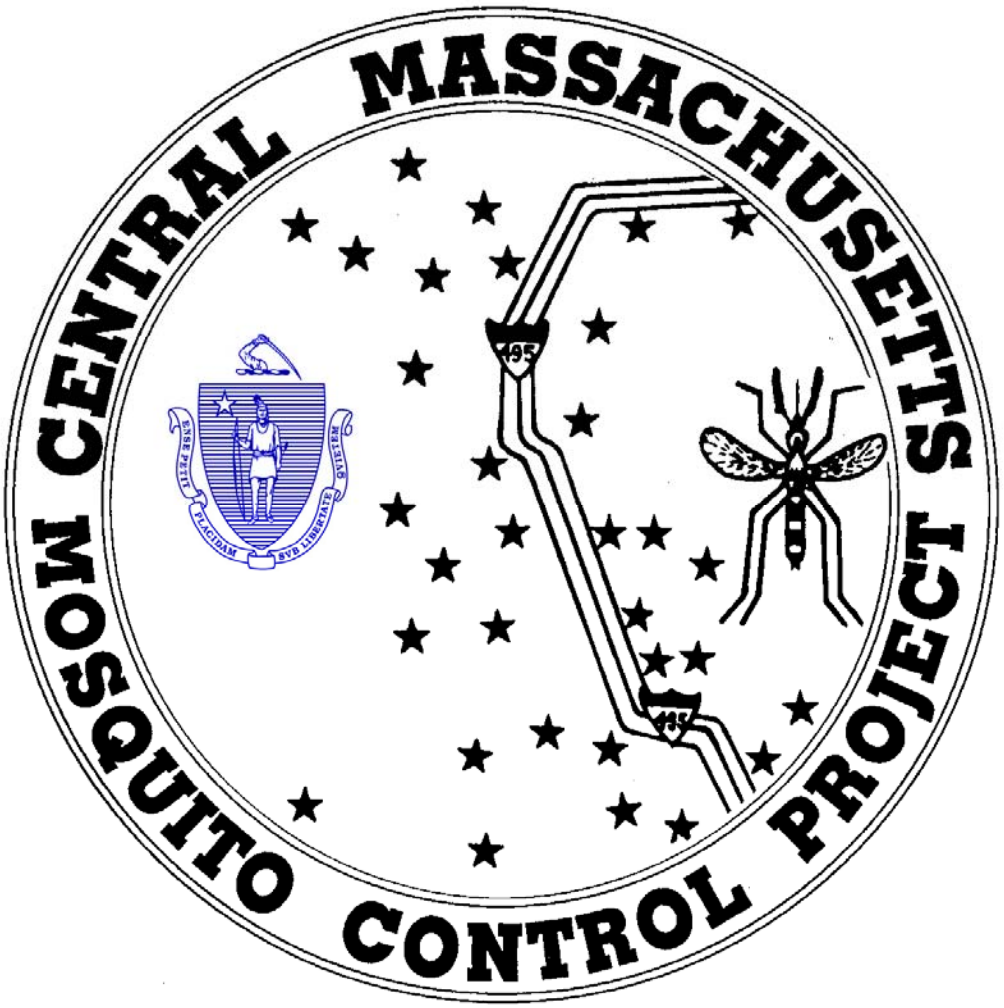
CMMCP WEEKLY SURVEILLANCE REPORT



EPI week #28
Jul. 10-16, 2016

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

Central Mass. Mosquito Control Project
Weekly Report- 7/10/16-7/16/16
EPI Week #28

Cumulative Surveillance Summary

Target Species	*Ae. vex*	*Cq. per*	*Cs. mel*	*Oc. can*	*Culex*	All Species
No. Pools	3	235	20	80	215	708
Total Specimens	14	30565	503	4463	4621	44427
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 73.03°F with a recorded high temperature of 93.40°F and a recorded low temperature of only 55.00°F. There was 0.32 inches of precipitation observed this week. Compared to the previous week, it was approximately 1.83°F warmer on average, and rained 0.18 inches less. There has been 0.89 inches of rain accumulated in July, after 1.32 inches for the month of June.

CMMCP Mosquito Summary*-

Target Species	Δ From Last Week	Δ From Last Year	Predominant Trap Site(s)
Aedes vexans	-100.0%	-100.0%	N/A
Coquillettidia perturbans	-45.50%	+254.4%	Webster, Berlin
Culiseta melanura	-23.53%	+160.0%	Millville, Webster
Ochlerotatus canadensis	-28.32%	+3371%	Webster, Leominster
Culex Species	-15.00%	-38.18%	Shrewsbury, Auburn, Chelmsford
All Species	-41.58%	+259.2%	Webster

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

Enhanced Surveillance for *Aedes albopictus* - Ovitrap Collections

	# Ovitraps	# Egg Papers	# Eggs
EPI Week #28	15	15	1017
2016 Totals	87	63	2278

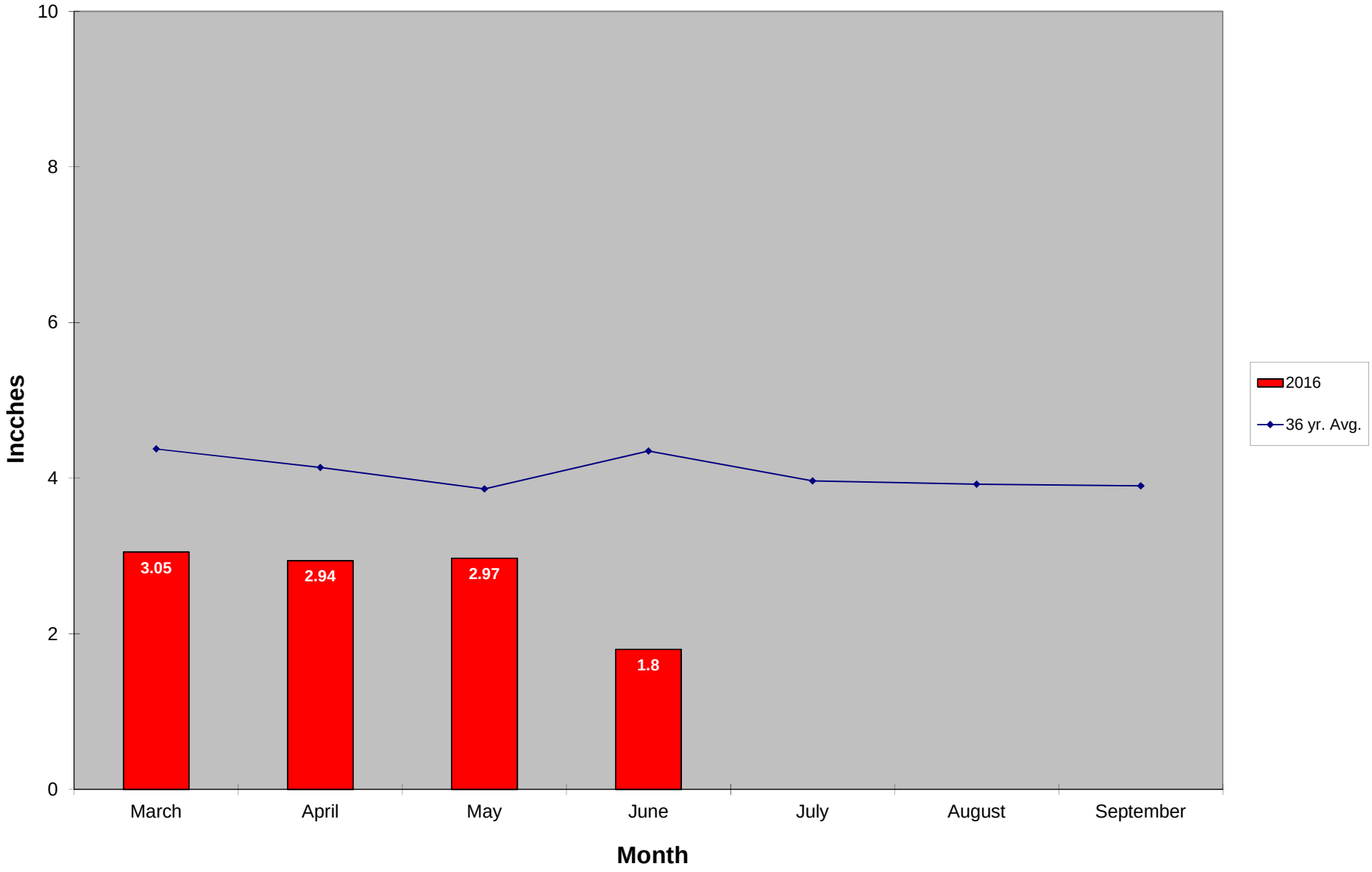
The temperatures for EPI Week 28 averaged 1.83 degrees warmer than the previous week, with approximately 0.32 inches of observed precipitation. At historical surveillance trap sites, the overall collection numbers decreased by 41.58% from EPI week 27. All target species were observed in lower numbers this week. Despite this decrease from the previous week, the long-term surveillance locations experienced a significant overall increase compared to the 2015 season. *Coquillettidia perturbans* was once again the most abundant species in the CMMCP service area, with Culex pipiens/restuans the second most abundant mosquito. *Cq. perturbans* will likely remain the predominant

species for EPI week 29. This week CMMCP collected 15 ovitraps, which produced 1017 eggs for *Aedes albopictus* surveillance.

For the year we received 170% more service requests than average; 12,127 requests compared to the 13 year average of 7,614. Service requests decreased 14.4% from last week; 703 in Epi week 27 compared to 614 in Epi week 28.

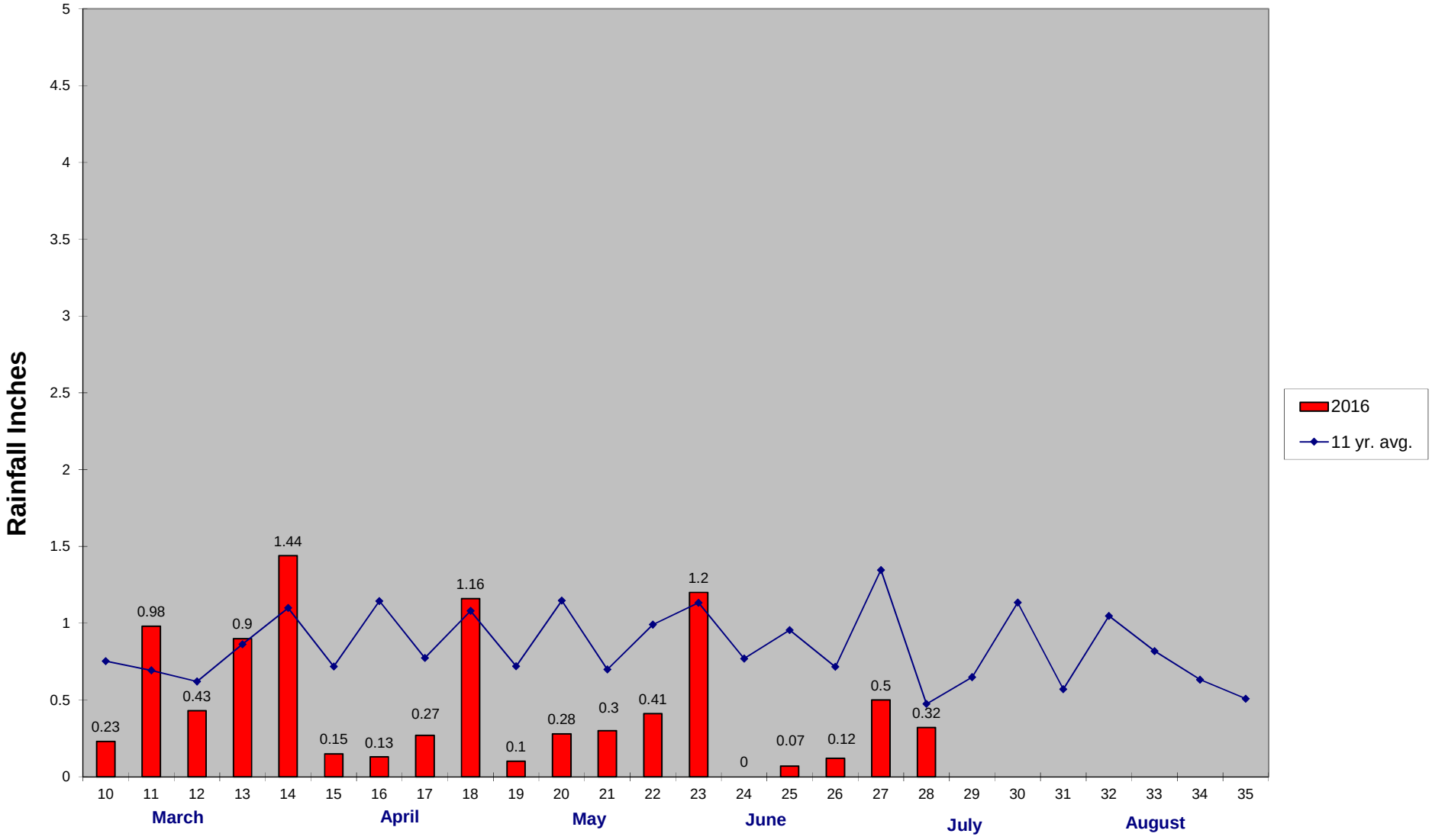
With the isolations of WNV in the city of Worcester, catch basins were treated (or retreated) in all member communities that border the city; Auburn, Millbury and Shrewsbury. Adult mosquito surveillance has been enhanced in these bordering communities and results are expected this week. Standard catch basin treatments have begun in all member towns.

2016 Mass. Rainfall Data vs. 36 Year Average*

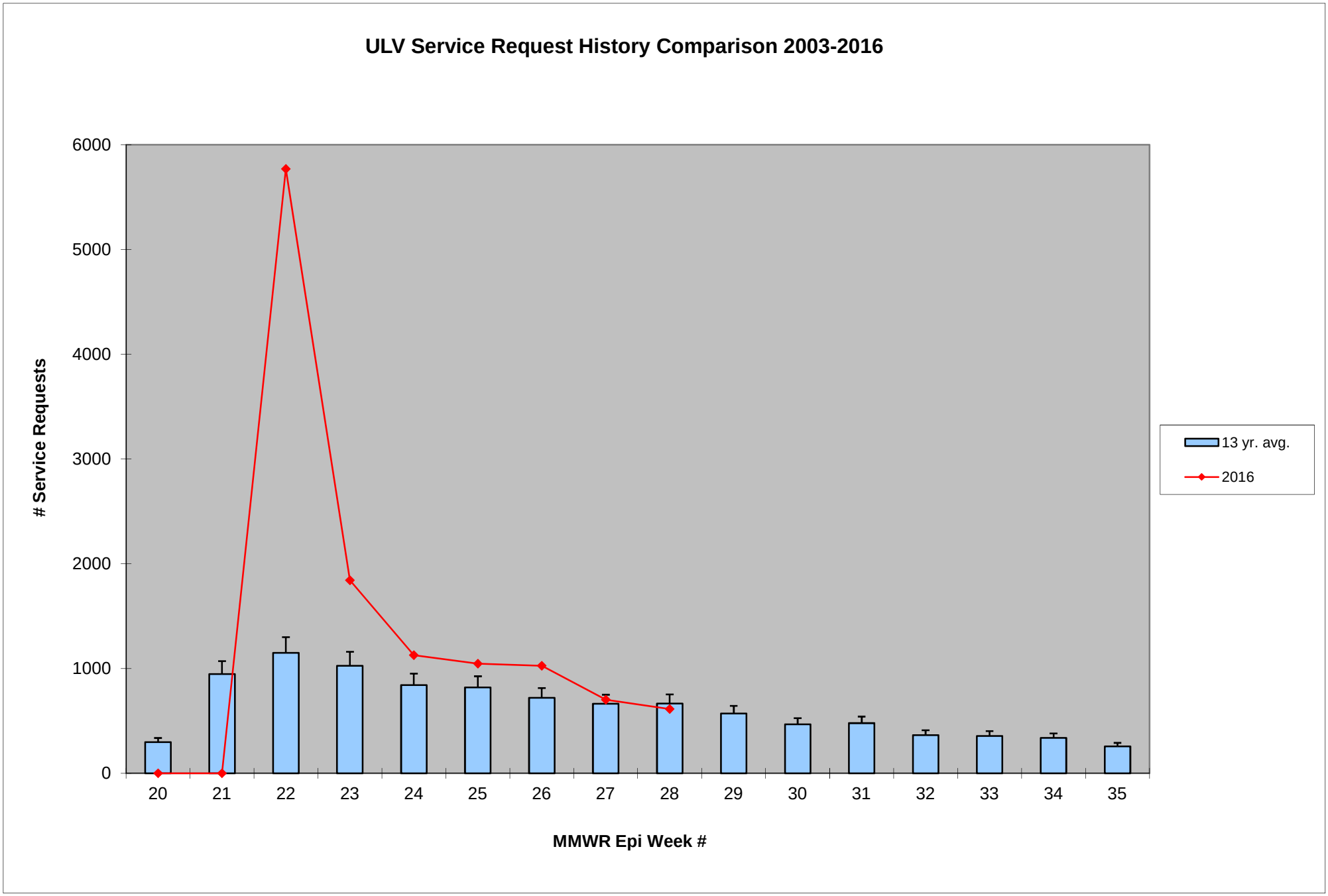


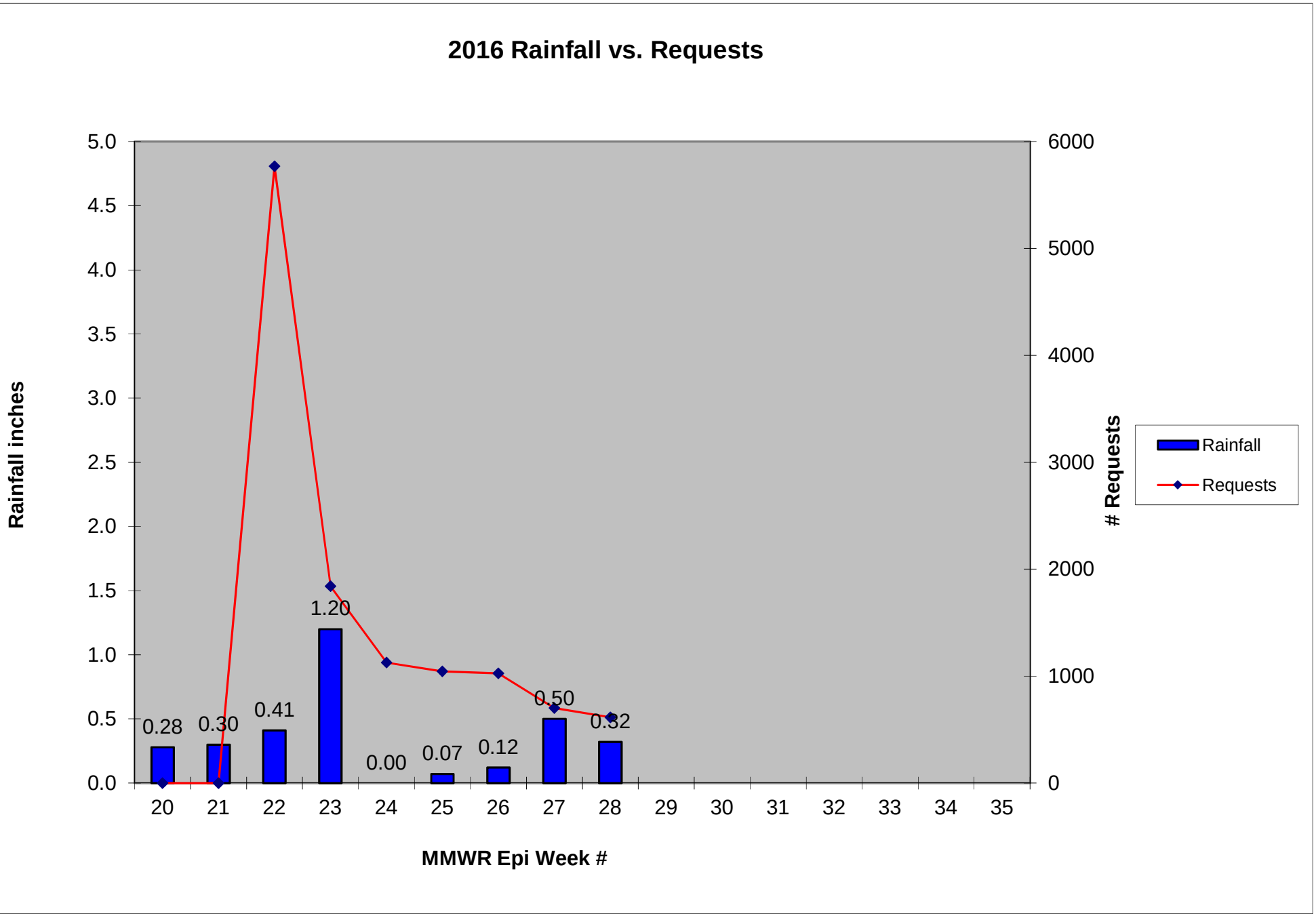
*source: http://www.nrcc.cornell.edu/regional/tables/tables.html

2016 CMMCP Weekly Rainfall vs. 11 Year Average*



*source: CMMCP weather station Northborough, MA


ULV Service Request History Comparison 2003-2016
Service Requests
6000
5000
4000
3000
2000
1000
0
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
MMWR Epi Week #
13 yr. avg.
2016


2016 Rainfall vs. Requests
Rainfall inches
Requests
MMWR Epi Week #
Rainfall
Requests
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
6000
5000
4000
3000
2000
1000
0
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
0.28
0.30
0.41
1.20
0.00
0.07
0.12
0.50
0.32