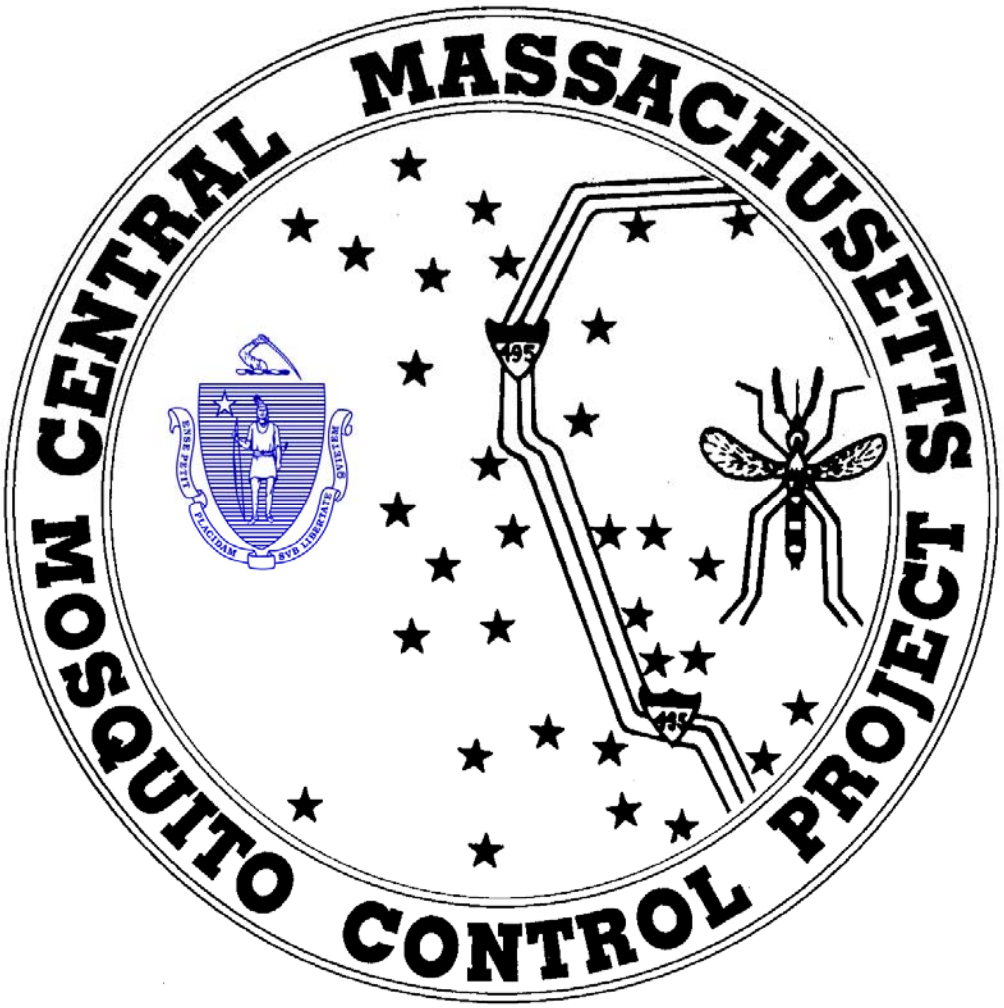
CMMCP WEEKLY SURVEILLANCE REPORT



EPI week #28
July 7-13, 2019

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Central Mass. Mosquito Control Project
Weekly Report- 7/7/19-7/13/19
EPI Week #28

Cumulative Surveillance Summary

Target Species	*Ae. vex*	*Cq. per*	*Cs. mel*	*Oc. can*	*Culex*	All Species
No. Pools	55	325	106	180	364	1,847
Total Specimens	317	51,210	777	3,873	4,816	63,961
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 74.34°F with a recorded high temperature of 93.50°F and a recorded low temperature of only 54.60°F. For this week there was also a total of 1.01 inches of rain observed. Compared to the previous week, it was approximately 0.95°F cooler on average, and rained about 0.90 inches less. There has been 2.69 inches of rain accumulated in July, after 3.04 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	+500.0%	+127.1%	Natick, Hudson, Stow
Coquillettidia perturbans	+259.8%	+130.4%	Westford, Sturbridge, Holliston
Culiseta melanura	-14.71%	+872.5%	Millville, Marlborough, Gardner
Ochlerotatus canadensis	+164.6%	+121.4%	Tewksbury, Hopedale
Culex Species	-11.72%	-73.37%	Hopedale, Berlin
All Species	+235.2%	+41.82%	Westford, Sturbridge, Holliston

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

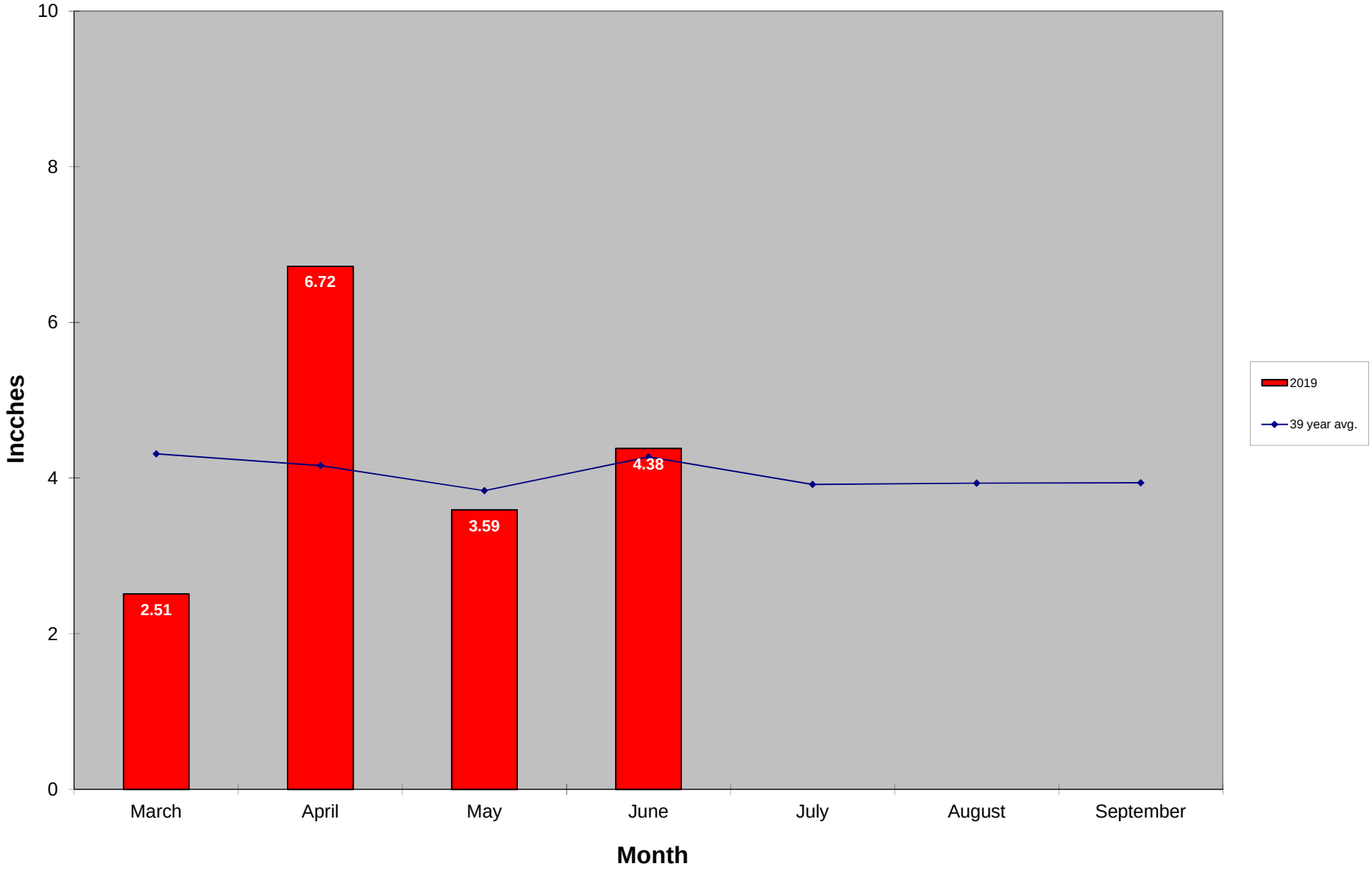
General statement: The temperatures for EPI week 28 averaged approximately 0.95°F cooler than the previous week, with 1.01 inches of precipitation observed. The only target mosquitoes that did not experience significant increases this week were *Culiseta melanura* and *Culex*. *Coquillettidia perturbans* was once again the most abundant mosquito species for the week, followed by *Culex*. Continued emergence of *Coquillettidia perturbans* should contribute to higher overall collections moving forward. All target species have all been collected in higher numbers this year compared to last, except for *Culex*. There have been zero mosquito pools from the CMMCP service area that have tested positive for mosquito-borne disease. Thirty-five egg papers, containing 3,527 eggs, were collected for *Aedes albopictus* surveillance during EPI week 28. No identifications of this invasive species have been confirmed to date.

Service requests are 60.6% greater than the 16 year average (7,121 vs. 11,437) but 10.2% lower than 2018 numbers (12,612 vs. 11,437). Service requests increased 8.4% from Epi week 27 to 28 (878 vs. 952). 1,438 service requests were closed out in EPI week 28; 9,625 have been closed to date from a total of 11,404 received (18.4% open). Work crews have been performing catch basins treatments in all member communities for *Culex* control. 7,505 catch basins were treated in Epi week 28, bringing the total for the year to 68,510.

***Aedes albopictus* Surveillance Data**

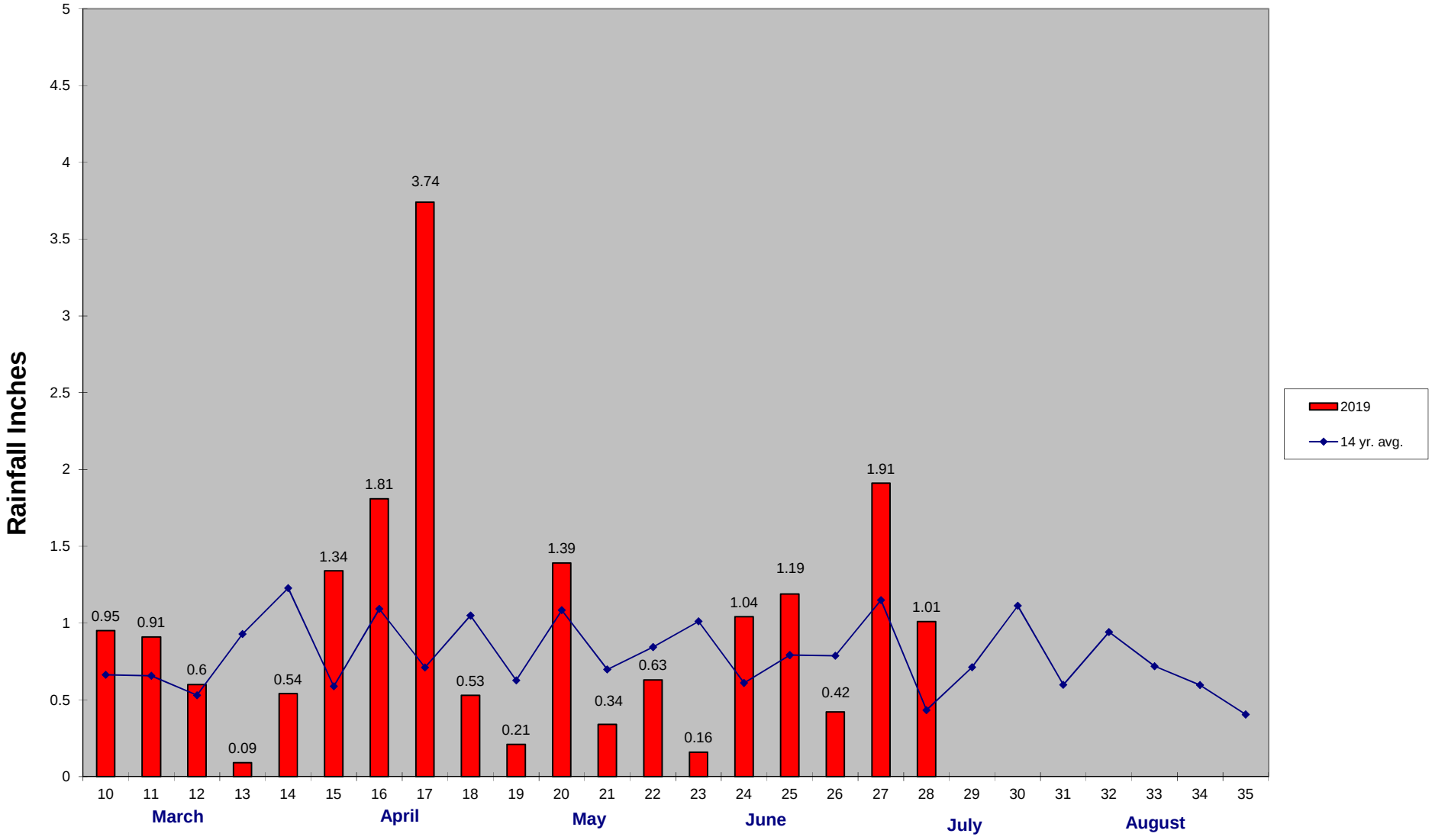
	# Ovitraps	**# Eggs**
EPI Week #22	31	4
EPI Week #23	21	221
EPI Week #24	33	530
EPI Week #25	37	1,294
EPI Week #26	37	1,100
EPI Week #27	-	-
EPI Week #28	35	3,527

2019 Mass. Rainfall Data vs. 39 Year Average*

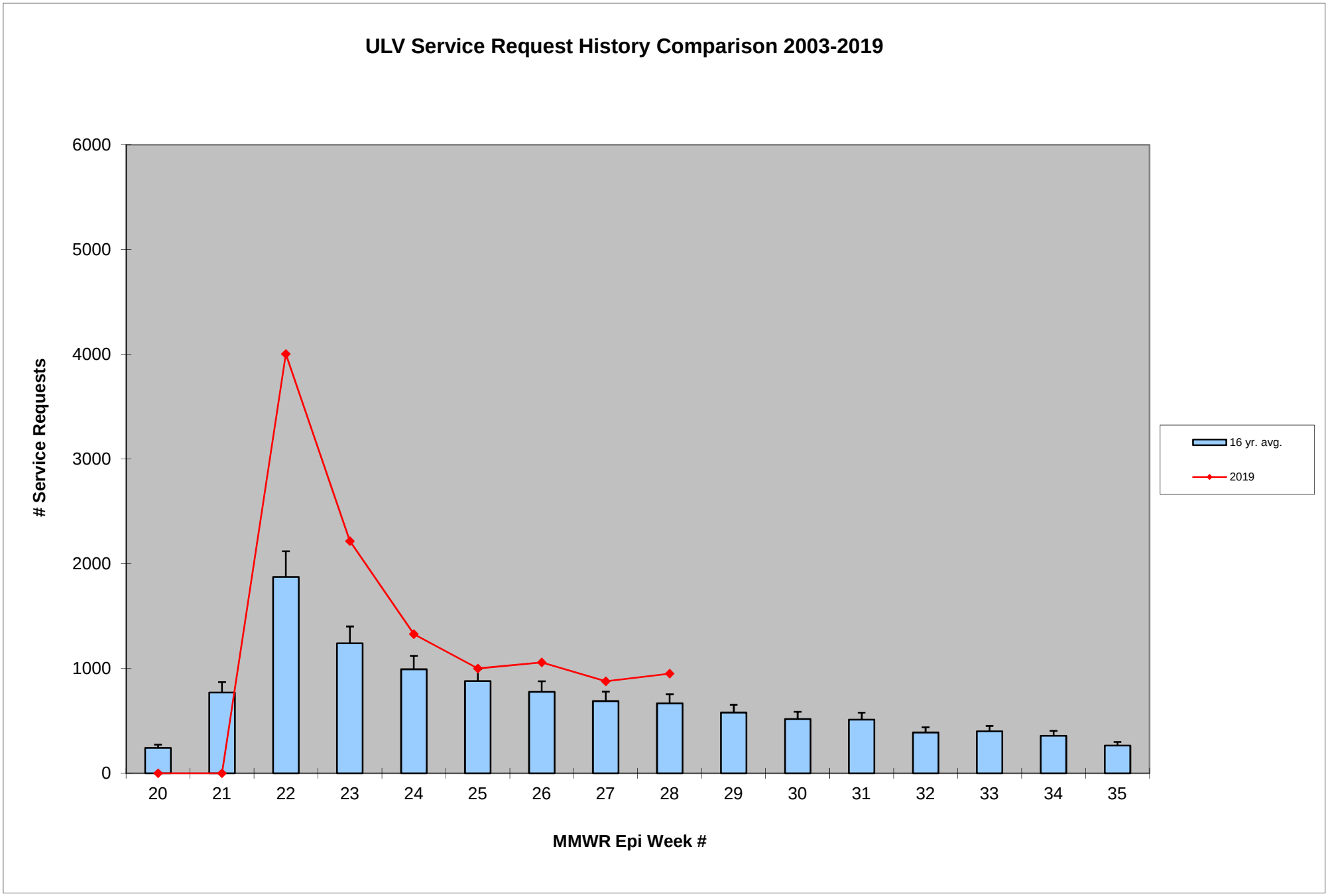


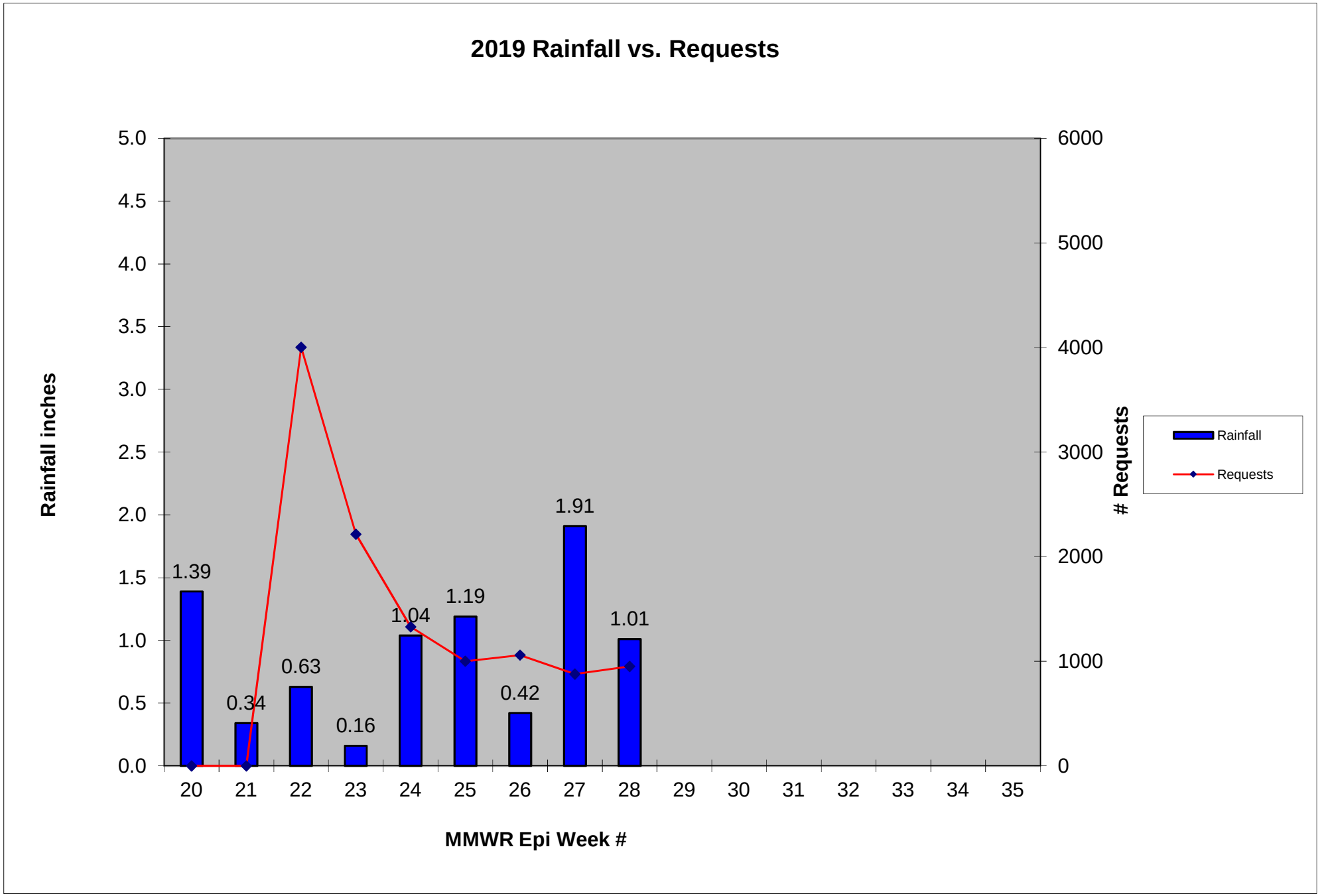
*source: http://www.nrcc.cornell.edu/regional/tables/tables.html

2019 CMMCP Weekly Rainfall vs. 14 Year Average*



*source: CMMCP weather station Northborough, MA


ULV Service Request History Comparison 2003-2019
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 #
16 yr. avg.
2019


2019 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
1.39
0.34
0.63
0.16
1.04
1.19
0.42
1.91
1.01
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35