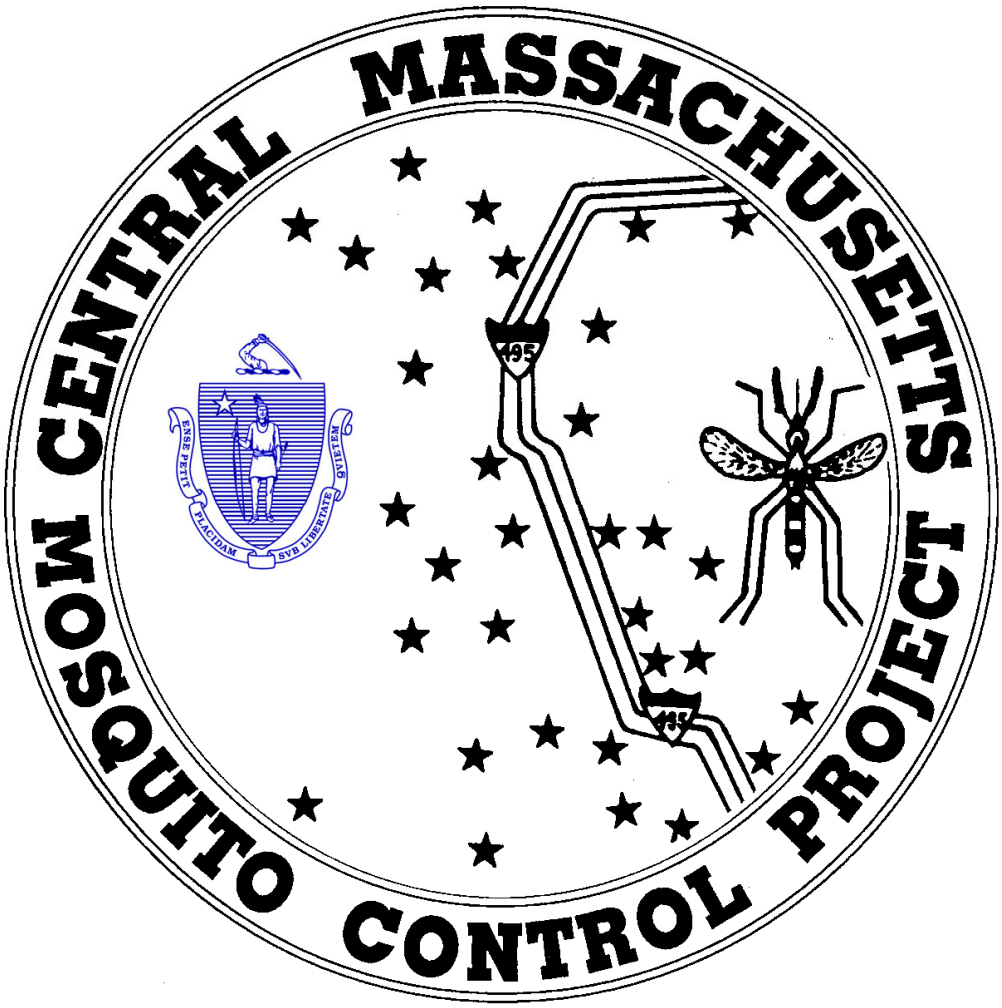
CMMCP WEEKLY SURVEILLANCE REPORT



EPI week #33
Aug. 9-15, 2020

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Central Mass. Mosquito Control Project
Weekly Report- 8/9/20-8/15/20
EPI Week #33

Cumulative Surveillance Summary

Target Species	*Ae. vex*	*Cq. per*	*Cs. mel*	*Oc. can*	*Culex*	All Species
No. Pools	155	670	87	193	450	3108
Total Specimens	1823	32158	301	2818	3474	46753
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 76.74°F with a recorded high temperature of 96.00°F and a recorded low temperature of only 60.10°F. There was no recordable rain observed this week. Compared to the previous week, it was approximately 1.70°F warmer on average, and rained about 1.79 inches less. There has been 1.79 inches of rain accumulated in August, after 1.06 inches for the month of July.

CMMCP Mosquito Summary-

Target Species	Δ From Last Week	Δ From Last Year	Predominant Trap Site(s)
Aedes vexans	-78.86%	+139.6%	Grafton, Hopedale
Coquillettidia perturbans	-49.38%	-79.43%	Bolton, Ayer
Culiseta melanura	-25.00%	-82.73%	Wilmington, Millbury
Ochlerotatus canadensis	-62.50%	-47.52%	Westford, Gardner
Culex Species	-27.29%	-71.60%	Tewksbury, Chelmsford
All Species	-51.11%	-75.30%	Bolton, Boxborough, Ayer

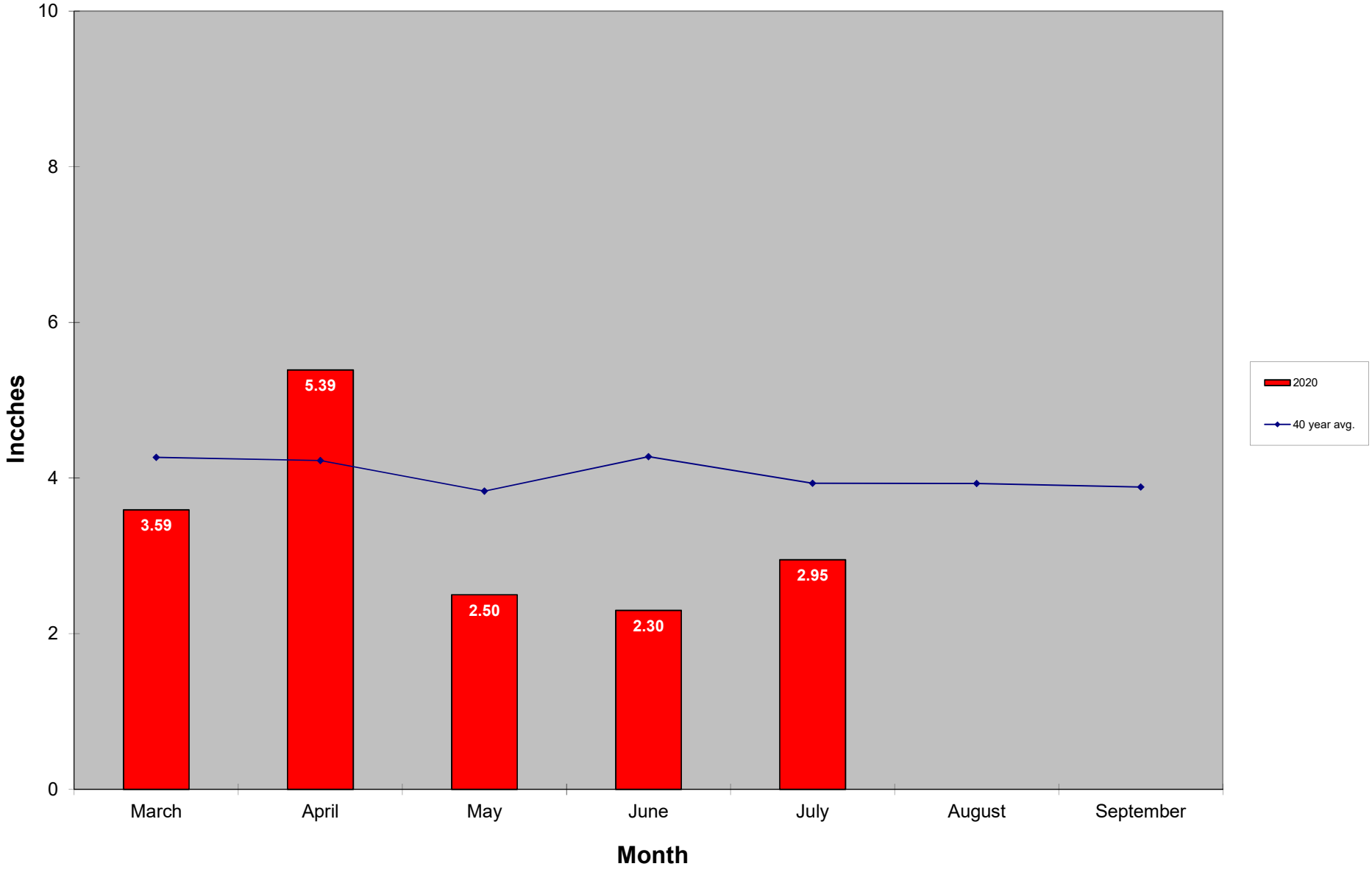
The predominant mosquito for the week was *Coquillettidia perturbans*, followed by *Culex* spp.

General narrative: The average temperature for EPI week 33 was approximately 1.70°F warmer than the previous week, with no precipitation observed. This week decreased emergence was observed for all target species. Despite the continued decrease, *Coquillettidia perturbans* was once again the most abundant mosquito species for the week, followed now by *Culex spp*. Compared to the 2019 season, overall mosquito surveillance numbers are down this year. All target species are lower this season, except for *Aedes vexans*. Every submitted mosquito pool from EPI week 32 tested negative for mosquito-borne disease. *Aedes albopictus* surveillance using ovitraps continued, with 1,492 eggs collected and submitted for identification this week. No observations of this invasive species have been noted to date in 2020.

Service requests are 62.2% greater than the 17-year average and a 1.7% increase over 2019 numbers. Services requests increased 14.7% over Epi week 32 numbers. Work

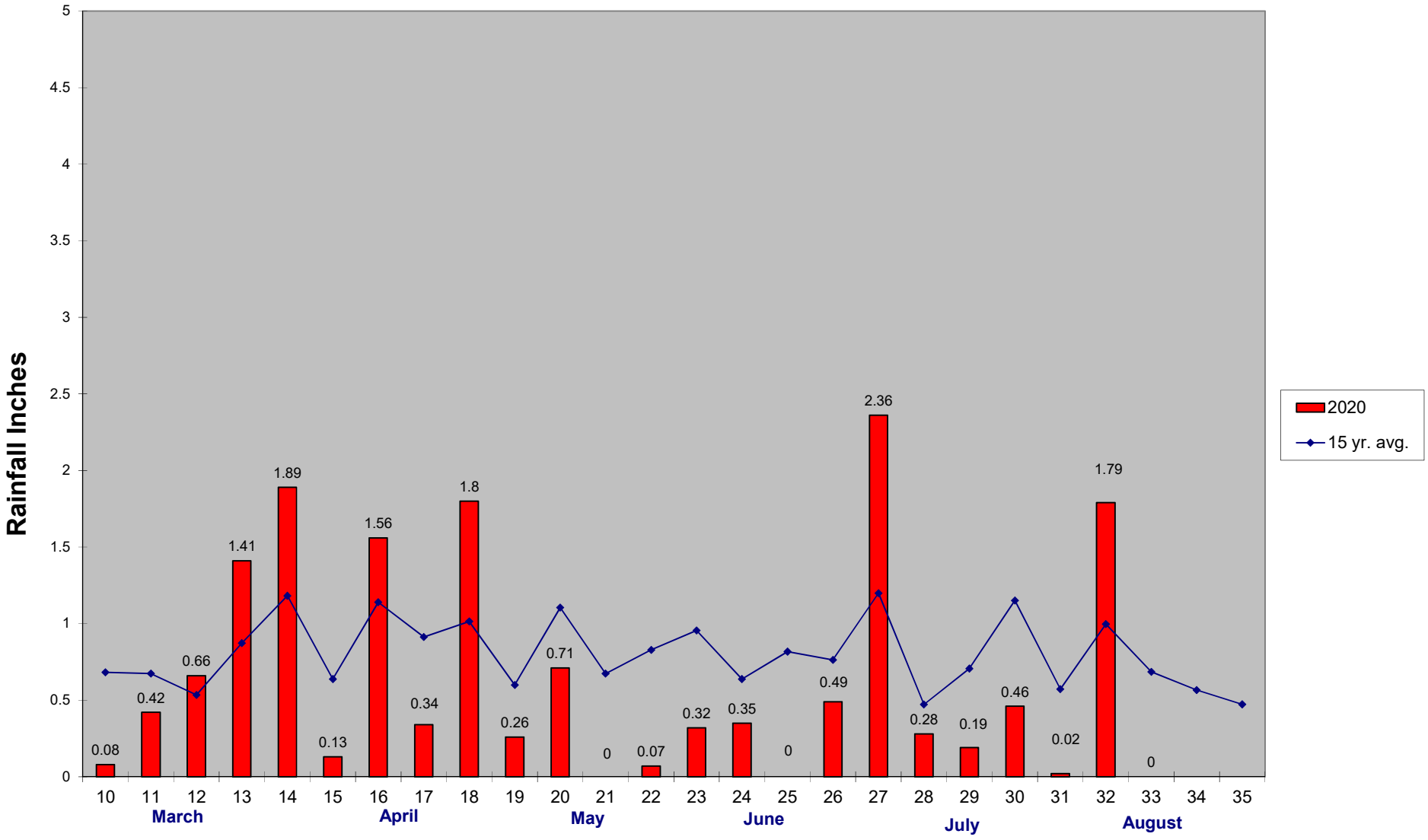
crews are performing catch basins treatments in all member communities for *Culex* control. 4,630 catch basins were treated in Epi week 33, bringing the total for the year to 71,326 basins. Final results are still pending from the analysis laboratories but initial results do not look positive for control in most *Cs. melanura* crypt habitat. Data is still being collected and analyzed from emergence traps in *Cq. perturbans* habitat.

2020 Mass. Rainfall Data vs. 40 Year Average*

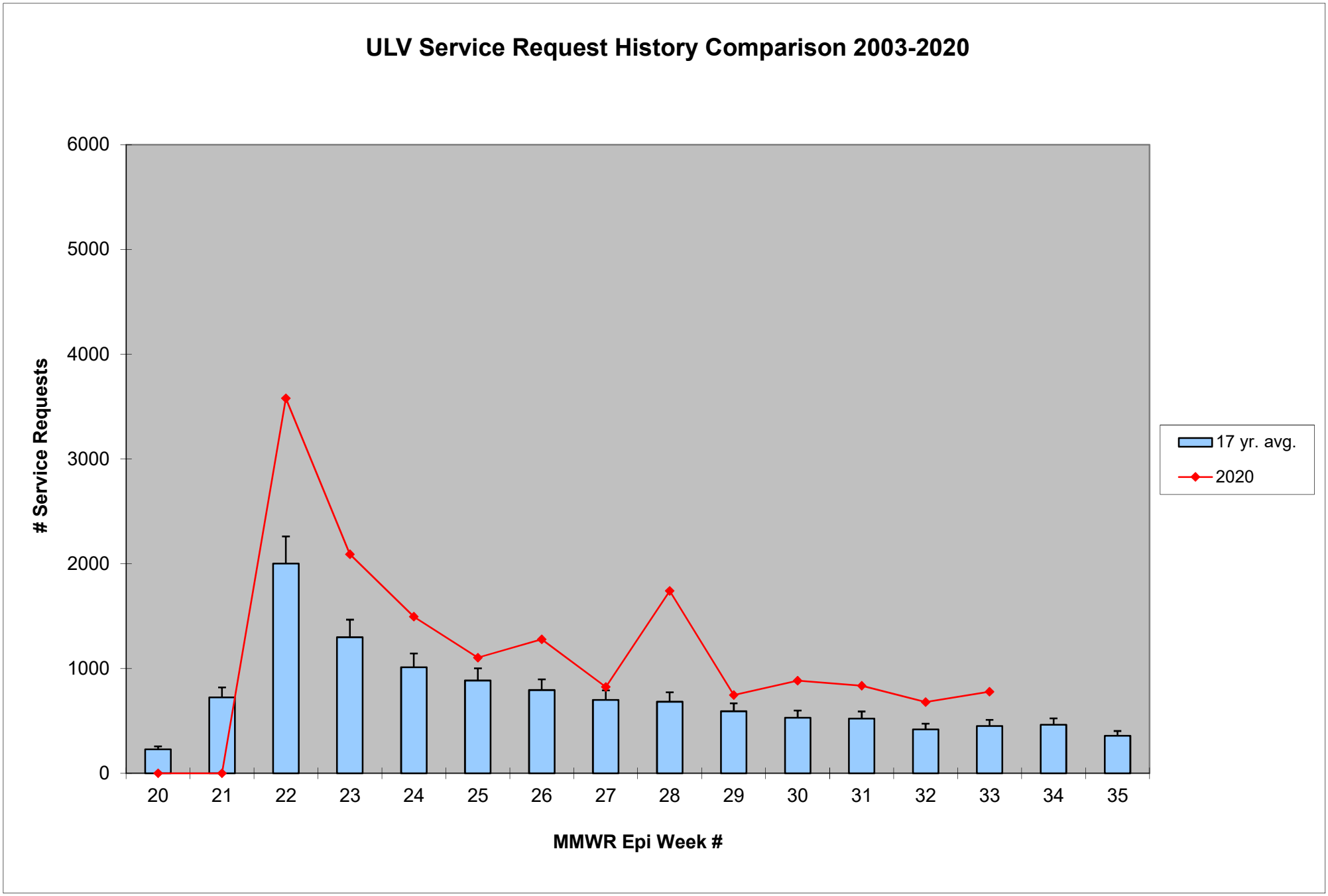


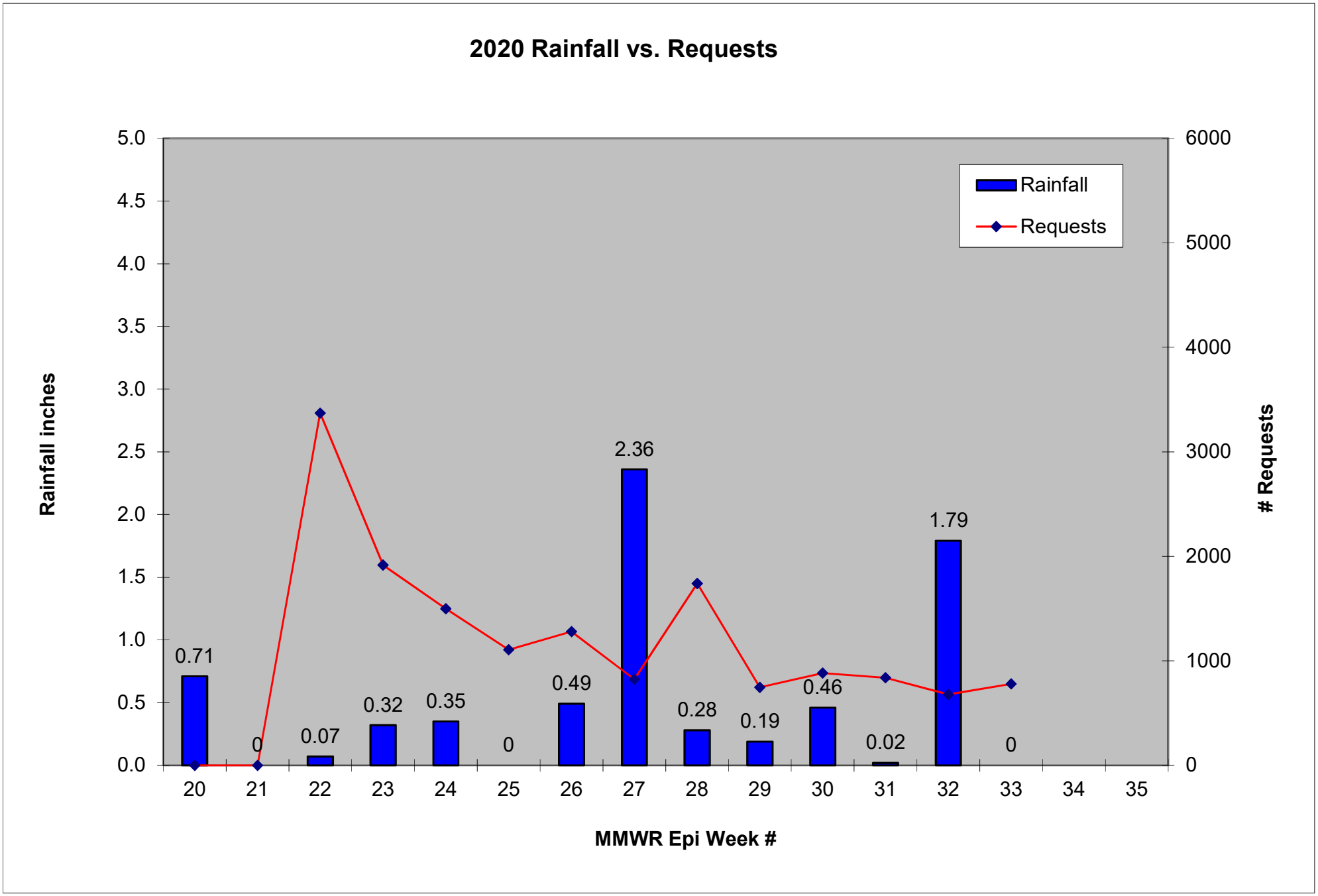
*source: http://www.nrcc.cornell.edu/regional/tables/tables.html

2020 CMMCP Weekly Rainfall vs. 15 Year Average*



*source: CMMCP weather station Northborough, MA


ULV Service Request History Comparison 2003-2020
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 #
17 yr. avg.
2020


2020 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
0.71
0
0.07
0.32
0.35
0
0.49
2.36
0.28
0.19
0.46
0.02
1.79
0