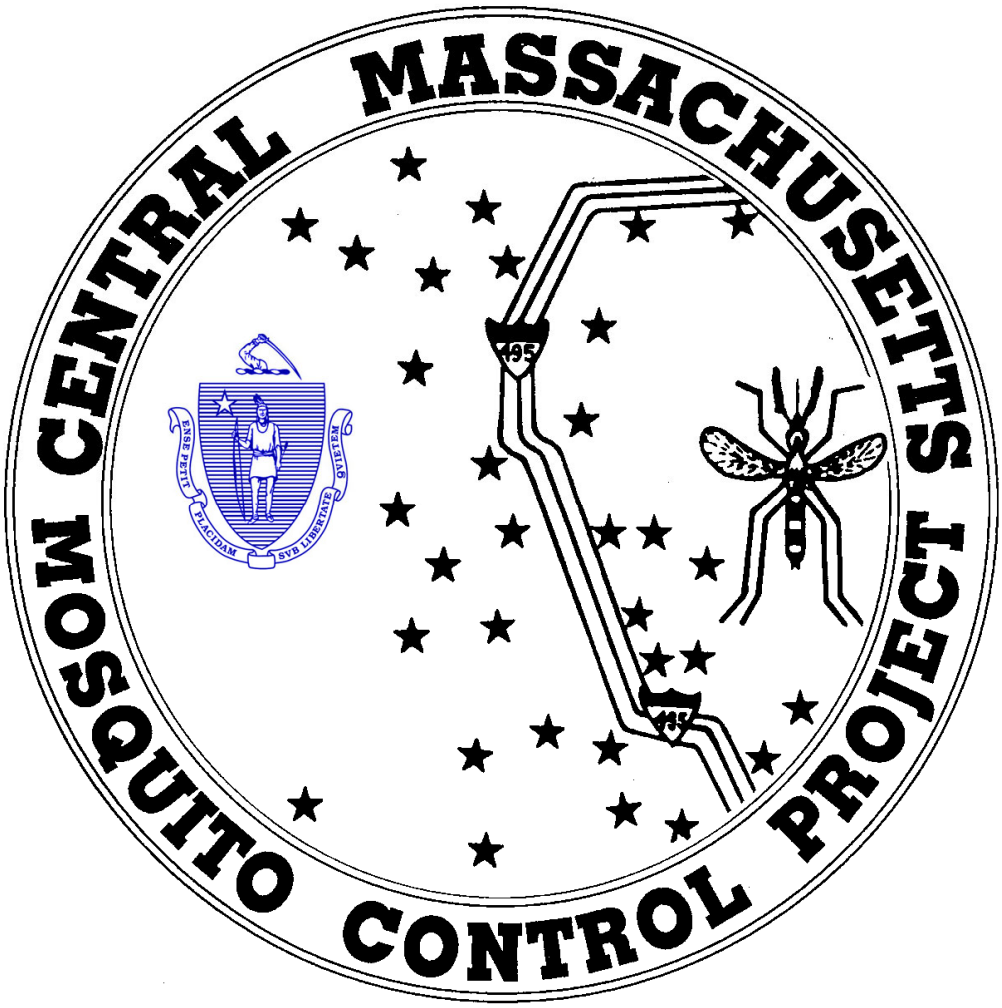
CMMCP WEEKLY SURVEILLANCE REPORT



EPI week #31
July 26 – Aug. 1, 2020

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Tim McGlinchy, *Director of Operations*
Tim Deschamps, *Executive Director*

Central Mass. Mosquito Control Project
Weekly Report- 7/26/20-8/1/20
EPI Week #31

Cumulative Surveillance Summary

Target Species	*Ae. vex*	*Cq. per*	*Cs. mel*	*Oc. can*	*Culex*	All Species
No. Pools	110	512	78	184	332	2445
Total Specimens	906	27683	287	2796	2740	39222
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 79.94°F with a recorded high temperature of 97.50°F and a recorded low temperature of only 62.30°F. For this week there was also a total of 0.02 inches of rain observed. Compared to the previous week, it was approximately 1.51°F warmer on average, and rained about 0.44 inches less. There has been 1.06 inches of rain accumulated in July, after 3.41 inches for the month of June.

CMMCP Mosquito Summary-

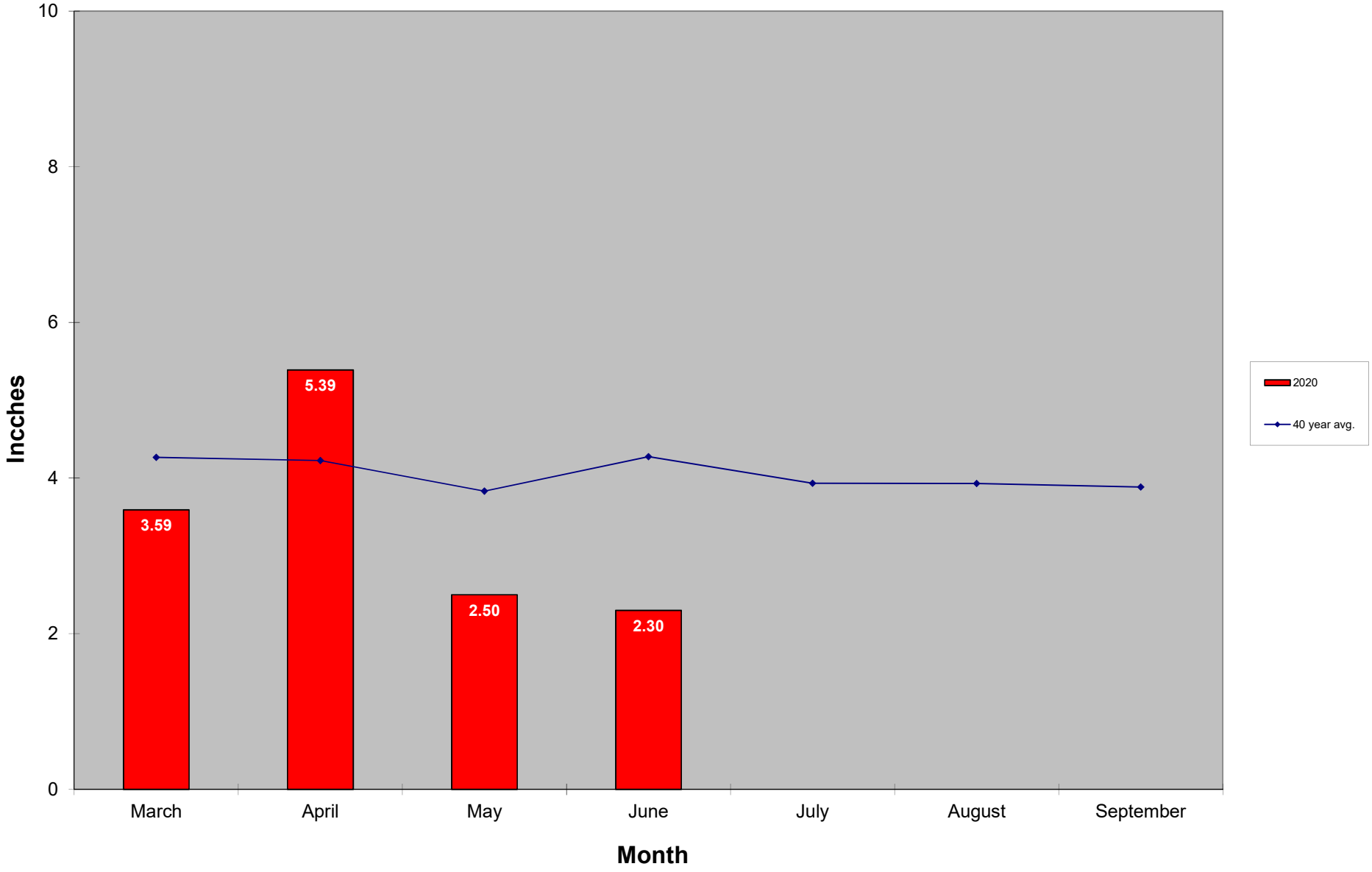
Target Species	**Δ From Last Week**	**Δ From Last Year**	**Predominant Trap Site(s)**
Aedes vexans	+3.470%	+148.7%	Gardner
Coquillettidia perturbans	-21.59%	-80.58%	Hopkinton, Dracut
Culiseta melanura	-14.29%	-75.69%	Tewksbury, Blackstone
Ochlerotatus canadensis	-39.29%	-47.20%	Auburn, Gardner
Culex Species	-7.130%	-68.97%	Worcester, Devens
All Species	-13.07%	-76.94%	Hopkinton, Hopedale

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

General narrative: The average temperature for EPI week 31 was approximately 1.51°F warmer than the previous week, with 0.02 inches of precipitation observed. This week decreased emergence was observed for all target mosquitoes except *Aedes vexans*. *Coquillettidia perturbans* experienced a second consecutive week of decline in the CMMCP service area. Despite the weekly decrease, *Coquillettidia perturbans* was once again the most abundant mosquito species for the week, followed now by *Ochlerotatus triseriatus*. 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 30 tested negative for mosquito-borne disease. *Aedes albopictus* surveillance using ovitraps continued, with 104 eggs collected and submitted for identification this week.

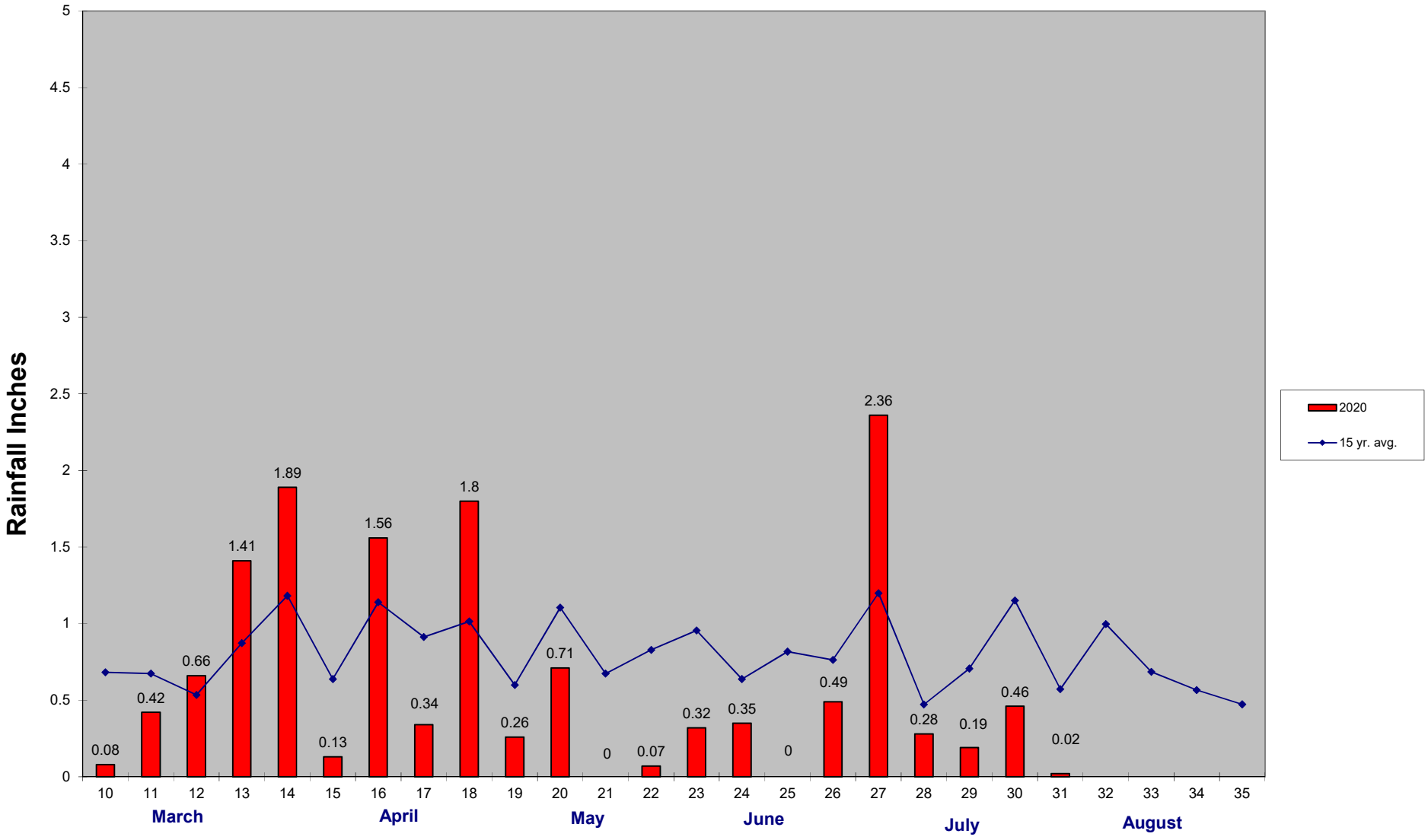
Service requests are 61.6% greater than the 17-year average and a 7.2% increase over 2019 numbers. Services requests are on par with Epi week 30 numbers. Work crews are performing catch basins treatments in all member communities for *Culex* control. 4,699 catch basins were treated in Epi week 31, bringing the total for the year to 60,147 basins. One interesting note, during Epi week 31 we treated our one-millionth catch basin since the program began in earnest in 2003 for *Culex* control and WNV risk mitigation. 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*

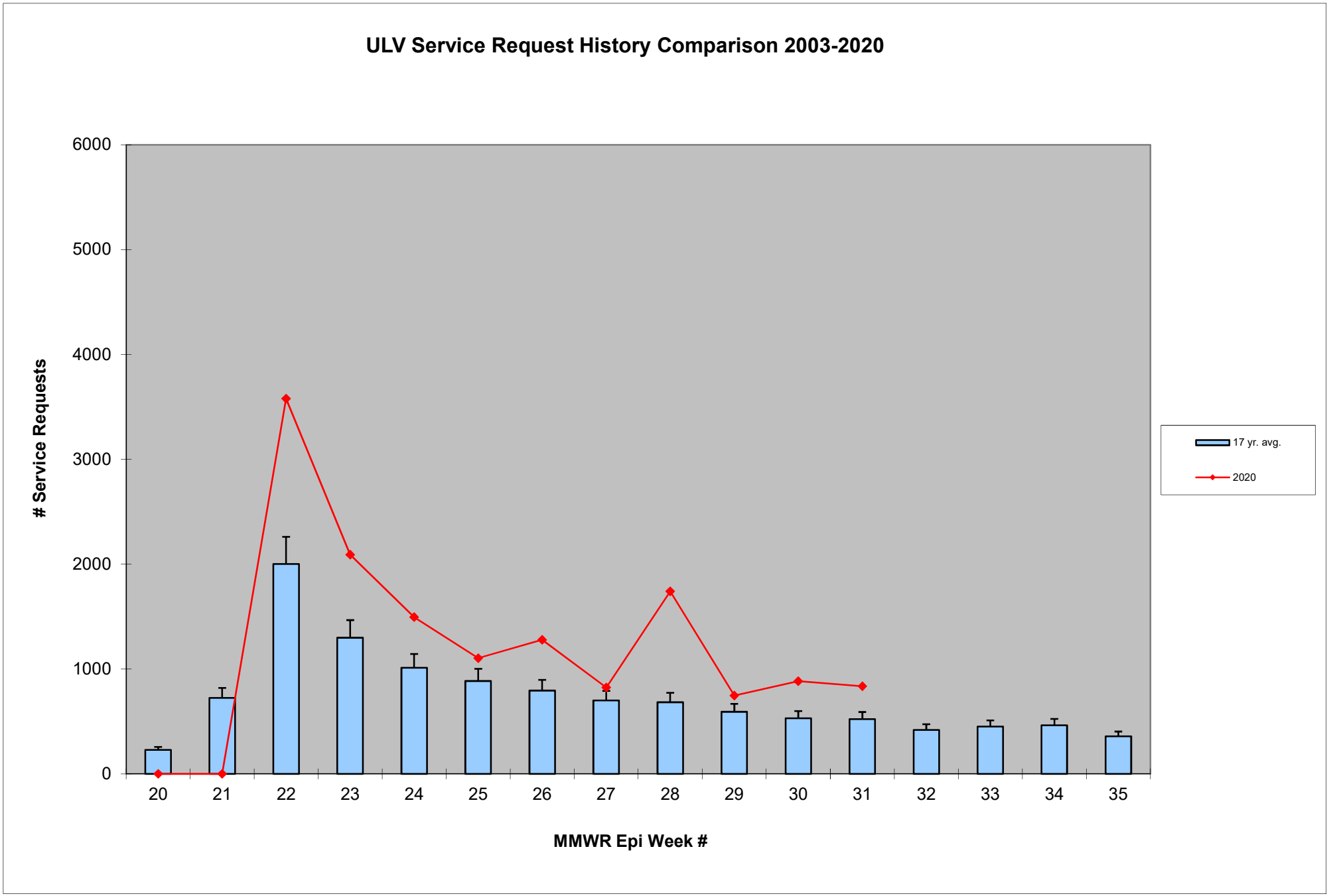


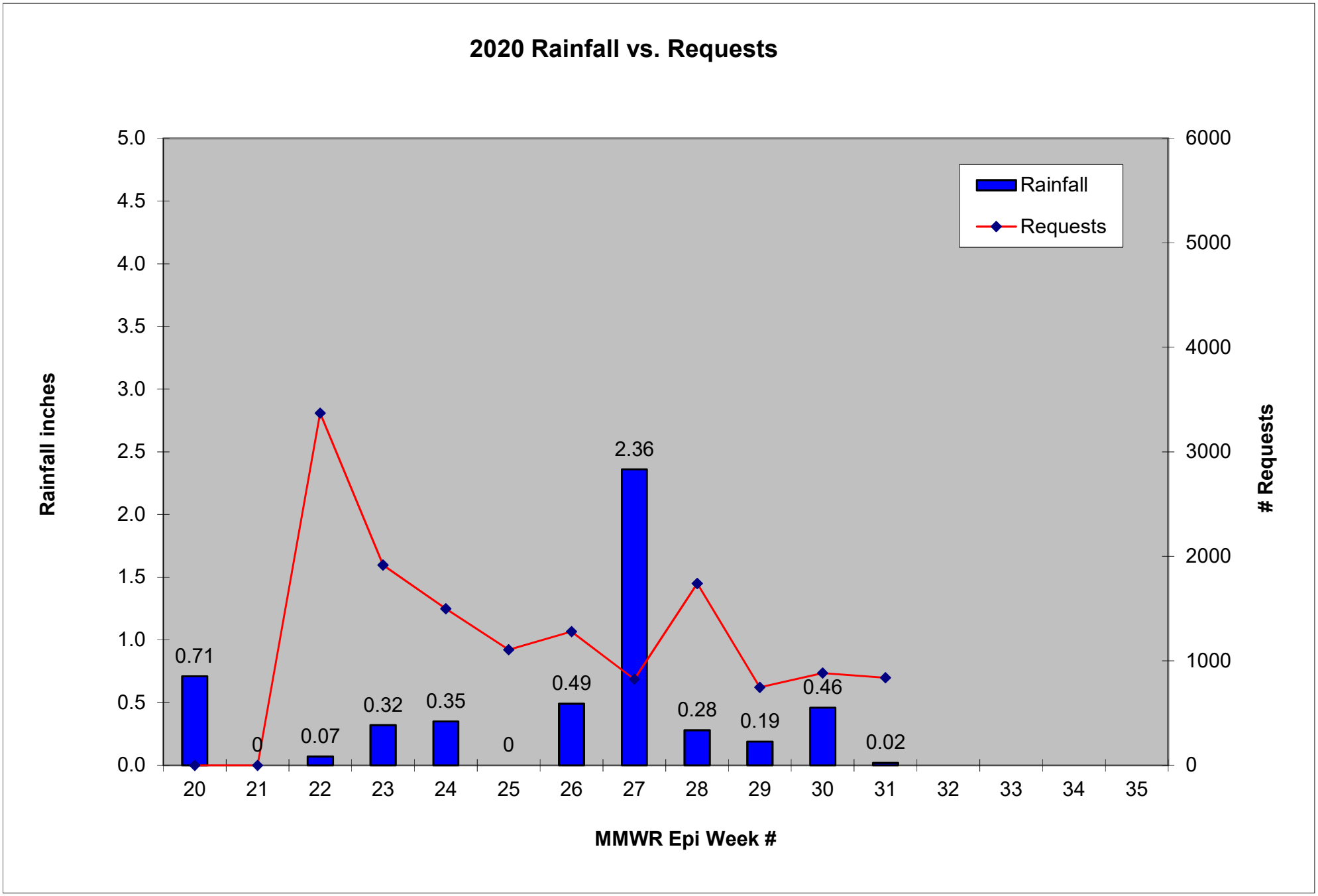
*source: http://www.nrcc.cornell.edu/regional/tables/tables.html

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
0.71
0
0.07
0.32
0.35
0
0.49
2.36
0.28
0.19
0.46
0.02
20
21
22
23
24
25
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27
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29
30
31
32
33
34
35