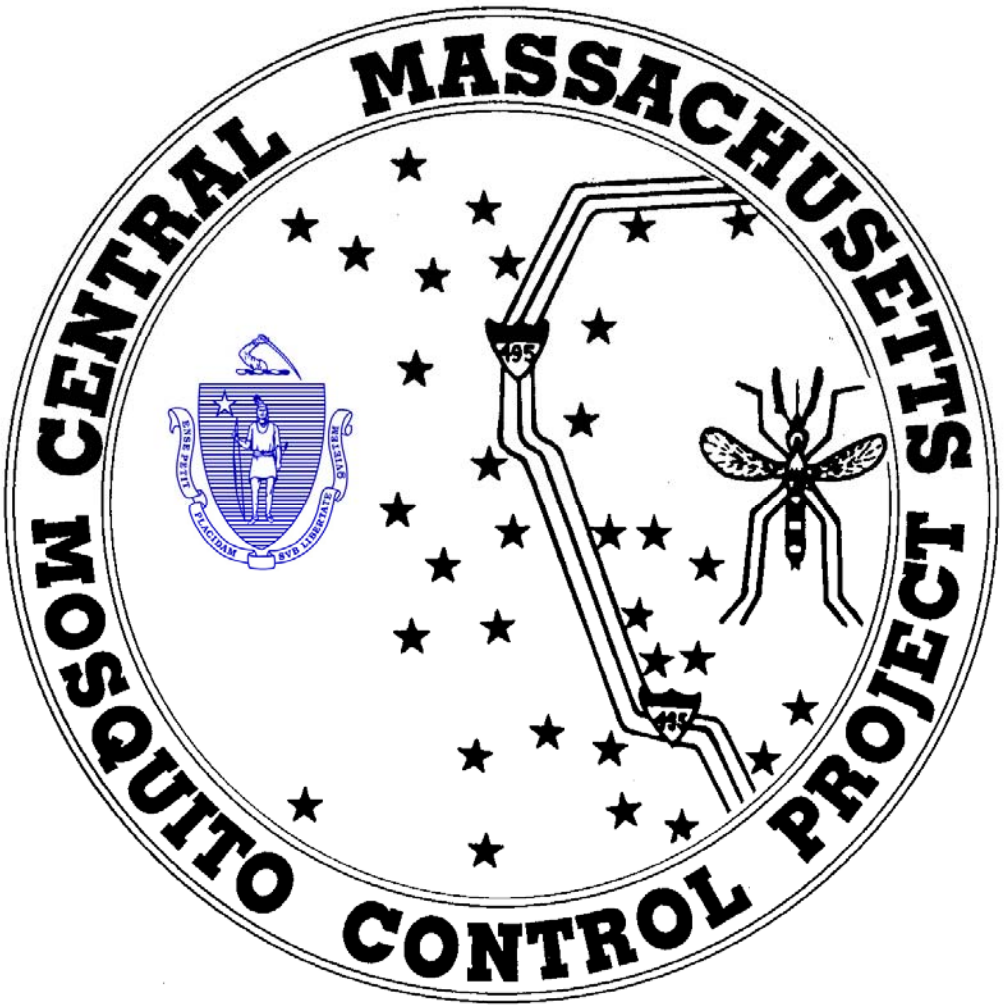
CMMCP WEEKLY SURVEILLANCE REPORT



EPI week #30
July 21-27, 2019

Frank Cornine, *Staff Biologist*
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Tim McGlinchy, *Director of Operations*
Tim Deschamps, *Executive Director*

Central Mass. Mosquito Control Project
Weekly Report- 7/21/19-7/27/19
EPI Week #30

Cumulative Surveillance Summary

Target Species	*Ae. vex*	*Cq. per*	*Cs. mel*	*Oc. can*	*Culex*	All Species
No. Pools	78	522	158	225	539	2,696
Total Specimens	375	96,365	967	4,185	7,918	114,445
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 73.19°F with a recorded high temperature of 94.60°F and a recorded low temperature of 56.80°F. For this week there was a total of 1.68 inches of rain observed. Compared to the previous week, it was approximately 3.68°F cooler on average, and rained 1.06 inches more. There has been 4.99 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	+90.00%	+112.4%	Hudson, Tewksbury
Coquillettidia perturbans	-40.89%	+218.3%	Millbury, Boxborough
Culiseta melanura	+31.71%	+554.1%	Hopkinton, Tewksbury
Ochlerotatus canadensis	-59.46%	+130.7%	Gardner, Millville
Culex Species	+6.800%	-67.63%	Tewksbury, Gardner
All Species	-36.64%	+87.60%	Millbury, Boxborough

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

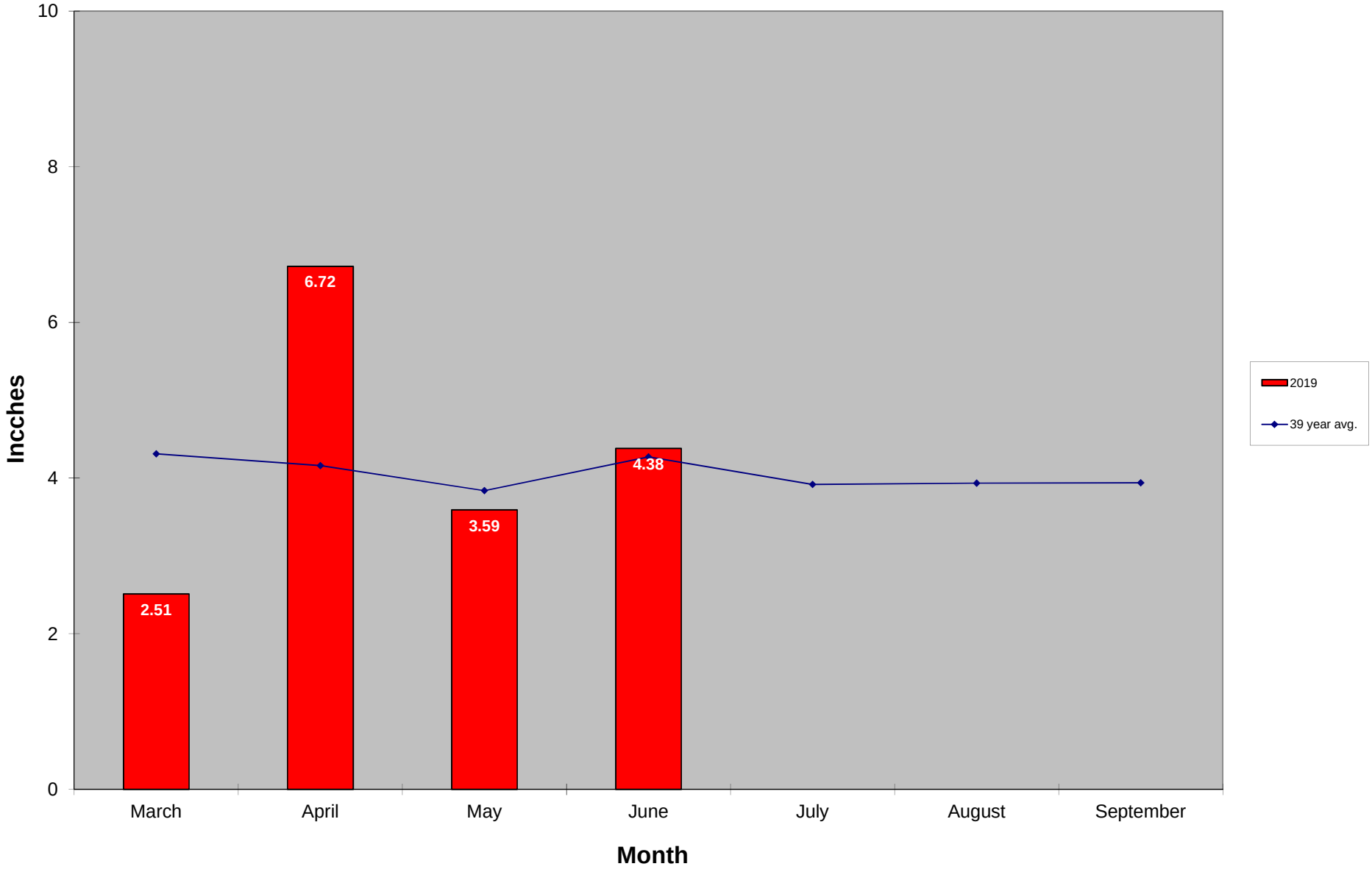
General narrative: The temperatures for EPI week 30 averaged approximately 3.68°F cooler than the previous week, with 1.68 inches of precipitation observed. *Aedes vexans*, *Culiseta melanura*, and *Culex* experienced increases this week, while *Coquillettidia perturbans* and *Ochlerotatus canadensis* decreased. *Coquillettidia perturbans* was once again the most abundant mosquito species for the week, followed by *Culex*. With the observed reduction of *Coquillettidia perturbans*, this species may have peaked for the season. 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 1,946 eggs, were collected for Aedes albopictus surveillance during EPI week 30. No confirmations of *Ae. albopictus* have been identified in 2019 to date.

Service requests are 57.1% greater than the 16 year average (8,220 vs. 12,920) but 10% lower than 2018 numbers (12,920 vs. 14,223). Service requests decreased 10.6% from Epi week 29 to 30 (779 vs. 704). 792 service requests were closed out in EPI week 30; 11,700 have been closed to date from a total of 12,862 received (9.9% open). Work crews have been performing catch basins treatments in all member communities for *Culex* control. 8,668 catch basins were treated in Epi week 30, bringing the total for the year to 84,379.

***Aedes albopictus* Surveillance Data**

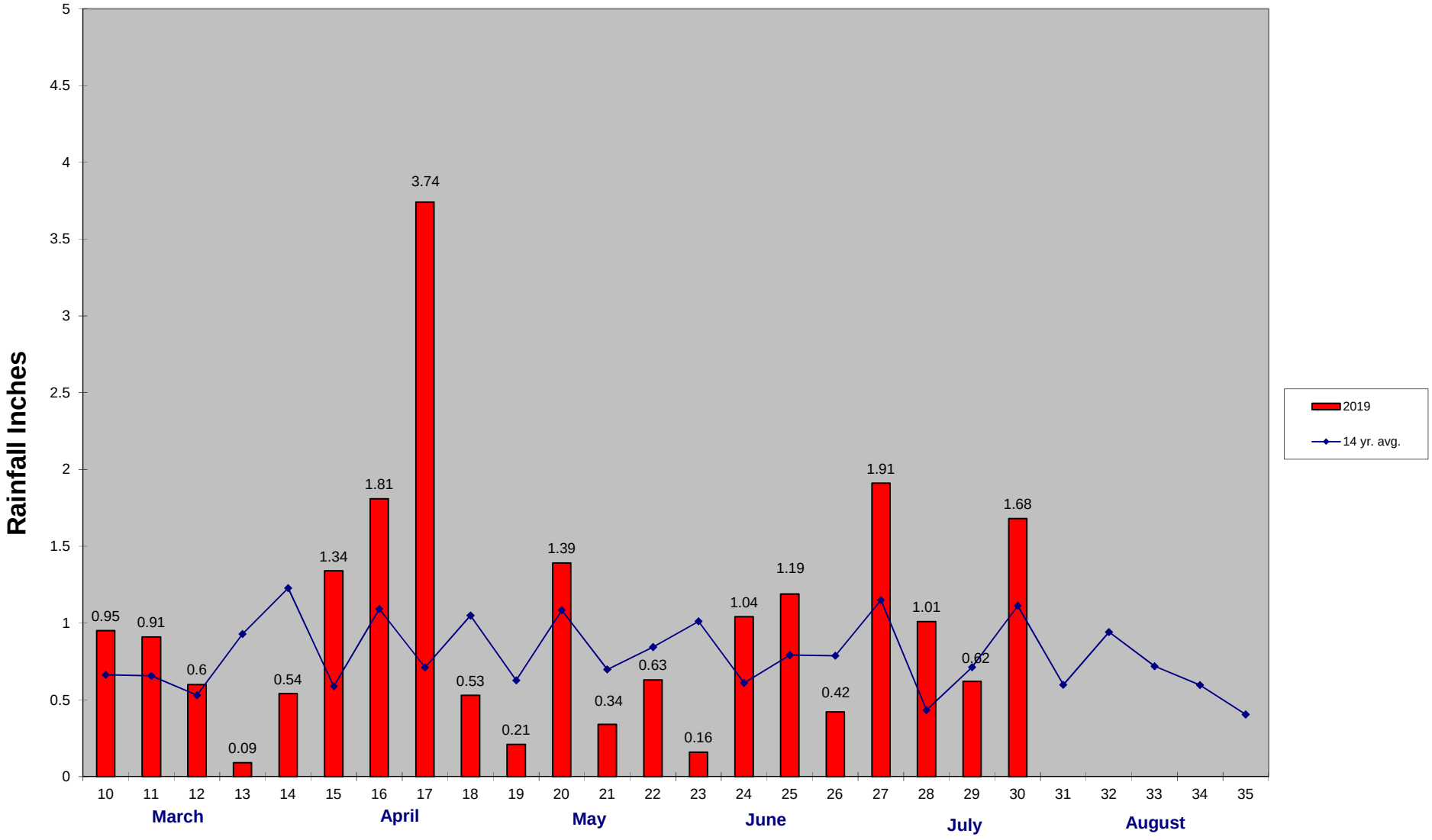
	# Ovitraps	**# Eggs**
EPI Week #22	31	4
EPI Week #23	21	221
EPI Week #24	33	530
EPI Week #25	37	1294
EPI Week #26	37	1100
EPI Week #27	-	-
EPI Week #28	35	3527
EPI Week #29	35	1481
EPI Week #30	35	1946

2019 Mass. Rainfall Data vs. 39 Year Average*



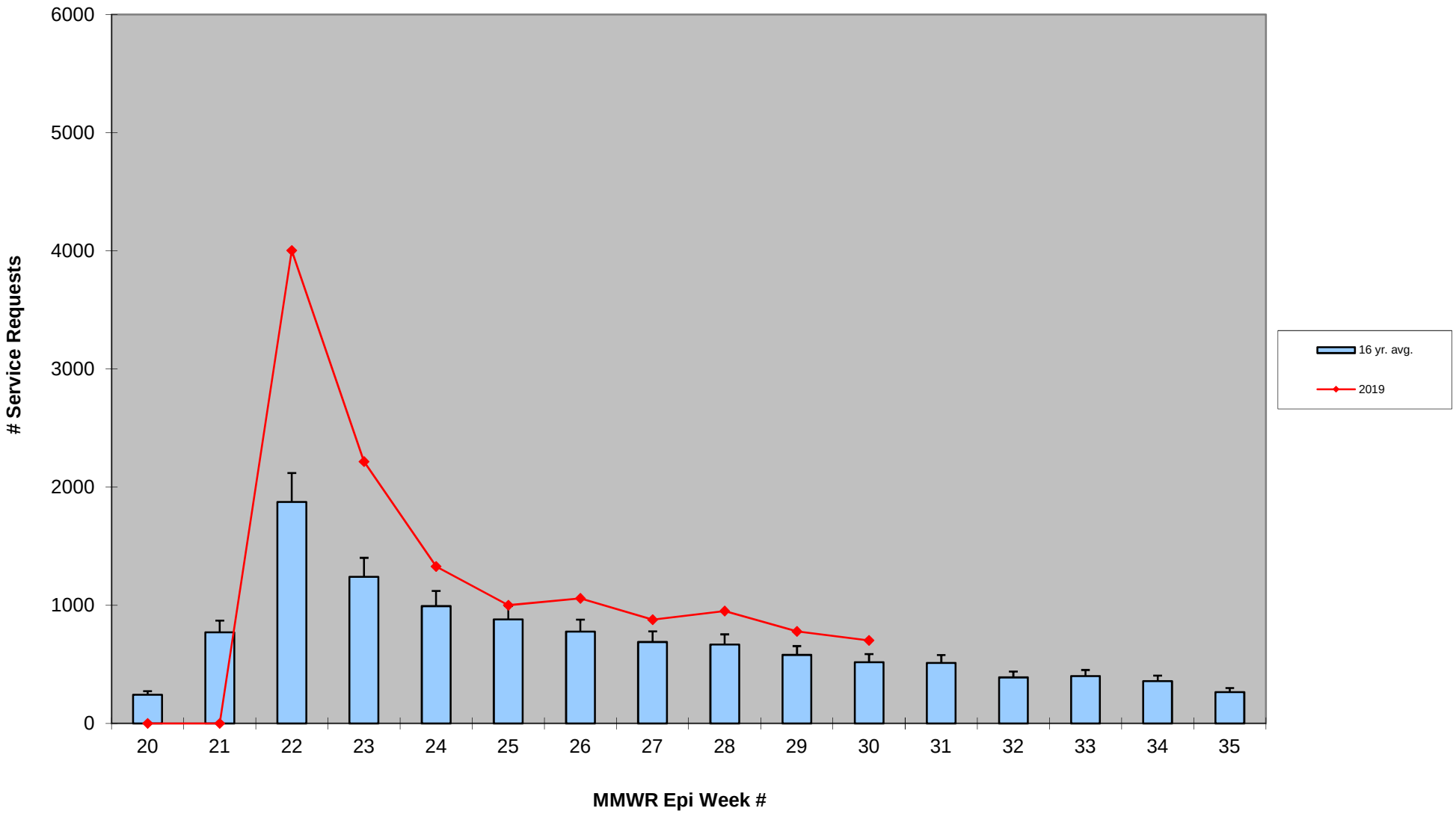
*source: http://www.nrcc.cornell.edu/regional/tables/tables.html

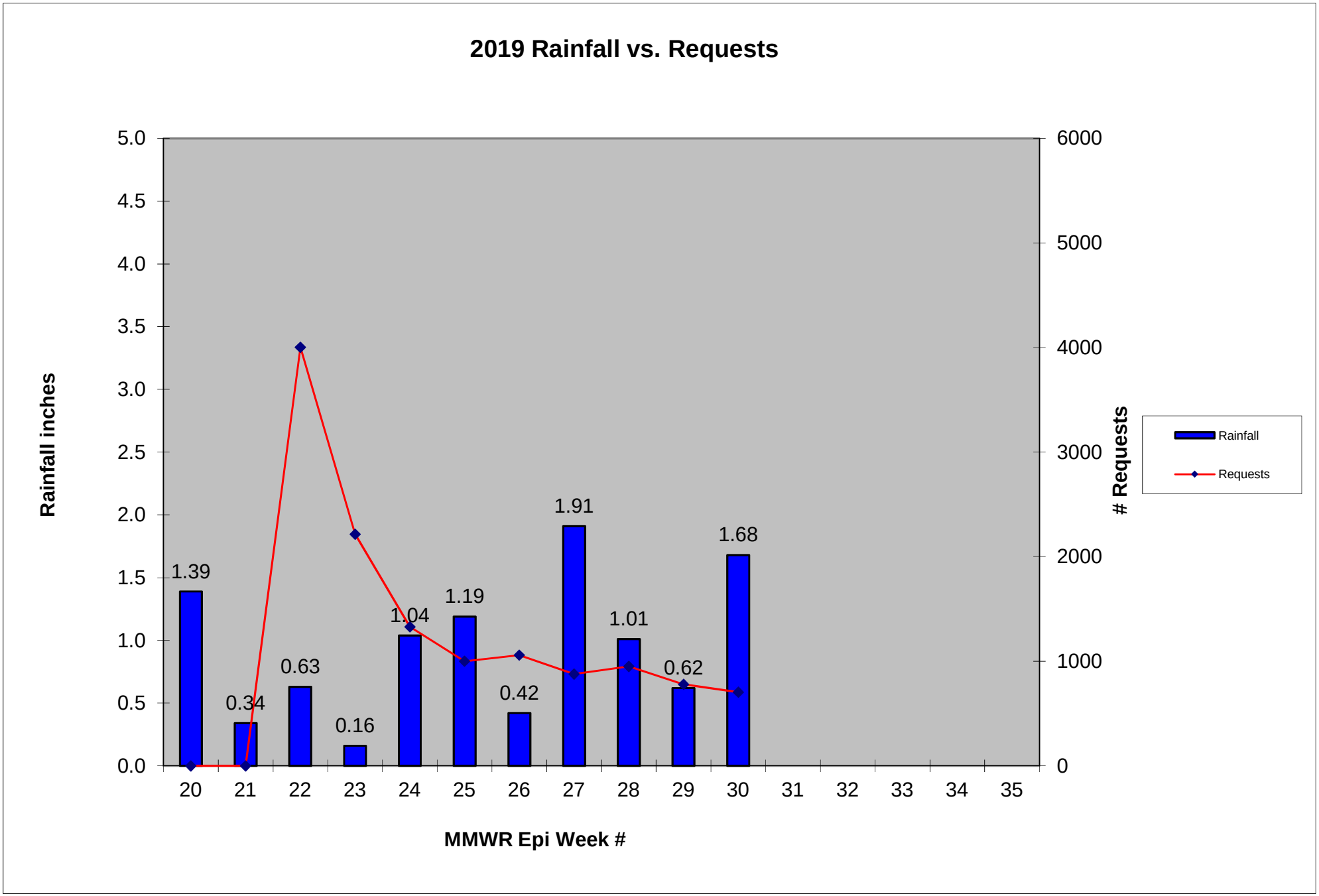
2019 CMMCP Weekly Rainfall vs. 14 Year Average*



*source: CMMCP weather station Northborough, MA

ULV Service Request History Comparison 2003-2019




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
0.62
1.68
20
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33
34
35