

CMMCP WEEKLY SURVEILLANCE REPORT



EPI week #34
Aug. 18-24, 2019

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Central Mass. Mosquito Control Project
Weekly Report- 8/18/19-8/24/19
EPI Week #34

Cumulative Surveillance Summary

Target Species	<i>Ae. vex</i>	<i>Cq. per</i>	<i>Cs. mel</i>	<i>Oc. can</i>	<i>Culex</i>	All Species
No. Pools	167	969	278	271	891	4408
Total Specimens	1060	162847	1864	4420	15260	193275
No. Pools WNV +	0	0	0	0	3 [†]	3 [†]
No. Pools EEE +	0	9 [†]	0	0	0	9 [†]

[†]Pool of WNV+ *Culex* species collected in Worcester on 7/26/19

[†]Pool of WNV+ *Culex* species collected in Stow on 7/31/19

[†]Pool of EEE+ *Coquillettidia perturbans* collected in Southborough on 7/31/19

[†]Pool of EEE+ *Coquillettidia perturbans* collected in Southborough on 7/31/19

[†]Pool of EEE+ *Coquillettidia perturbans* collected in Westborough on 8/2/19

[†]Pool of EEE+ *Coquillettidia perturbans* collected in Westborough on 8/2/19

[†]Pool of WNV+ *Culex* species collected in Worcester on 8/6/19

[†]Pool of EEE+ *Coquillettidia perturbans* collected in Hopkinton on 8/6/19

[†]Pool of EEE+ *Coquillettidia perturbans* collected in Westborough on 8/8/19

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[†]Pool of EEE+ *Coquillettidia perturbans* collected in Westborough on 8/8/19

Weather Summary (Northborough, MA): The weather for this particular week averaged 73.53°F with a recorded high temperature of 96.10°F and a recorded low temperature of 51.40°F. For this week there was also a total of 0.15 inches of rain observed. Compared to the previous week, it was approximately 1.84°F warmer on average, and rained 0.13 inches more. There has been 1.95 inches of rain accumulated in August, after 5.20 inches for the month of July.

CMMCP Mosquito Summary-

Target Species	Δ From Last Week	Δ From Last Year	Predominant Trap Site(s)
<i>Aedes vexans</i>	+21.50%	+30.67%	Southborough, Acton
<i>Coquillettidia perturbans</i>	-6.190%	+290.9%	Southborough, Milford
<i>Culiseta melanura</i>	-52.75%	+588.2%	Webster, Sturbridge
<i>Ochlerotatus canadensis</i>	-9.090%	+135.9%	Northbridge, Lancaster
<i>Culex</i> Species	+82.72%	-50.19%	Stow, Holliston
All Species	+3.120%	+138.8%	Southborough, Milford

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

General narrative: The temperatures for EPI week 34 averaged approximately 1.84°F warmer than the previous week, with only 0.15 inches of precipitation observed. *Aedes*

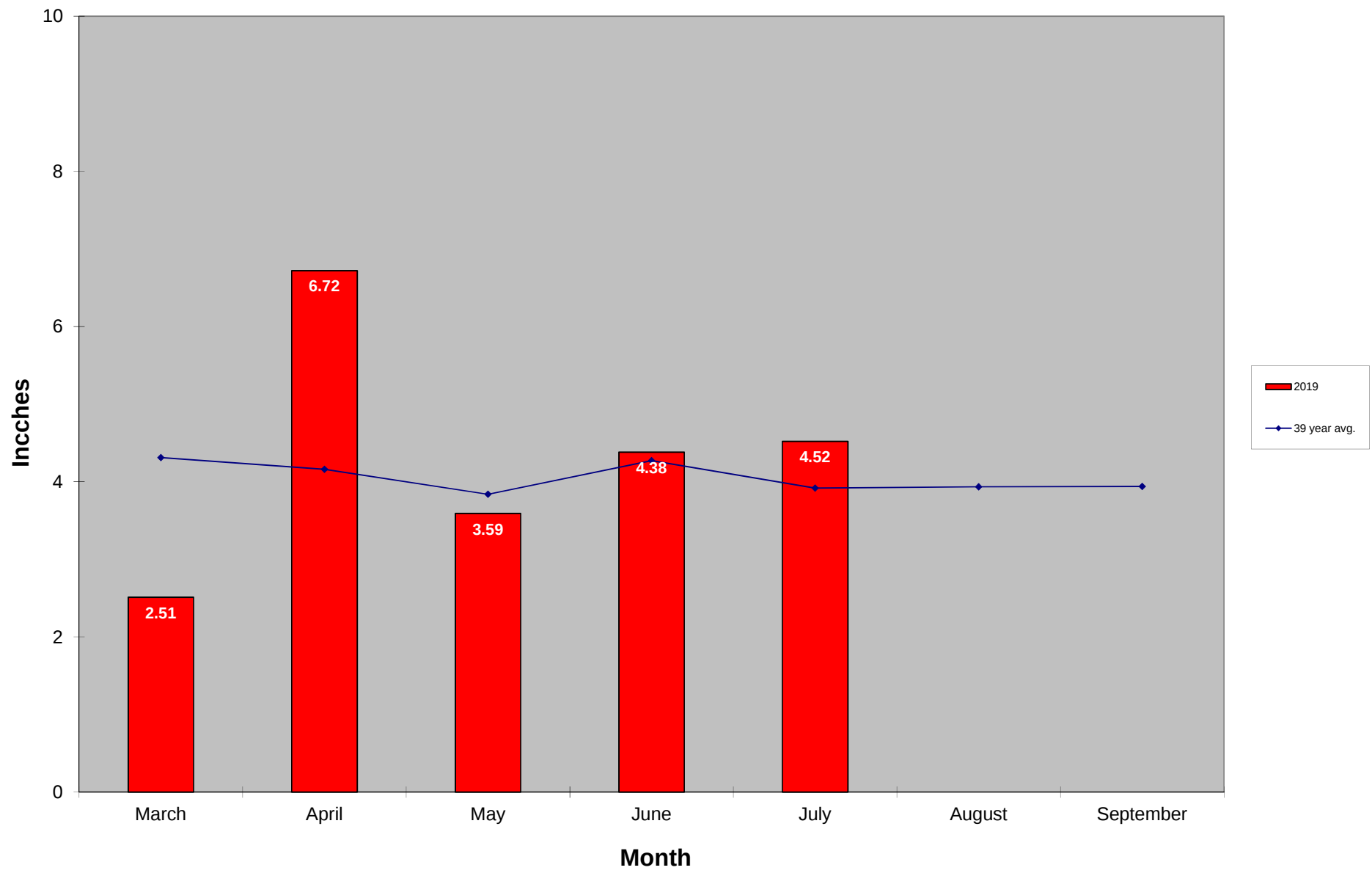
vexans and *Culex* were the only target mosquitoes that experienced an increase this surveillance week, while all others decreased. Despite this there was still a slight increase observed in the overall mosquito population. *Coquillettidia perturbans* was once again the most abundant mosquito species for the week, followed by *Culex*. All target species have been collected in higher numbers this year compared to last, except for *Culex*. There were no additional pools from the CMMCP service area that tested positive for mosquito-borne disease. Cool evening temperatures and the natural decline in *Coquillettidia perturbans* should result in an overall mosquito population reduction for EPI week 35. Surveillance for *Aedes albopictus* using ovitraps has been suspended to allow staff to concentrate on monitoring current mosquito-borne disease in the CMMCP service area.

Service requests are 81.4% greater than the 16 year average (9,880 vs. 17,923) and now 4.5% higher than 2018 numbers (17,142 vs. 17,923) despite being lower than 2018 numbers until this week. Service requests increased 68.5% from Epi week 33 to 34 (1,277 vs. 2,153). 1,296 service requests were closed out in EPI week 34; 15,423 have been closed to date from a total of 17,769 received (15.2% open). Work crews have been performing catch basins treatments in all member communities for *Culex* control. 6,603 catch basins were treated in Epi week 34, bringing the total for the year to 117,859 basins treated for *Culex* control.

***Aedes albopictus* Surveillance Data**

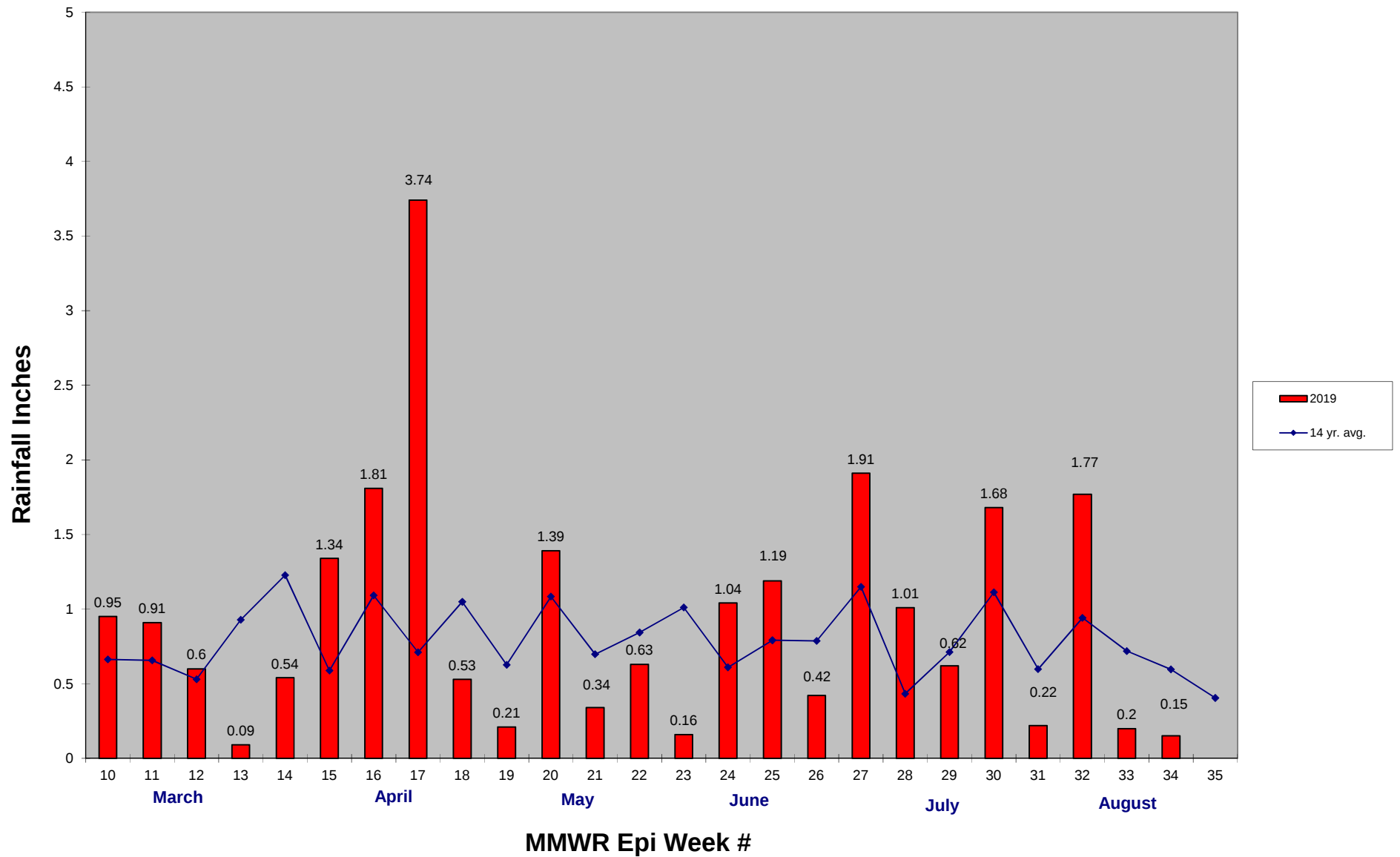
	# Ovitrap	# Eggs
EPI Week #22	31	4
EPI Week #23	21	221
EPI Week #24	33	530
EPI Week #25	37	1294
EPI Week #26	37	1100
EPI Week #27	-	-
EPI Week #28	35	3527
EPI Week #29	35	1481
EPI Week #30	35	1946
EPI Week #31	35	2373
EPI Week #32	25	941
EPI Week #33	-	-
EPI Week #34	-	-

2019 Mass. Rainfall Data vs. 39 Year Average*



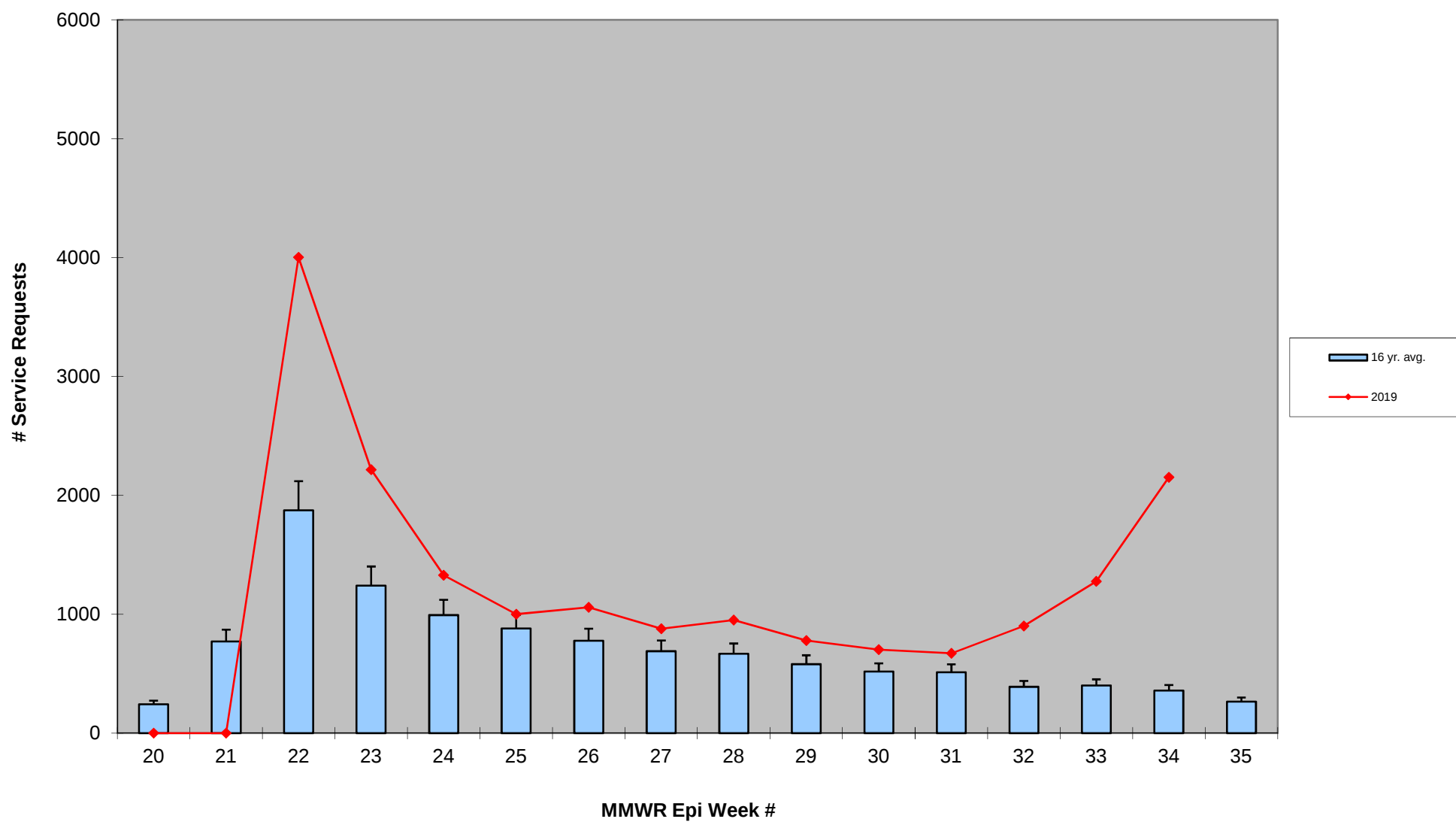
*source: <http://www.nrcc.cornell.edu/regional/tables/tables.html>

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

