

CMMCP WEEKLY SURVEILLANCE REPORT



EPI week #37
Sept. 8-14, 2019

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Central Mass. Mosquito Control Project
Weekly Report- 9/8/19-9/14/19
EPI Week #37

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	233	1170	359	299	1151	5715
Total Specimens	1428	167591	2225	4487	17278	203518
No. Pools WNV +	0	0	0	0	9 [†]	9 [†]
No. Pools EEE +	2 [†]	19 [†]	2 [†]	0	3 [†]	26 [†]

[†]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

[†]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

[†]Pool of WNV+ *Culex* species collected in Worcester on 8/20/19

[†]Pool of WNV+ *Culex* species collected in Worcester on 8/20/19

[†]Pool of WNV+ *Culex* species collected in Leominster on 8/20/19

[†]Pool of EEE+ *Coquillettidia perturbans* collected in Southborough on 8/21/19

[†]Pool of EEE+ *Coquillettidia perturbans* collected in Southborough on 8/21/19

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[†]Pool of EEE+ *Culex* species collected in Southborough on 8/21/19

[†]Pool of EEE+ *Aedes vexans* collected in Southborough on 8/21/19

[†]Pool of EEE+ *Aedes vexans* collected in Southborough on 8/21/19

[†]Pool of EEE+ *Culex* species collected in Hudson on 8/21/19

[†]Pool of WNV+ *Culex* species collected in Holliston on 8/21/19

[†]Pool of EEE+ *Culex* species collected in Marlborough on 8/21/19

[†]Pool of WNV+ *Culex* species collected in Littleton on 8/22/19

[†]Pool of WNV+ *Culex* species collected in Auburn on 8/23/19

[†]Pool of EEE+ *Coquillettidia perturbans* collected in Sherborn on 8/25/19

[†]Pool of EEE+ *Coquillettidia perturbans* collected in Southborough on 8/28/19

[†]Pool of EEE+ *Coquillettidia perturbans* collected in Southborough on 8/28/19

[†]Pool of EEE+ *Coquillettidia perturbans* collected in Southborough on 8/28/19

[†]Pool of EEE+ *Coquillettidia perturbans* collected in Shrewsbury on 8/28/19

[†]Pool of EEE+ *Culiseta melanura* collected in Holliston on 8/28/19

†Pool of EEE+ *Culiseta melanura* collected in Millville on 8/29/19

Weather Summary (Northborough, MA): The weather for this particular week averaged 62.34°F with a recorded high temperature of 85.10°F and a recorded low temperature of only 41.40°F. For this week there was also a total of 0.41 inches of rain observed. Compared to the previous week, it was approximately 2.20°F cooler on average, and rained about 0.30 inches less. There has been 1.12 inches of rain accumulated in September, after 3.37 inches for the month of August.

CMMCP Mosquito Summary-

Target Species	Δ From Last Week	Δ From Last Year	Predominant Trap Site(s)
<i>Aedes vexans</i>	-7.23%	-49.45%	Lancaster
<i>Coquillettidia perturbans</i>	-57.14%	+283.5%	Gardner, Milford
<i>Culiseta melanura</i>	-1.52%	+441.6%	Gardner, Milford
<i>Ochlerotatus canadensis</i>	-50.00%	+128.2%	Gardner
<i>Culex</i> Species	+27.73%	-49.39%	Lancaster, Milford
All Species	-22.48%	+125.5%	Lancaster, Milford

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

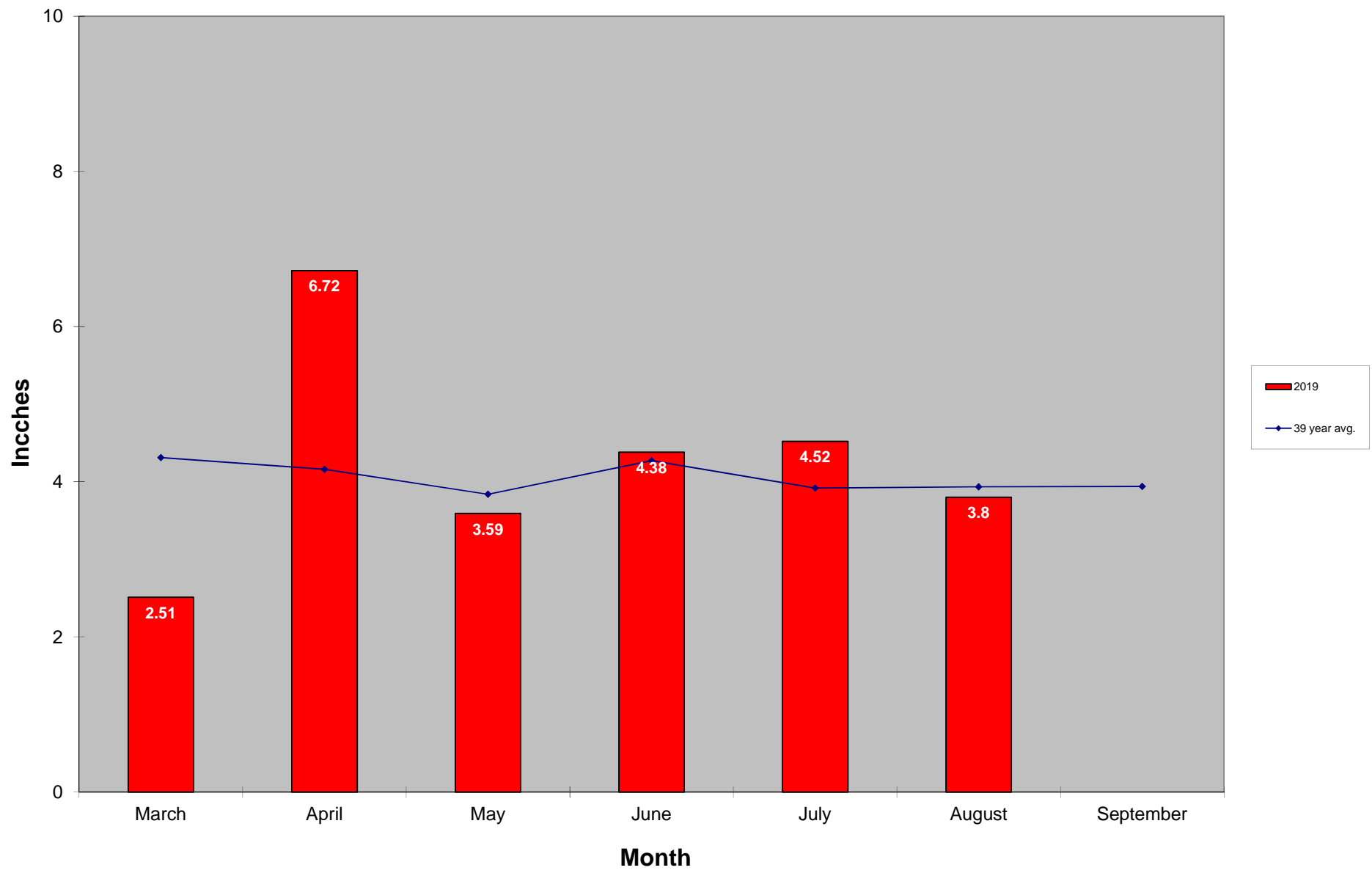
General narrative: The temperatures for EPI week 37 averaged approximately 2.20°F cooler than the previous week, with 0.41 inches of precipitation observed. *Culex* was the only target mosquitoes that experienced an increase this surveillance week, while all others decreased. Overall there was significant reduction in the general mosquito population, influenced by a continued decrease in *Coquillettidia perturbans*. *Culex* became the most abundant mosquito species for the week, followed now by *Coquillettidia perturbans*. All target species have been collected in higher numbers this year compared to last, except for *Aedes vexans* and *Culex*. *Coquillettidia perturbans* should continue to decrease as we enter the last weeks of the 2019 mosquito surveillance season. There were no mosquito pools that tested positive for mosquito-borne disease last week. 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.

***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

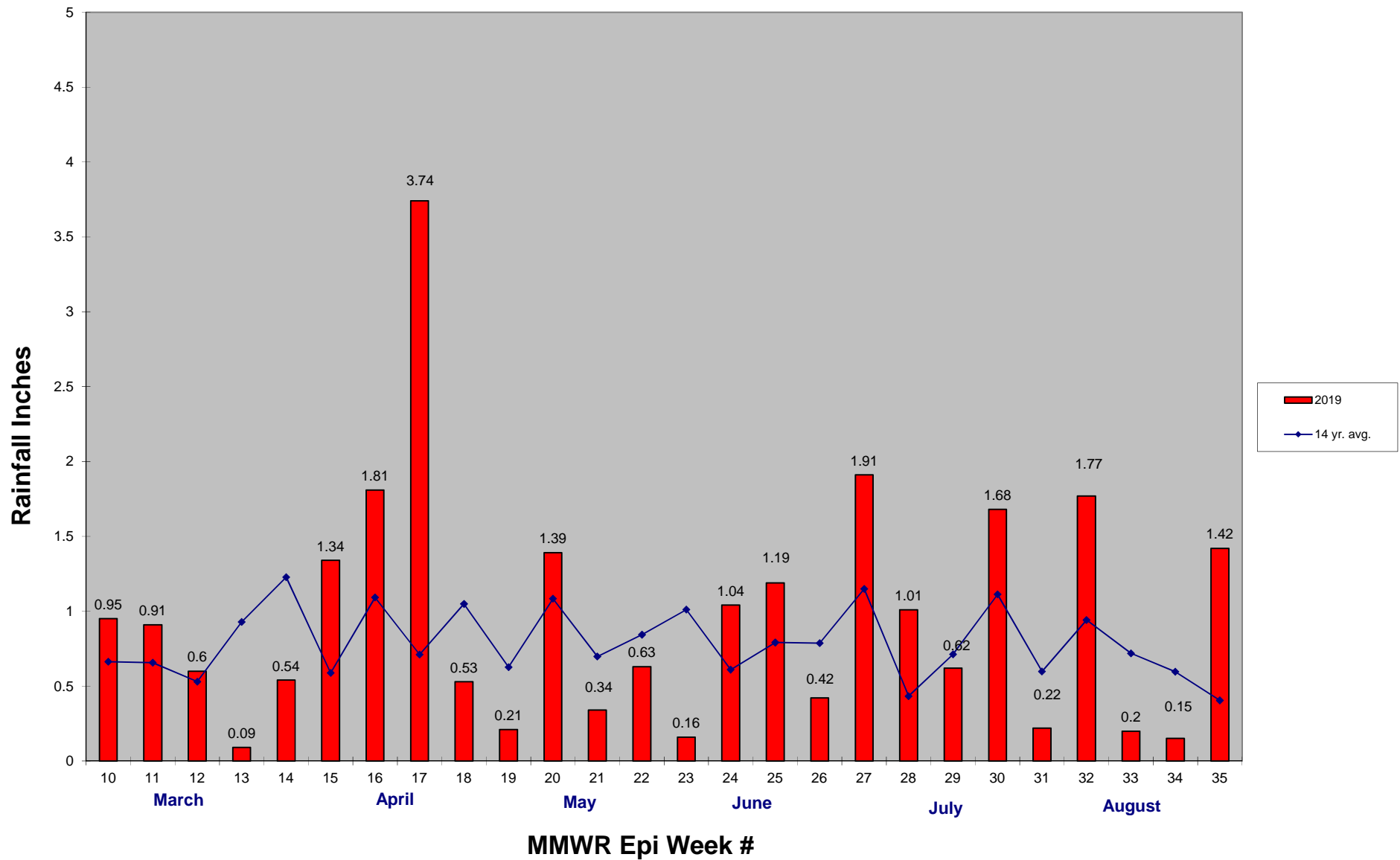
EPI Week #32	25	941
EPI Week #33	-	-
EPI Week #34	-	-
EPI Week #35	-	-
EPI Week #36	-	-
EPI Week #37	-	-

2019 Mass. Rainfall Data vs. 39 Year Average*



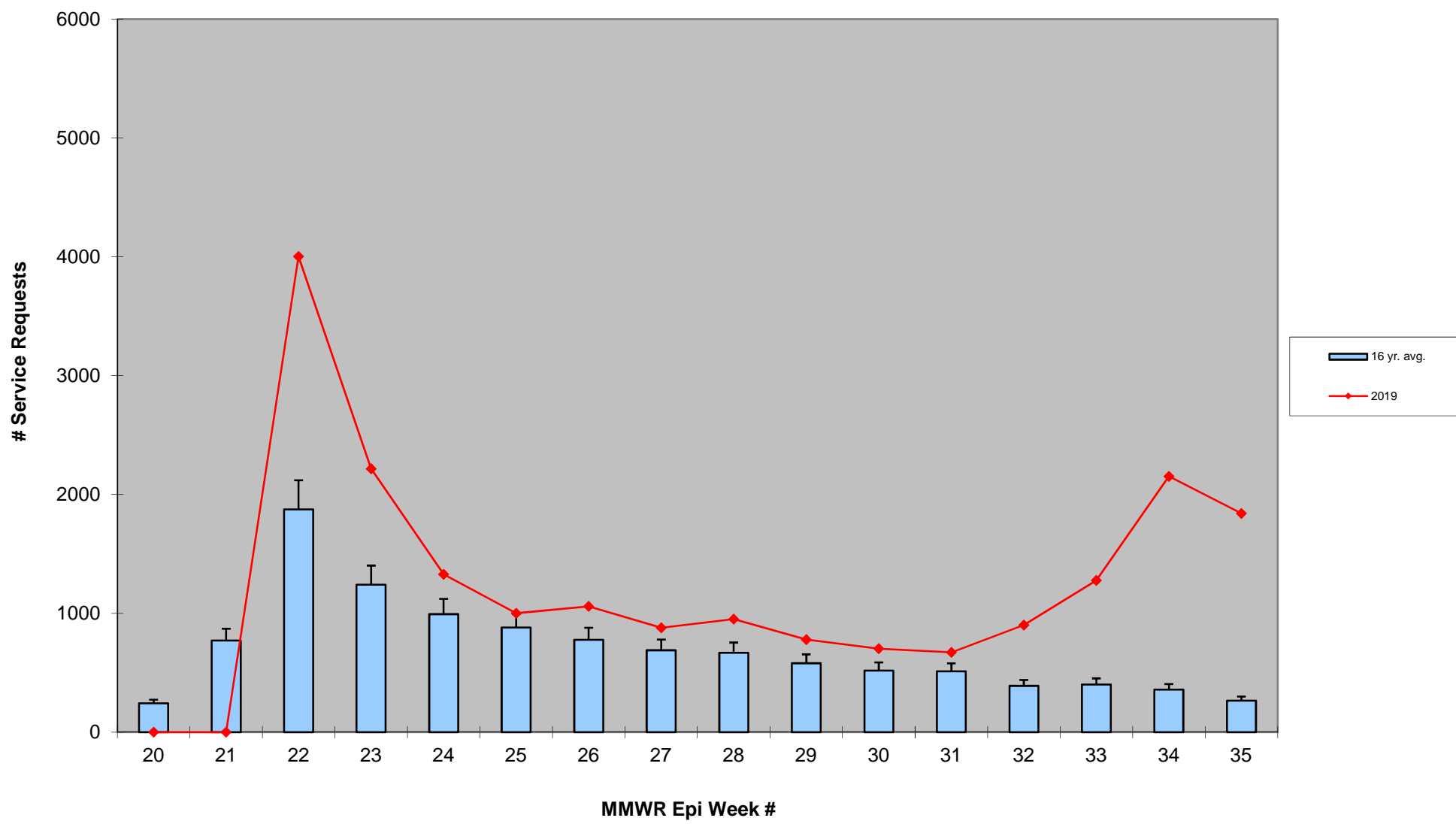
*source: <http://www.nrcc.cornell.edu/regional/tables/tables.html>

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

