

CMMCP WEEKLY SURVEILLANCE REPORT



EPI week #39
Sept. 22-28, 2019

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Central Mass. Mosquito Control Project
Weekly Report- 9/22/19-9/28/19
EPI Week #39

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	277	1223	413	306	1234	6328
Total Specimens	1565	167738	2360	4494	17501	204923
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

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

[†]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

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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 65.27°F with a recorded high temperature of 90.40°F and a recorded low temperature of only 47.40°F. For this week there was also a total of 0.45 inches of rain observed. Compared to the previous week, it was approximately 5.41°F warmer on average, and rained about 0.44 inches more. There has been 1.58 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>	-13.21%	-53.18%	Hopedale
<i>Coquillettidia perturbans</i>	-46.88%	+283.5%	Gardner
<i>Culiseta melanura</i>	+114.7%	+395.3%	Gardner
<i>Ochlerotatus canadensis</i>	-100.0%	+116.9%	N/A
<i>Culex</i> Species	-61.98%	-49.17%	Millbury
All Species	-26.24%	+123.0%	Gardner

The predominant mosquito for the week was *Culiseta melanura*, followed by *Culex*.

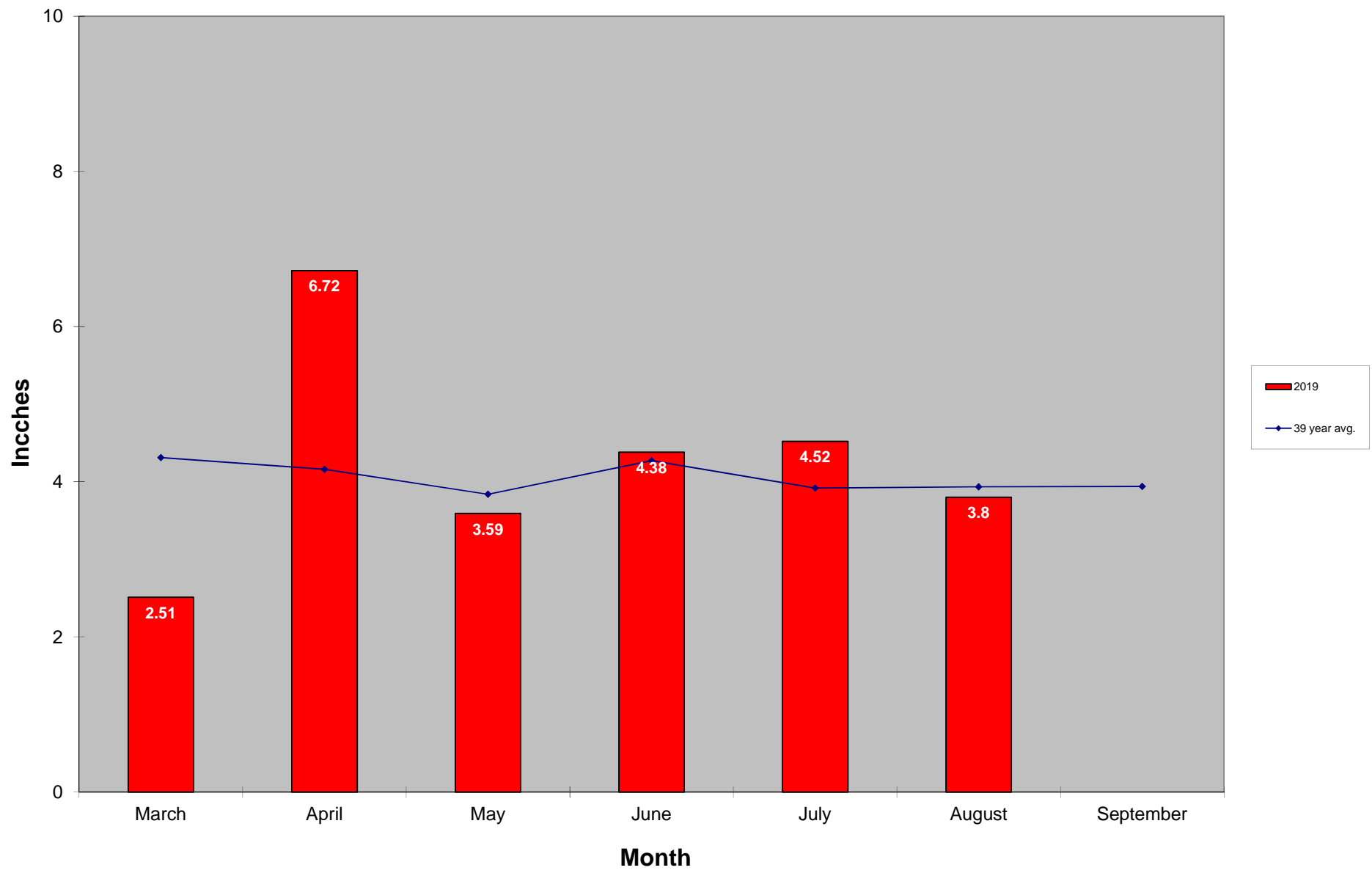
General narrative: The temperatures for EPI week 39 averaged approximately 5.41°F warmer than the previous week, with 0.45 inches of precipitation observed. All target mosquitoes species experienced decreases this surveillance week, except for *Culiseta melanura*. Overall there was significant reduction in the general mosquito population, influenced by a continued decrease in *Coquillettidia perturbans*. *Culiseta melanura* was the most abundant mosquito for the week, followed now by *Culex*. All target species have been collected in higher numbers this year compared to last, except for *Aedes vexans* and *Culex*. The local mosquito population should continue to decrease as evening temperatures drop and natural expiration occurs. 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

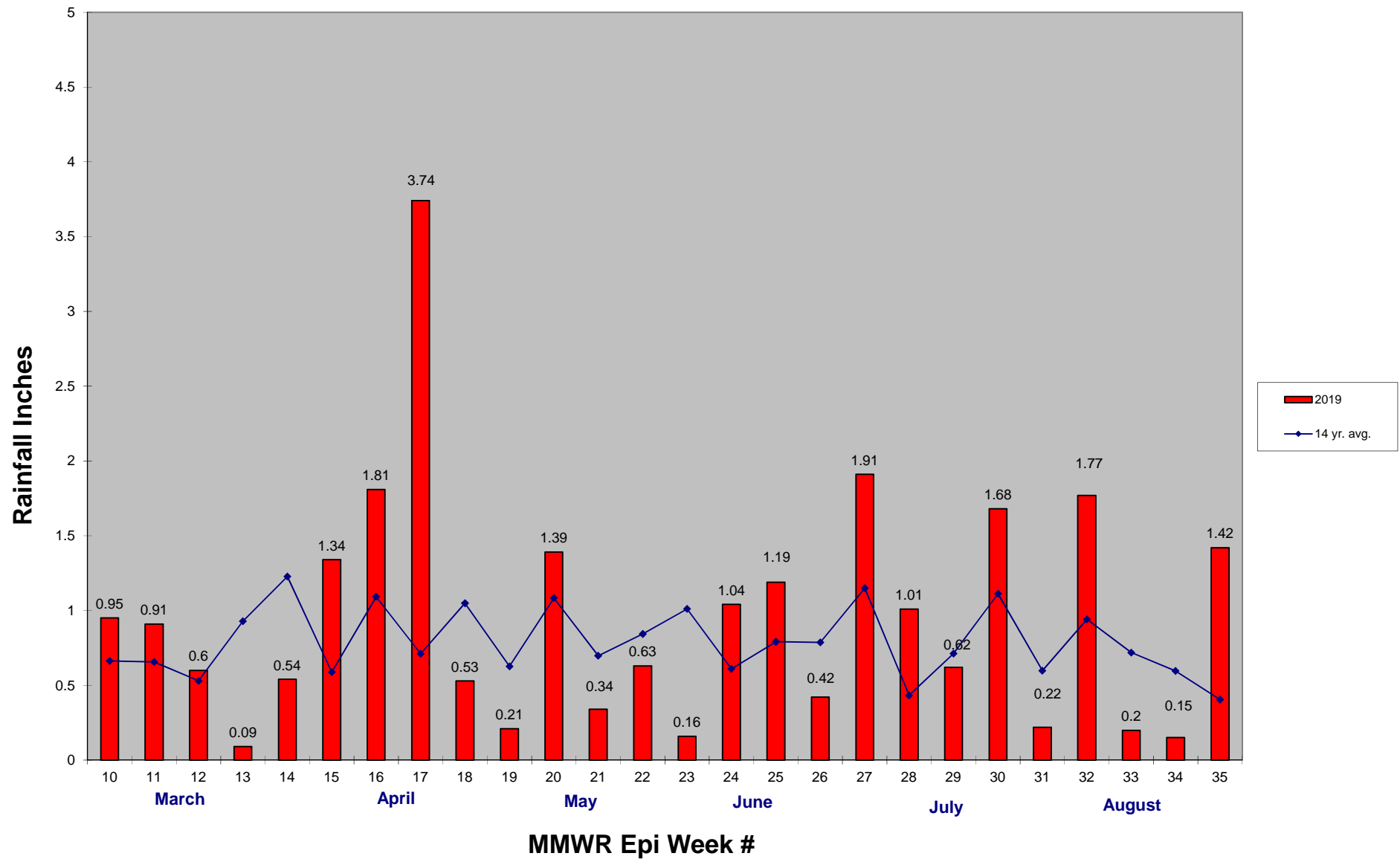
EPI Week #32	25	941
EPI Week #33	-	-
EPI Week #34	-	-
EPI Week #35	-	-
EPI Week #36	-	-
EPI Week #37	-	-
EPI Week #38	-	-
EPI Week #39	-	-

2019 Mass. Rainfall Data vs. 39 Year Average*



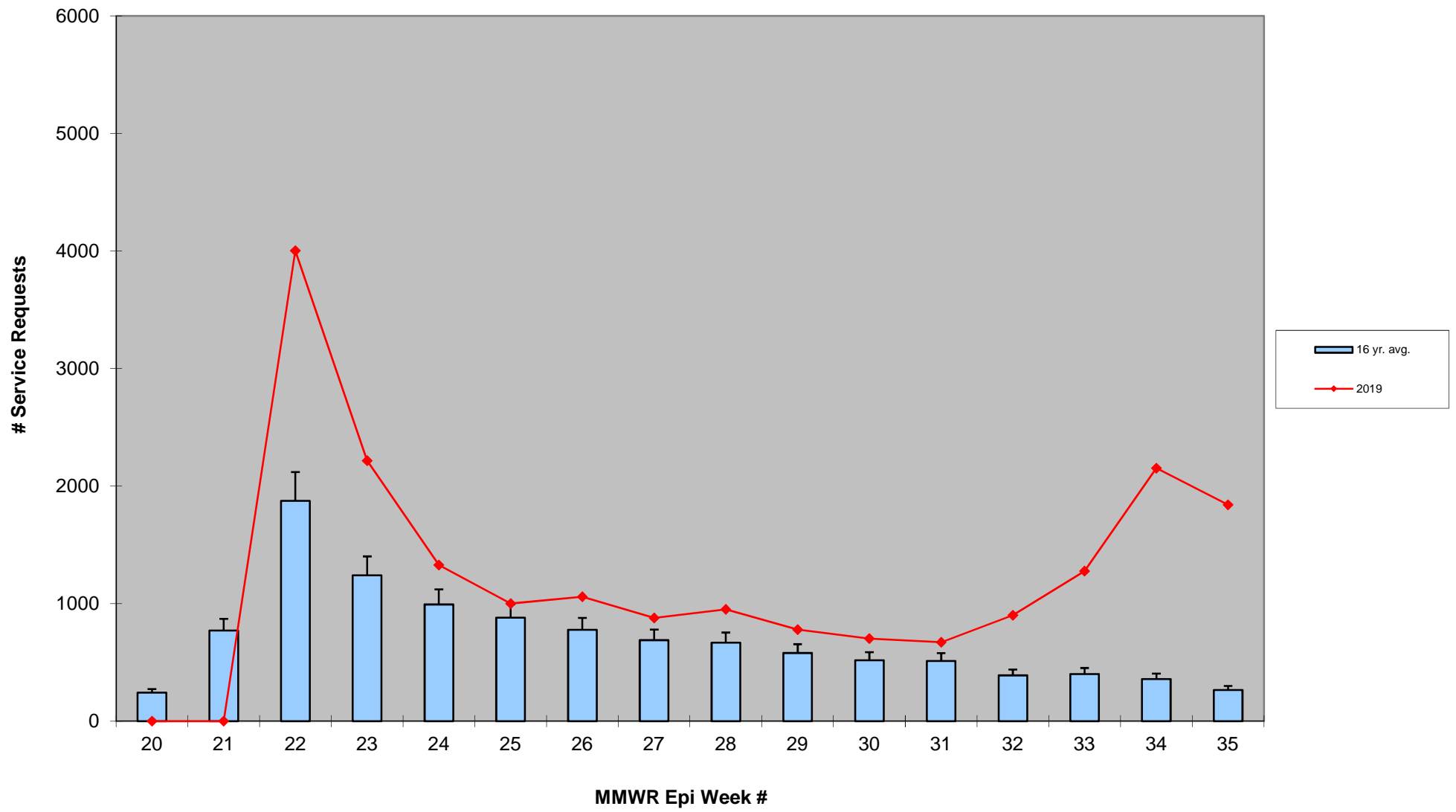
*source: <http://www.nrcc.cornell.edu/regional/tables/tables.html>

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

