

CMMCP WEEKLY SURVEILLANCE REPORT



EPI week #36
Sept. 1-7, 2019

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Central Mass. Mosquito Control Project
Weekly Report- 9/1/19-9/7/19
EPI Week #36

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	219	1140	340	293	1096	5475
Total Specimens	1351	167288	2160	4474	16845	202159
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

[†]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 64.54°F with a recorded high temperature of 84.50°F and a recorded low temperature of only 50.00°F. For this week there was also a total of 0.71 inches of rain observed. Compared to the previous week, it was approximately 1.37°F cooler on average, and rained about 0.71 inches less. There has been 0.71 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>	-59.31%	-33.99%	Natick, Dracut
<i>Coquillettidia perturbans</i>	-81.15%	+283.9%	Boxborough, Milford, Dracut
<i>Culiseta melanura</i>	-71.30%	+566.9%	Acton, Boxborough
<i>Ochlerotatus canadensis</i>	+8.330%	+128.9%	Acton
<i>Culex</i> Species	-69.10%	-50.08%	Boxborough
All Species	-74.68%	+129.1%	Boxborough, Milford, Dracut

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

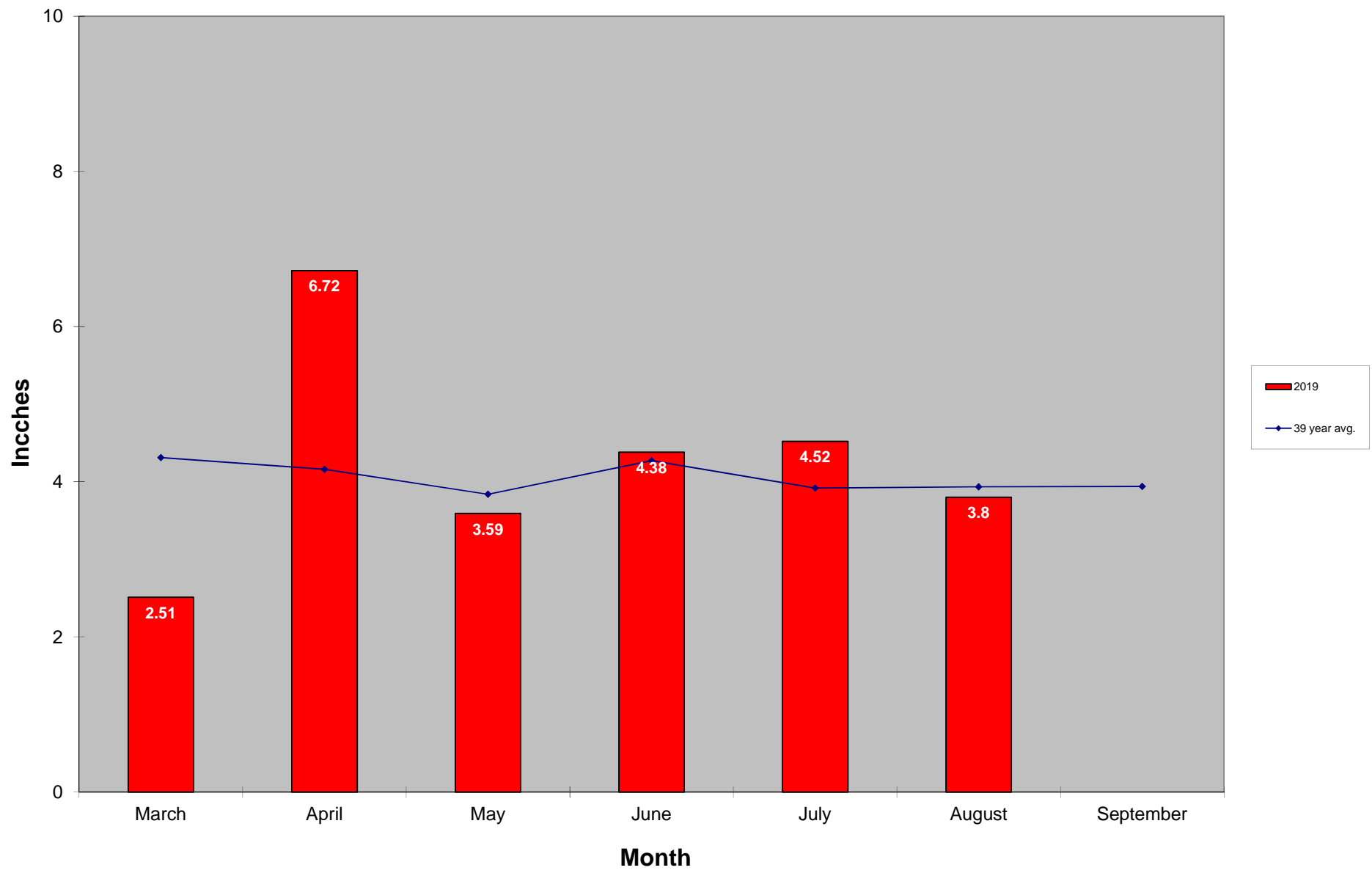
General narrative: The temperatures for EPI week 36 averaged approximately 1.37°F cooler than the previous week, with 0.71 inches of precipitation observed. *Ochlerotatus canadensis* was the only target mosquitoes that experienced an increase this surveillance week, while all others decreased. Overall there was significant reduction in the general mosquito population, influenced by a continued decrease in *Coquillettidia perturbans*. Despite their decrease, *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 *Aedes vexans* and *Culex*. *Coquillettidia perturbans* should continue to decrease as we enter the last weeks of the 2019 mosquito surveillance season. 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

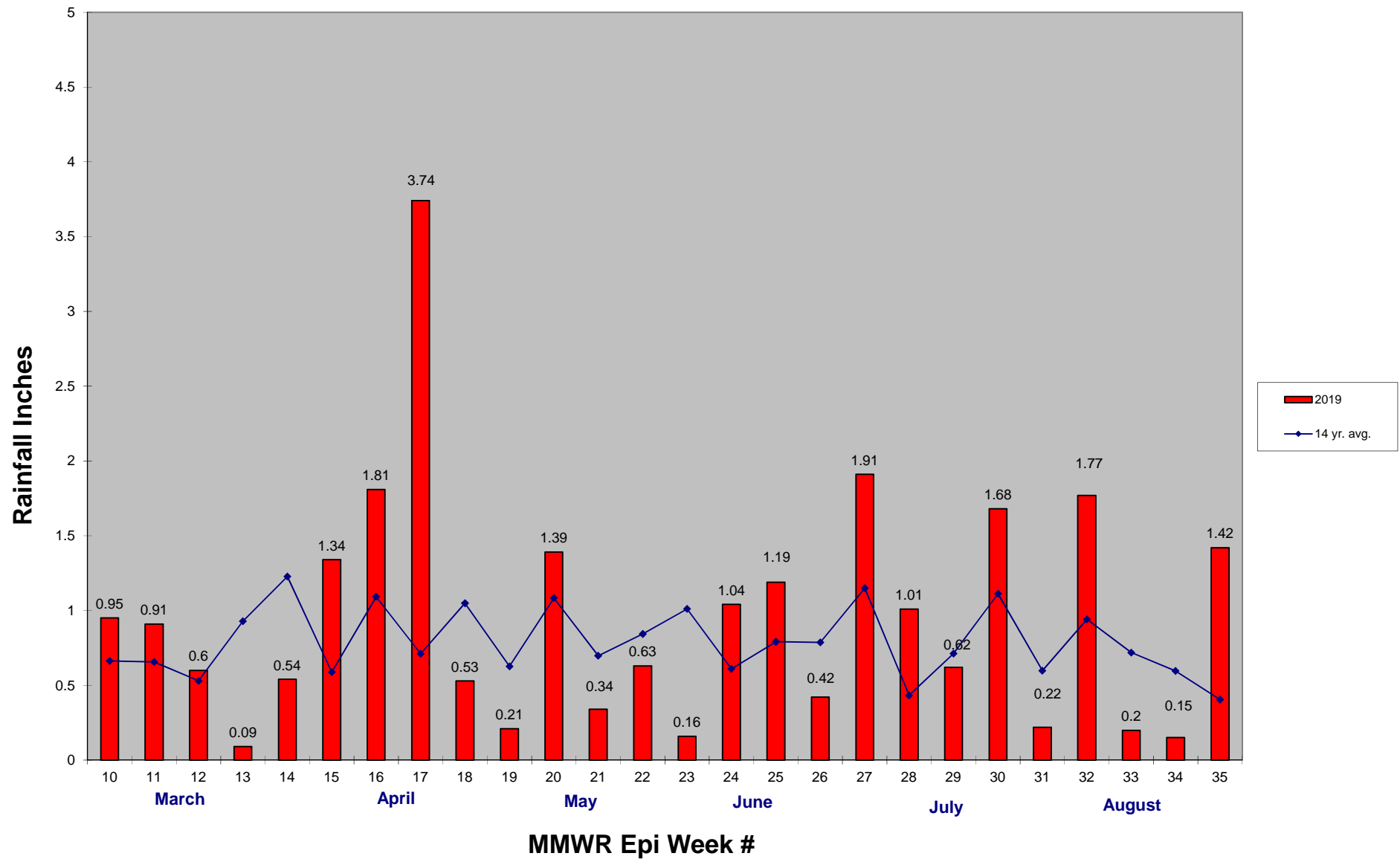
EPI Week #32	25	941
EPI Week #33	-	-
EPI Week #34	-	-
EPI Week #35	-	-
EPI Week #36	-	-

2019 Mass. Rainfall Data vs. 39 Year Average*



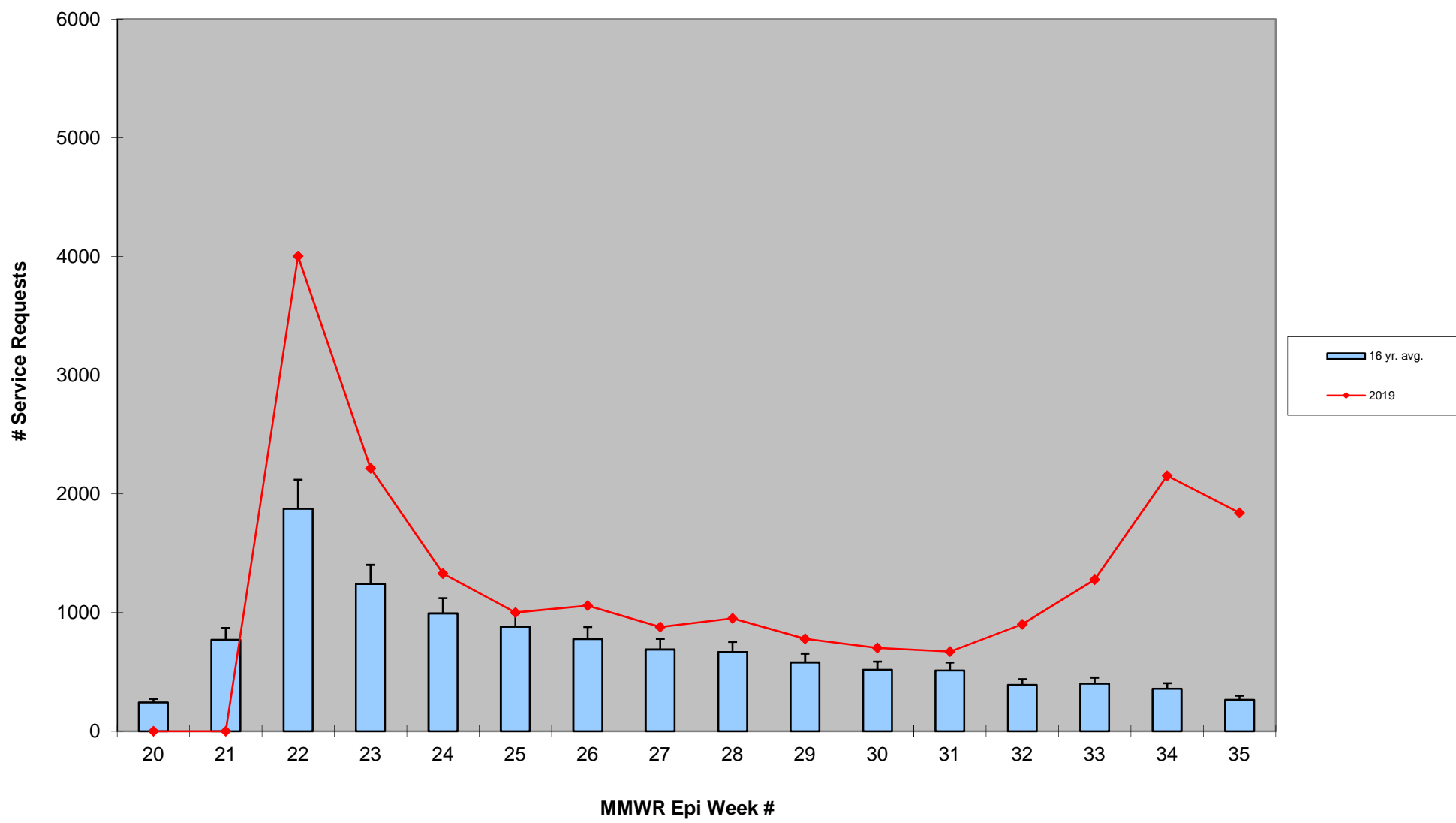
*source: <http://www.nrcc.cornell.edu/regional/tables/tables.html>

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

