

CMMCP WEEKLY SURVEILLANCE REPORT



EPI week #41
Oct. 6-12, 2019

Frank Cornine, Staff Biologist
Curtis Best, Staff Entomologist
David Mullins, Field Biologist
Tim McGlinchy, Director of Operations
Tim Deschamps, Executive Director

Central Mass. Mosquito Control Project
Weekly Report- 10/6/19-10/12/19
EPI Week #41

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	291	1228	437	307	1274	6585
Total Specimens	1583	167745	2467	4495	17574	205265
No. Pools WNV +	0	0	0	0	10 [†]	10 [†]
No. Pools EEE +	2 [†]	19 [†]	3 [†]	0	4 [†]	28 [†]

†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 EEE+ *Culex* species collected in Lowell on 8/9/19

†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+ *Coquillettidia perturbans* collected in Southborough on 8/21/19

†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

†Pool of EEE+ *Culiseta melanura* collected in Gardner on 9/24/19

†Pool of WNV+ *Culex salinarius* collected in Worcester on 9/27/19

Weather Summary (Northborough, MA): The weather for this particular week averaged 54.54°F with a recorded high temperature of 77.00°F and a recorded low temperature of only 33.80°F. For this week there was also a total of 0.45 inches of rain observed. Compared to the previous week, it was approximately 1.93°F cooler on average, and rained about 0.16 inches more. There has been 0.74 inches of rain accumulated in October, after 1.58 inches for the month of September.

CMMCP Mosquito Summary-

Target Species	Δ From Last Week	Δ From Last Year	Predominant Trap Site(s)
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<i>Aedes vexans</i>	+25.00%	-54.07%	Lancaster
<i>Coquillettidia perturbans</i>	-83.33%	+283.5%	Dracut
<i>Culiseta melanura</i>	-72.62%	+386.1%	Gardner
<i>Ochlerotatus canadensis</i>	-100.0%	+116.8%	N/A
<i>Culex</i> Species	-21.95%	-49.01%	Westborough
All Species	-45.25%	+122.8%	Gardner, Westborough

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

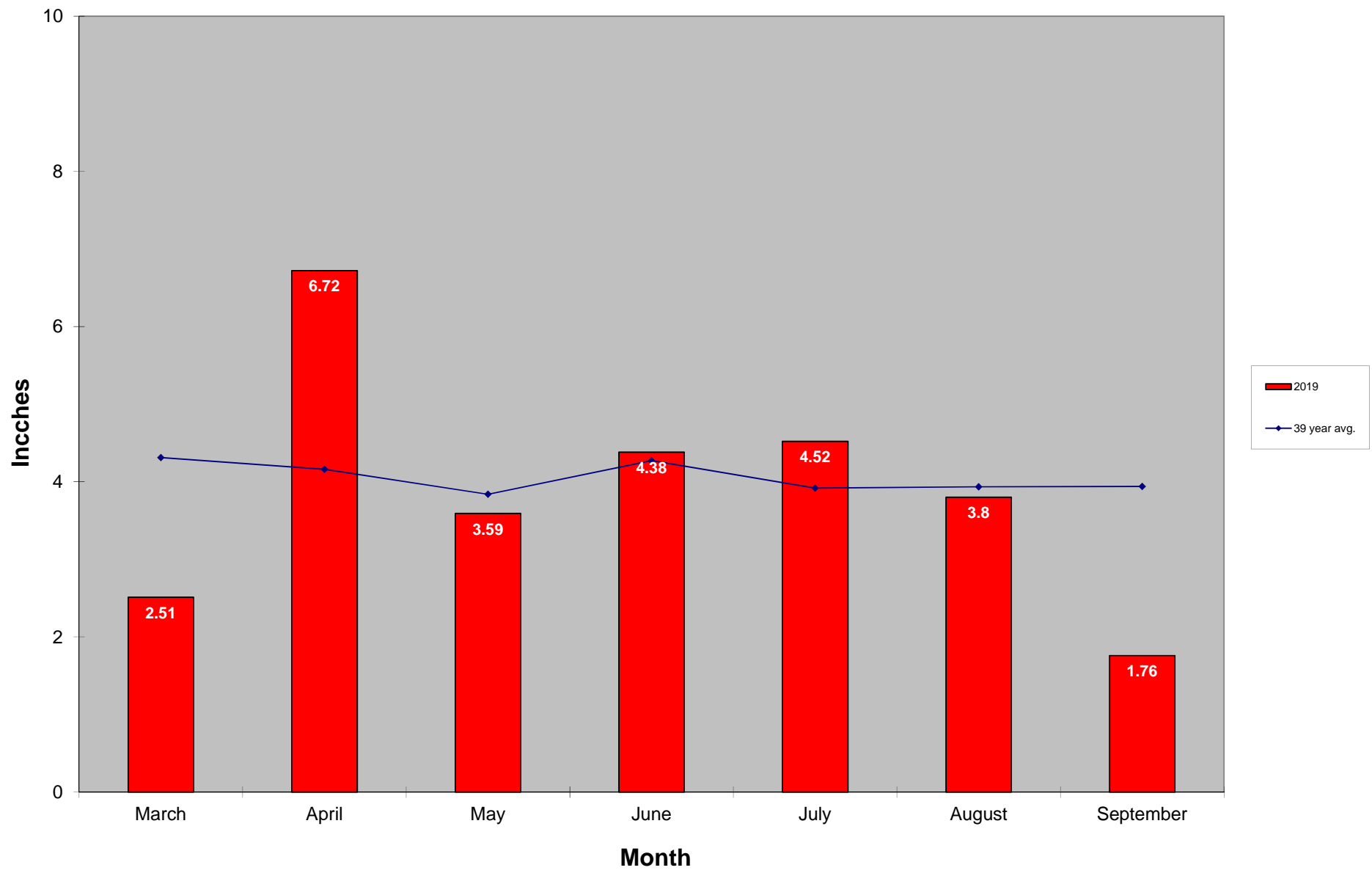
General narrative: The temperatures for EPI week 41 averaged approximately 1.93°F cooler than the previous week, with 0.45 inches of precipitation observed. All target mosquitoes species experienced decreases this surveillance week, except for *Aedes vexans*, which had a slight increase. Overall there was a continued reduction in the general mosquito population. *Culex* was the most abundant mosquito for the week, followed now by *Culiseta melanura*. Every 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 decline occurs. There were zero additional mosquito pools that tested positive for mosquito-borne disease from the previous 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

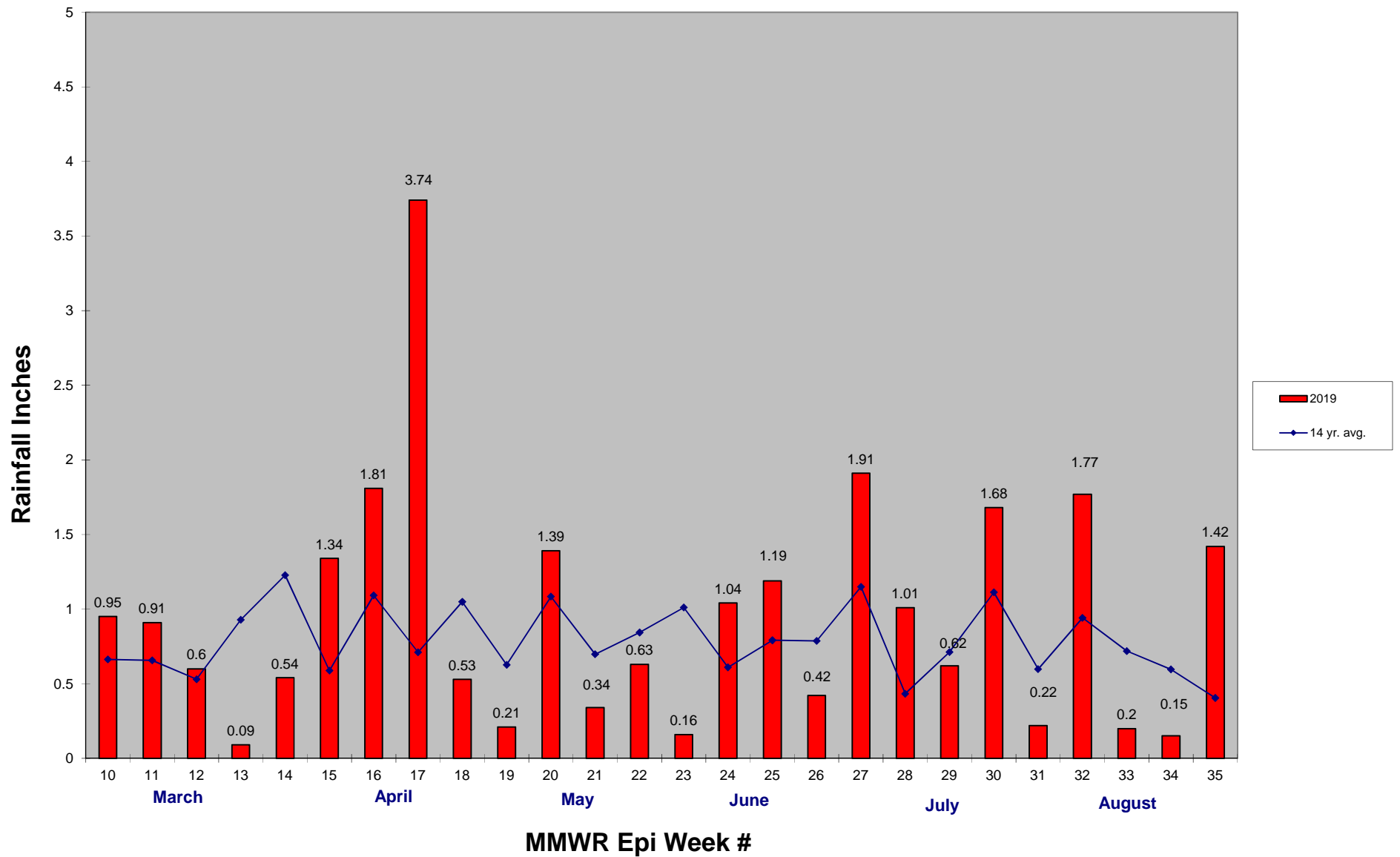
EPI Week #29	35	1481
EPI Week #30	35	1946
EPI Week #31	35	2373
EPI Week #32	25	941
EPI Week #33	-	-
EPI Week #34	-	-
EPI Week #35	-	-
EPI Week #36	-	-
EPI Week #37	-	-
EPI Week #38	-	-
EPI Week #39	-	-
EPI Week #40	-	-
EPI Week #41	-	-

2019 Mass. Rainfall Data vs. 39 Year Average*



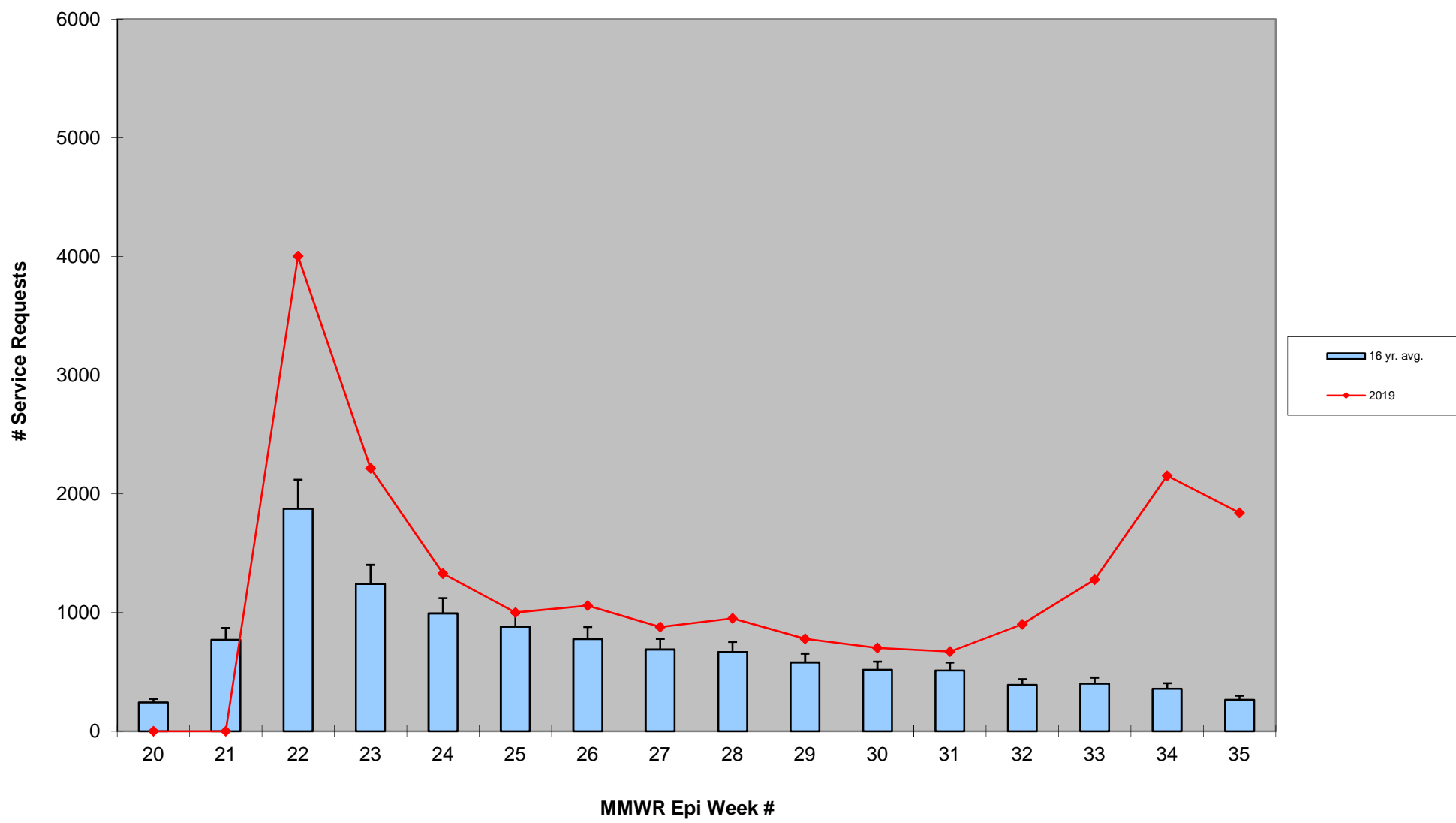
*source: <http://www.nrcc.cornell.edu/regional/tables/tables.html>

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

