

CMMCP WEEKLY SURVEILLANCE REPORT



EPI week #32
Aug. 7 – Aug. 13, 2016

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Central Mass. Mosquito Control Project
Weekly Report- 8/7/16-8/13/16
EPI Week #32

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	12	433	27	94	393	1197
Total Specimens	95	48853	555	4805	8442	68132
No. Pools WNV +	0	2 [†]	0	0	1 [†]	3 [†]
No. Pools EEE +	0	0	0	0	0	0

[†]Pool of WNV+ *Culex pipiens/restuans* complex collected in Auburn on 8/2/16

[†]Pool of WNV+ *Coquilleltidia perturbans* collected in Auburn on 8/2/16

[†]Pool of WNV+ *Coquilleltidia perturbans* collected in Hopkinton on 8/5/16

Weather Summary (Northborough, MA): The weather for this particular week averaged 75.79°F with a recorded high temperature of 94.70°F and a recorded low temperature of only 56.30°F. There was 0.75 inches of precipitation observed this week. Compared to the previous week, it was approximately 5.12°F warmer on average, and rained 0.04 inches more. There has been 1.39 inches of rain accumulated in August, after 1.62 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>	-66.67%	+300.0%	Shrewsbury, Gardner
<i>Coquilleltidia perturbans</i>	-71.25%	+260.1%	Webster, Westford
<i>Culiseta melanura</i>	-92.59%	-66.67%	Berlin
<i>Ochlerotatus canadensis</i>	-41.25%	+4600%	Webster
<i>Culex</i> Species	-55.35%	+77.50%	Westford, Holliston
All Species	-67.31%	+280.6%	Webster, Westford

The predominant mosquito for the week was *Coquilleltidia perturbans*
followed by *Culex pipiens/restuans*.

The temperature for EPI week 32 averaged approximately 5.12 degrees warmer than the previous week, with only almost 0.75 inches of precipitation observed. At historical surveillance trap sites, the overall collection numbers decreased by 67.31% over EPI week 31, primarily due to a decrease in *Coquilleltidia perturbans*. All target species decreased for EPI week 32. Despite the decrease from EPI week 31, the long-term surveillance locations showed a significant overall increase when compared to the 2015 season, due again primarily because of the change in the *Cq. perturbans* population. This species was once again the most abundant target mosquito in the CMMCP service area, with *Cx. pipiens/restuans* the second most abundant mosquito. *Cq. perturbans* will likely remain the predominant species for EPI week 33. Fourteen egg papers were

collected from fifteen CMMCP ovitraps this week. These produced 941 eggs which will help monitor for the presence of *Aedes albopictus* in central Massachusetts.

Enhanced Surveillance for *Aedes albopictus* - Ovitrap Collections

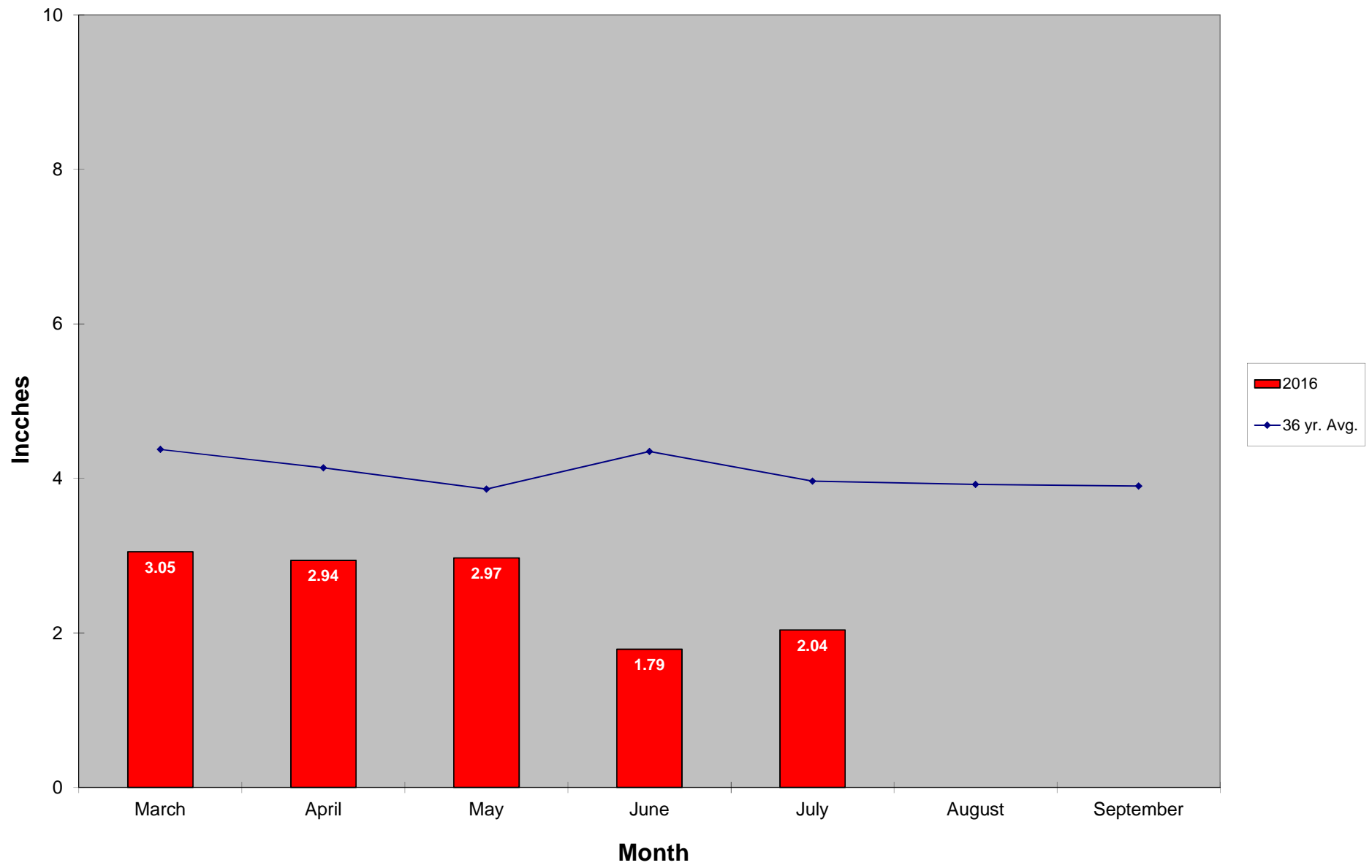
	# Ovitrap	# Egg Papers	# Eggs
EPI Week #22	15	7	0
EPI Week #23	-	-	-
EPI Week #24	5	2	49
EPI Week #25	15	6	93
EPI Week #26	17	17	19
EPI Week #27	25	19	1180
EPI Week #28	25	25	1020
EPI Week #29	10	7	62
EPI Week #30	15	12	632
EPI Week #31	15	10	524
EPI Week #32	15	14	941
2016 Totals	157	119	4520

Our first confirmation of West Nile Virus were in the towns of Auburn & Hopkinton on August 10. After consultation with the local Boards of Health, spraying was done in the affected areas August 11. Catch basins treatments were performed in these areas as necessary. Confirmation of WNV in nearby Grafton (a non-member town) on August 12 has prompted our surveillance team to determine if additional trapping is necessary in the bordering towns of Millbury & Shrewsbury.

For the year we received 159% more service requests than average; 14,340 requests compared to the 13 year average of 9,012. Service requests increased 5.3% from the previous week; 470 in Epi week 32 compared to 446 in Epi week 31.

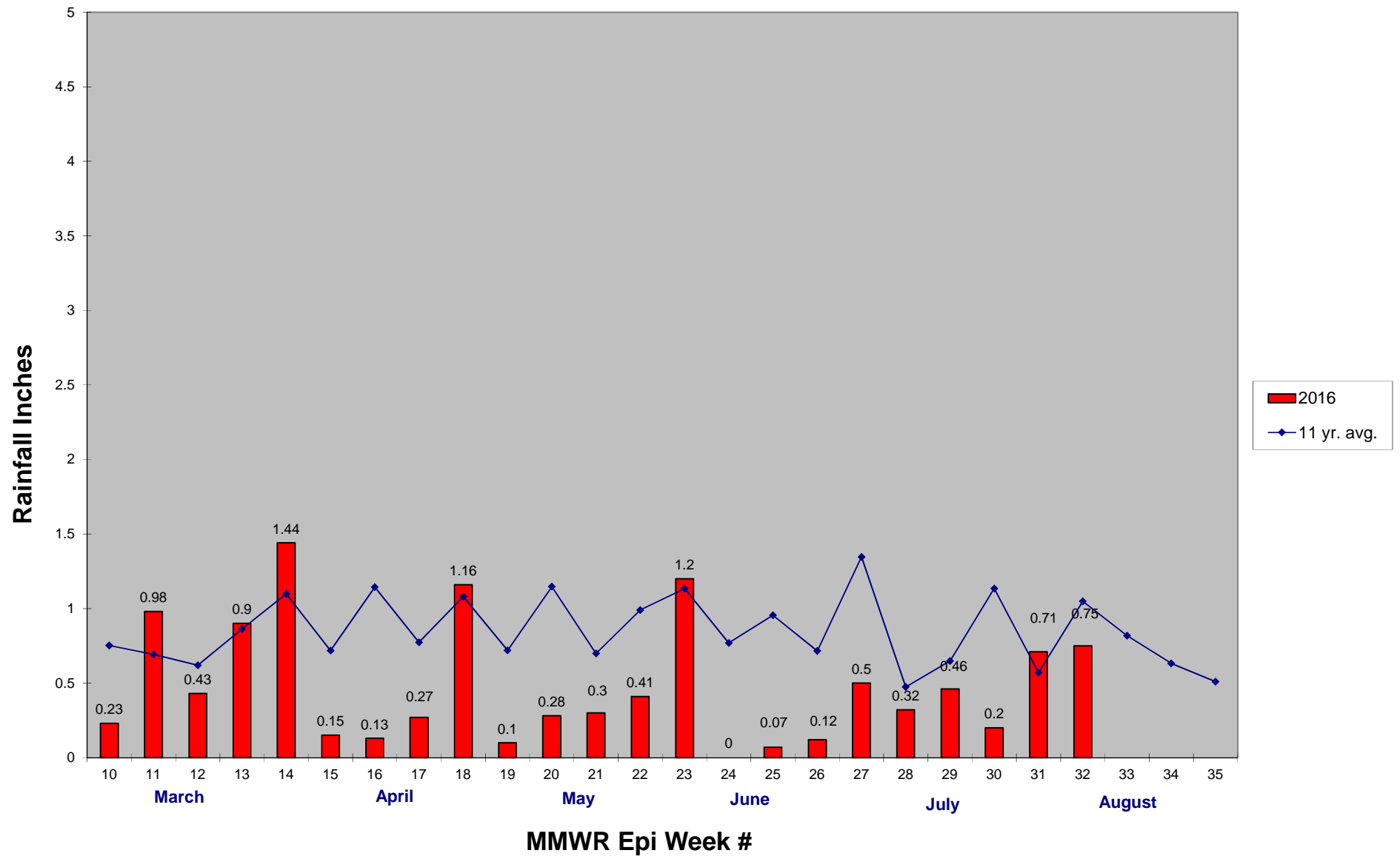
Standard catch basin treatments continue in all member towns. With scattered reports of rain, some heavy, in our region, we have been pushing the message through social media and other outlets to “Dump and Drain” to minimize larval populations that use these habitats to develop.

2016 Mass. Rainfall Data vs. 36 Year Average*



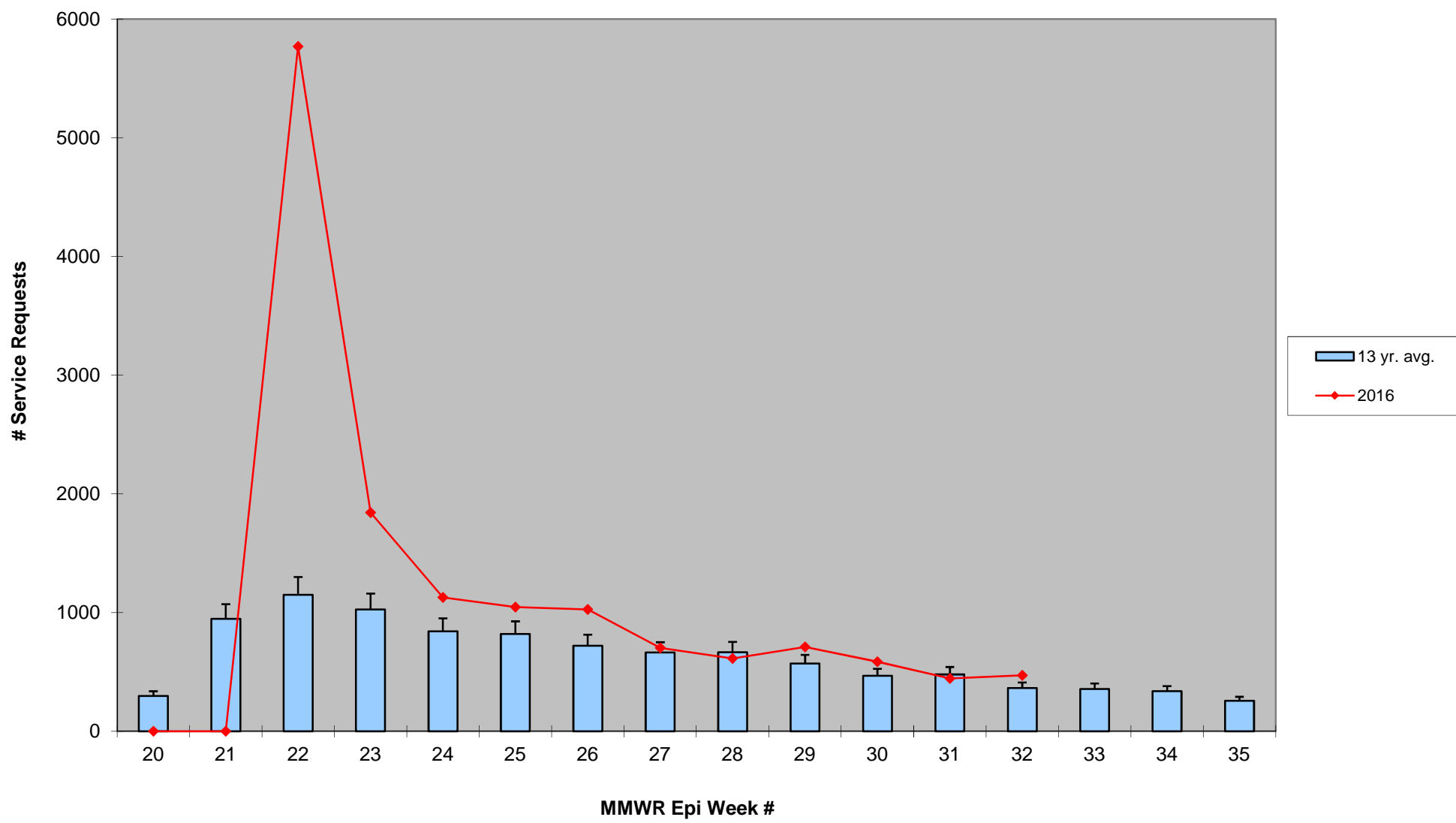
*source: <http://www.nrcc.cornell.edu/regional/tables/tables.html>

2016 CMMCP Weekly Rainfall vs. 11 Year Average*



*source: CMMCP weather station Northborough, MA

ULV Service Request History Comparison 2003-2016



2016 Rainfall vs. Requests

