

CMMCP WEEKLY SURVEILLANCE REPORT



EPI week #30
Jul. 24-30, 2016

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Central Mass. Mosquito Control Project

Weekly Report- 7/24/16-7/30/16

EPI Week #30

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 | 4 | 344 | 24 | 88 | 310 | 968 |
| Total Specimens | 21 | 42341 | 521 | 4678 | 6881 | 59327 |
| No. Pools WNV + | 0 | 0 | 0 | 0 | 0 | 0 |
| No. Pools EEE + | 0 | 0 | 0 | 0 | 0 | 0 |

Weather Summary (Northborough, MA): The weather for this particular week averaged 77.67°F with a recorded high temperature of 94.90°F and a recorded low temperature of only 60.10°F. There was 0.20 inches of precipitation observed this week. Compared to the previous week, it was approximately 1.90°F warmer on average, and rained 0.26 inches less. There has been 1.55 inches of rain accumulated in July, after 1.32 inches for the month of June.

CMMCP Mosquito Summary*-

| Target Species | Δ From Last Week | Δ From Last Year | Predominant Trap Site(s) |
|----------------------------------|------------------|------------------|--------------------------|
| <i>Aedes vexans</i> | +00.00% | +00.00% | N/A |
| <i>Coquilleltidia perturbans</i> | -51.03% | +390.2% | Leominster, Berlin |
| <i>Culiseta melanura</i> | -55.56% | -85.19% | Holliston |
| <i>Ochlerotatus canadensis</i> | -33.04% | +3750% | Berlin |
| <i>Culex</i> Species | +40.33% | +273.5% | Holliston, Boylston |
| All Species | -43.54% | +395.2% | Leominster, Berlin |

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

Enhanced Surveillance for *Aedes albopictus* - Ovitrap Collections

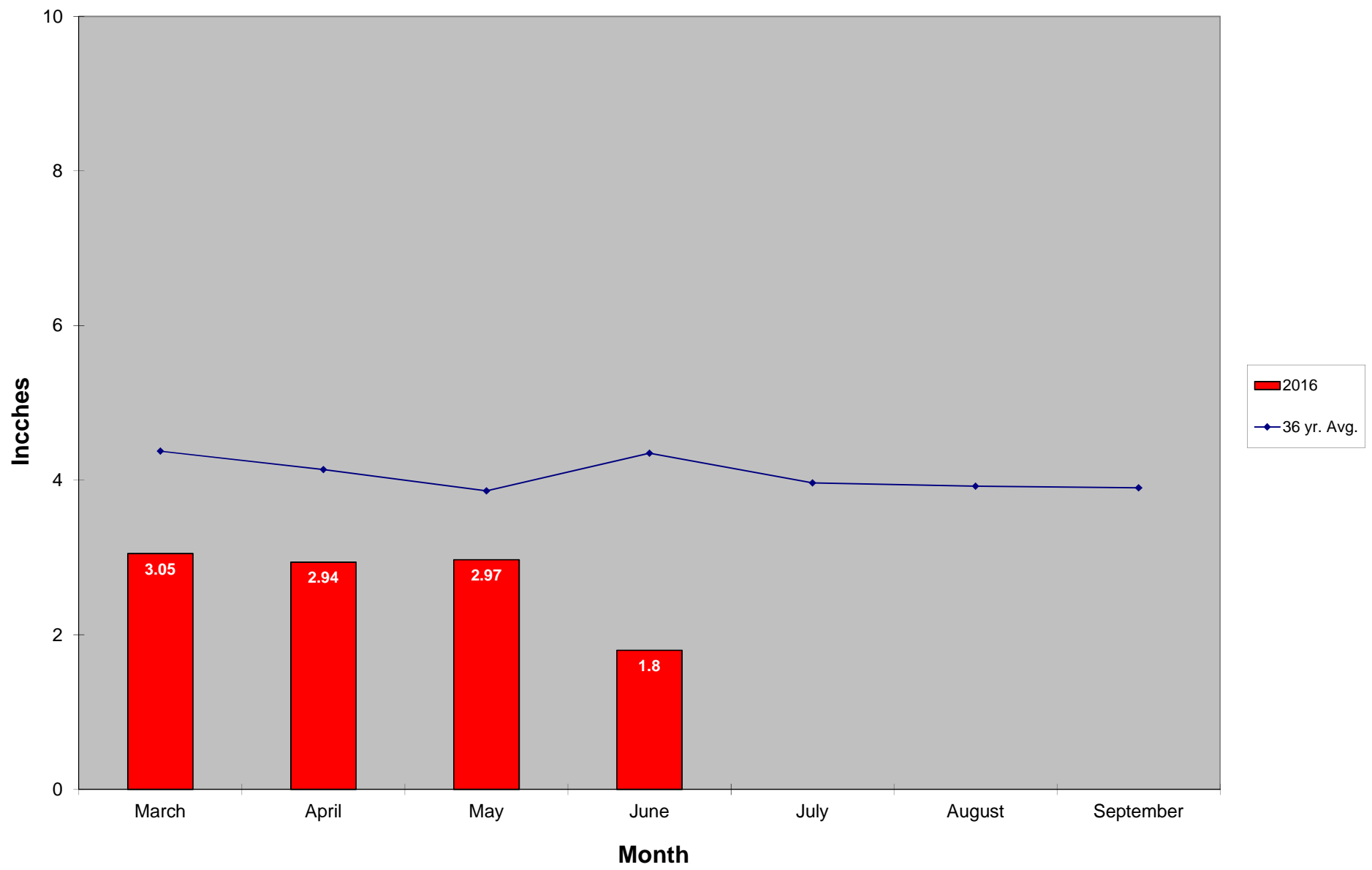
| | # Ovitrap | # Egg Papers | # Eggs |
|--------------|-----------|--------------|--------|
| EPI Week #22 | 15 | 7 | 0 |
| EPI Week #23 | - | - | - |
| EPI Week #24 | 5 | 2 | 49 |
| EPI Week #25 | 15 | 6 | 93 |
| EPI Week #26 | 17 | 17 | 19 |
| EPI Week #27 | 25 | 19 | 1180 |
| EPI Week #28 | 25 | 25 | 1020 |
| EPI Week #29 | 10 | 7 | 62 |
| EPI Week #30 | 15 | 12 | 632 |
| 2016 Totals | 127 | 95 | 3055 |

The temperatures for EPI week 30 averaged approximately 1.90 degrees warmer than the previous week, with only almost 0.20 inches of precipitation observed. At historical surveillance trap sites, the overall collection numbers decreased by 43.54% over EPI week 29, primarily due to a significant reduction in *Coquillettidia perturbans*. The only target species to experience an increase for EPI week 30 was *Culex pipiens/restuans*. Although collection numbers decreased from the previous week, these long-term surveillance locations showed an overall increase when compared to the 2015 season. *Cq. perturbans* was once again the most abundant species 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 31. Twelve egg papers were collected from fifteen CMMCP ovitraps this week. These produced 632 eggs which will help monitor for the presence of *Aedes albopictus* in central Massachusetts.

For the year we received 164% more service requests than average; 13,424 requests compared to the 13 year average of 8,169. Service requests decreased 21.3% from the previous week; 711 in Epi week 29 compared to 586 in Epi week 30.

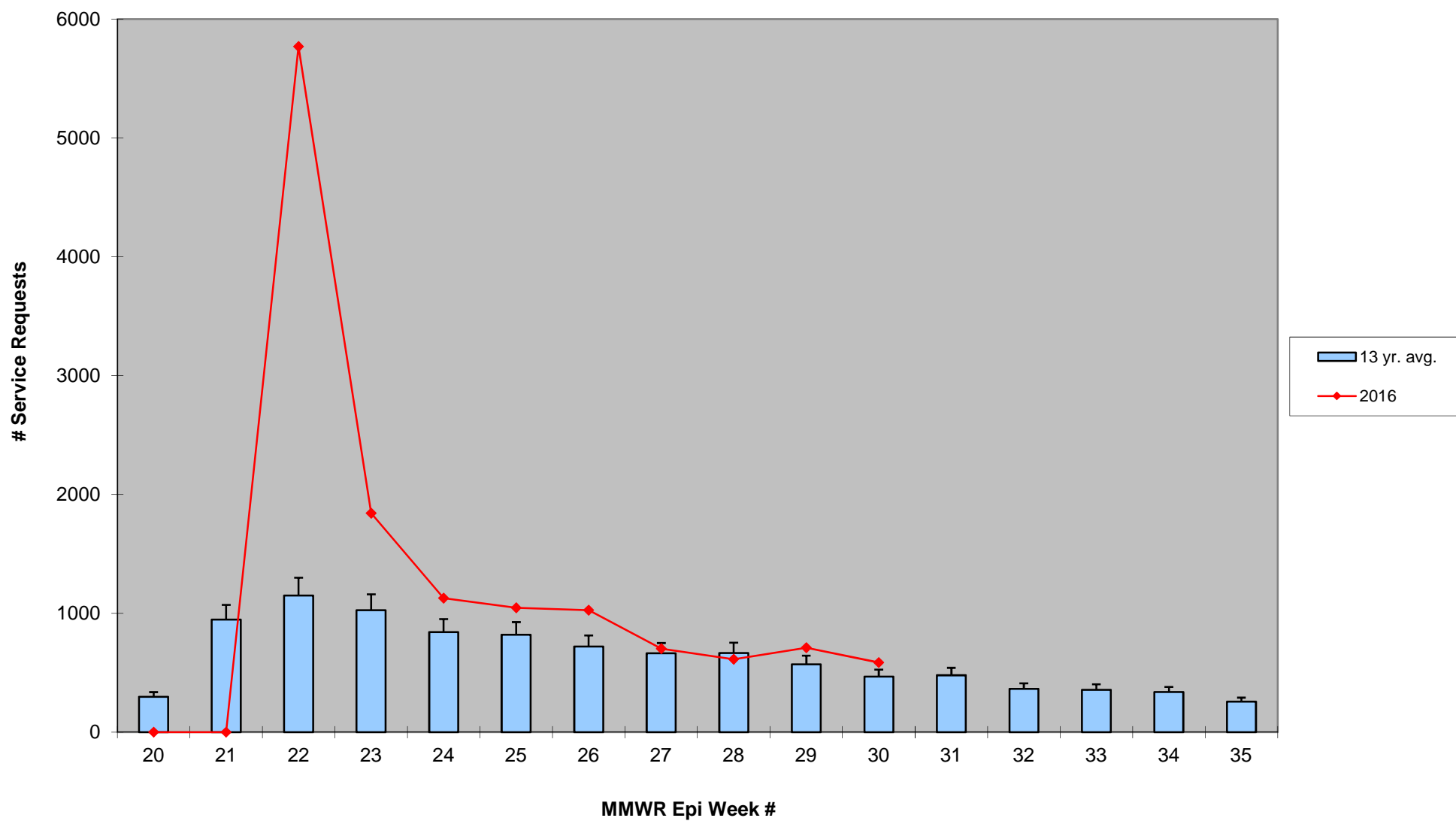
Standard catch basin treatments continue in all member towns. With scattered reports of rain, some heavy, in our region, we have been pushing the message through social media and other outlets to "Dump and Drain" to minimize larval populations that use these habitats to develop.

2016 Mass. Rainfall Data vs. 36 Year Average*

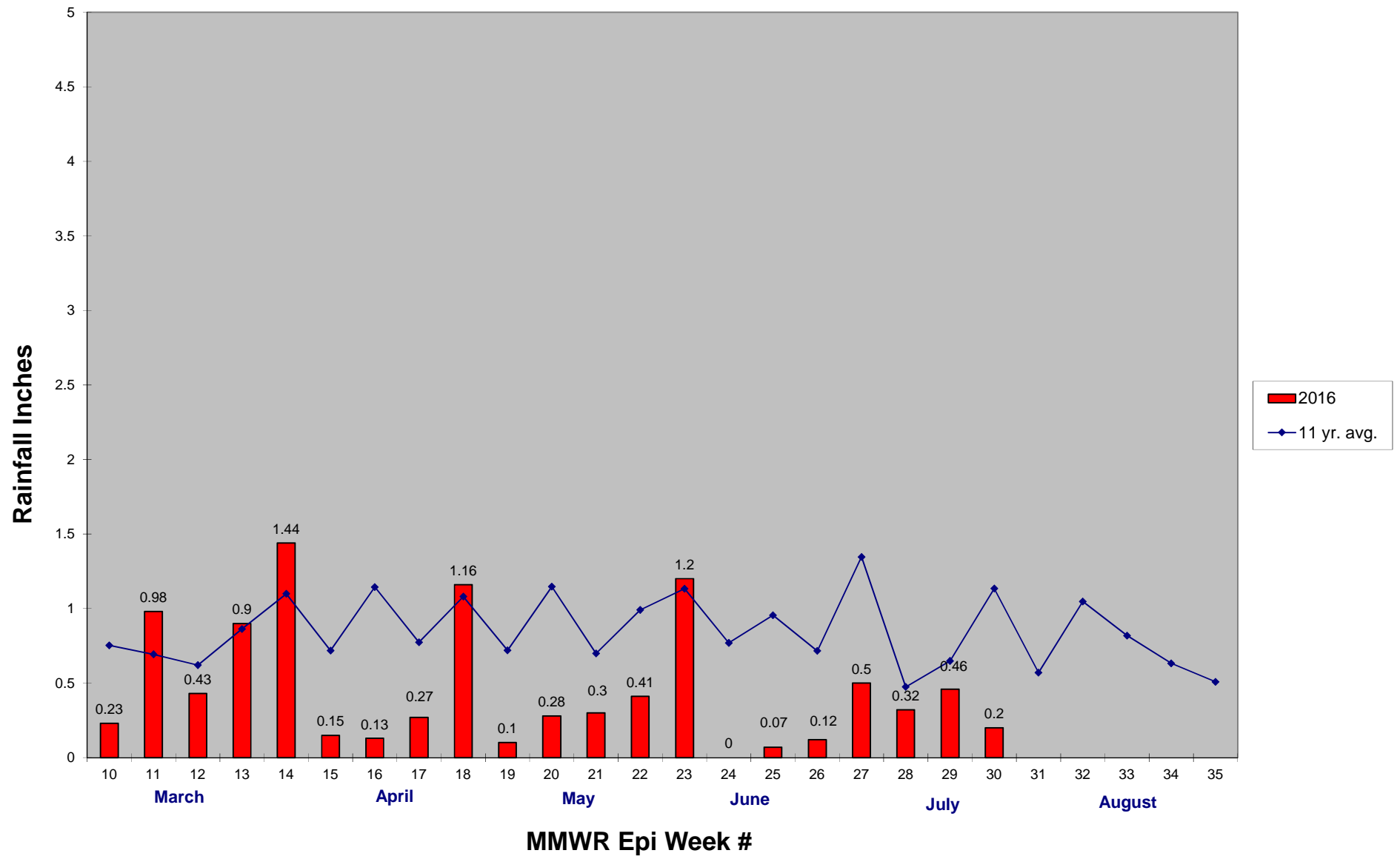


*source: <http://www.nrcc.cornell.edu/regional/tables/tables.html>

ULV Service Request History Comparison 2003-2016



2016 CMMCP Weekly Rainfall vs. 11 Year Average*



*source: CMMCP weather station Northborough, MA

2016 Rainfall vs. Requests

