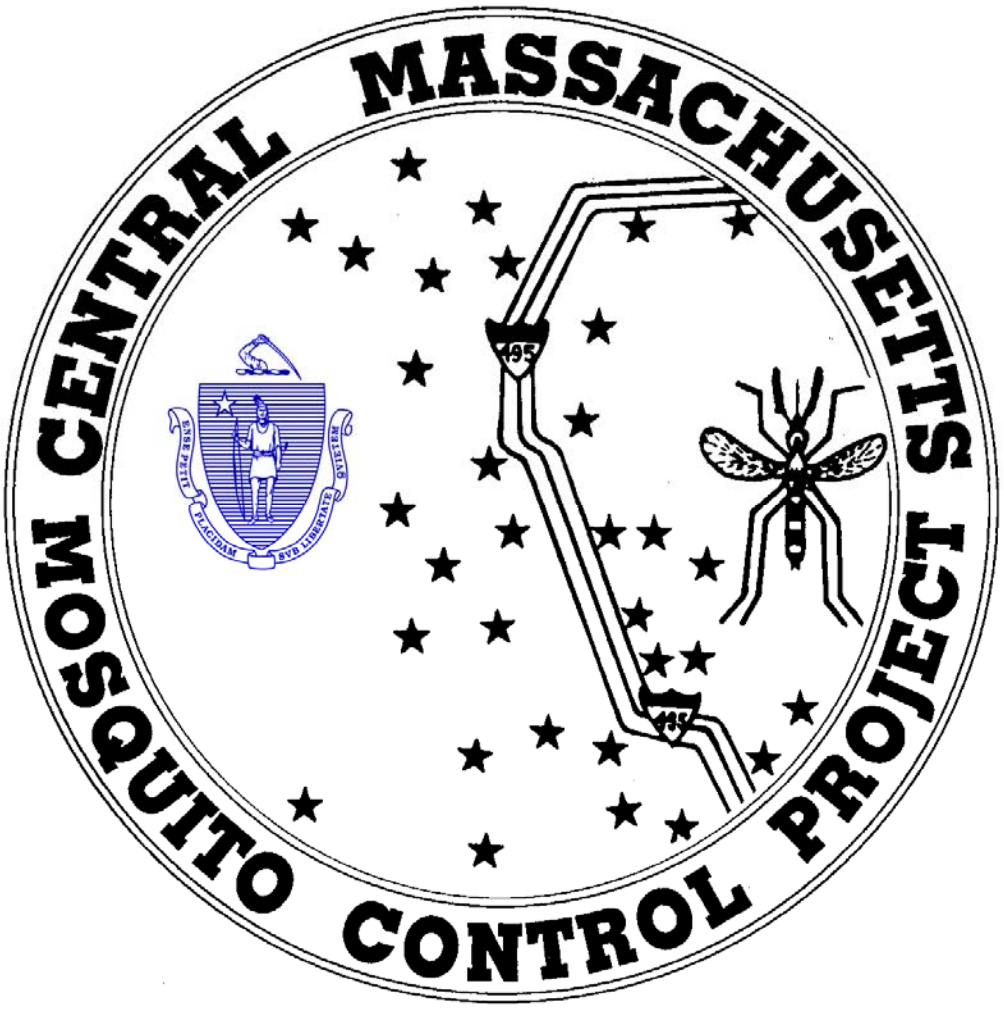
# CMMCP WEEKLY SURVEILLANCE REPORT




## EPI week #31
## July 28 – Aug. 3, 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- 7/28/19-8/3/19
# EPI Week #31

**Cumulative Surveillance Summary**

| Target Species | *Ae. vex* | *Cq. per* | *Cs. mel* | *Oc. can* | *Culex* | All Species |
|---|---|---|---|---|---|---|
| **No. Pools** | 88 | 623 | 191 | 242 | 629 | 3102 |
| **Total Specimens** | 405 | 142809 | 1264 | 4345 | 10059 | 164158 |
| **No. Pools WNV +** | 0 | 0 | 0 | 0 | 1† | 1† |
| **No. Pools EEE +** | 0 | 0 | 0 | 0 | 0 | 0 |

†Pool of WNV+ *Culex* species collected in Worcester on 7/26/19

**Weather Summary (Northborough, MA):** The weather for this particular week averaged 76.89°F with a recorded high temperature of 93.30°F and a recorded low temperature of only 55.40°F. For this week there was also a total of 0.22 inches of rain observed. Compared to the previous week, it was approximately 3.70°F warmer on average, and rained about 1.46 inches less. There has been 5.20 inches of rain accumulated in July, after 3.04 inches for the month of June.

**CMMCP Mosquito Summary-**

| Target Species | Δ From Last Week | Δ From Last Year | Predominant Trap Site(s) |
|---|---|---|---|
| *Aedes vexans* | -21.05% | +77.29% | Holliston, Westborough |
| *Coquillettidia perturbans* | +176.9% | +303.2% | Southborough, Holliston |
| *Culiseta melanura* | +175.0% | +618.8% | Tewksbury |
| *Ochlerotatus canadensis* | +77.78% | +137.9% | Acton, Gardner |
| *Culex* Species | +33.65% | -62.42% | Hopedale |
| All Species | +153.8% | +138.0% | Southborough, Holliston |

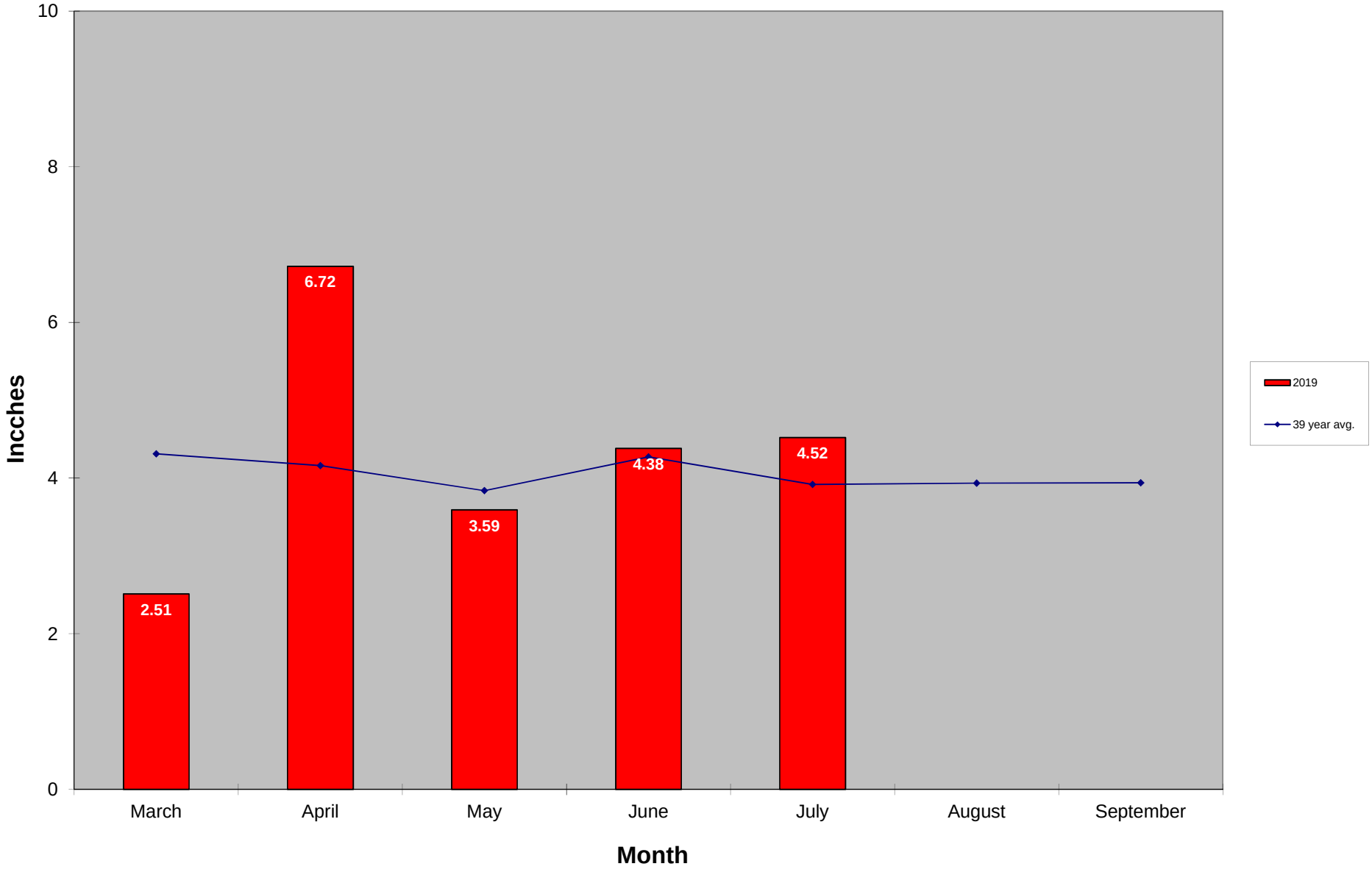
The predominant mosquito for the week was *Coquillettidia perturbans*, followed by *Culex*.

**General narrative**: The temperatures for EPI week 31 averaged approximately 3.70°F warmer than the previous week, with only 0.22 inches of precipitation observed. This week of mosquito surveillance saw all target mosquito species experiencing increases except for *Aedes vexans*. *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 *Culex*. The first mosquito pool from the CMMCP service area that tested positive for mosquito-borne disease was found last week. One pool of *Culex* from Worcester, tested positive for West Nile virus. Thirty-five egg papers, containing 2373 eggs, were collected for *Aedes albopictus* surveillance during EPI week 31.

***Aedes albopictus* Surveillance Data**

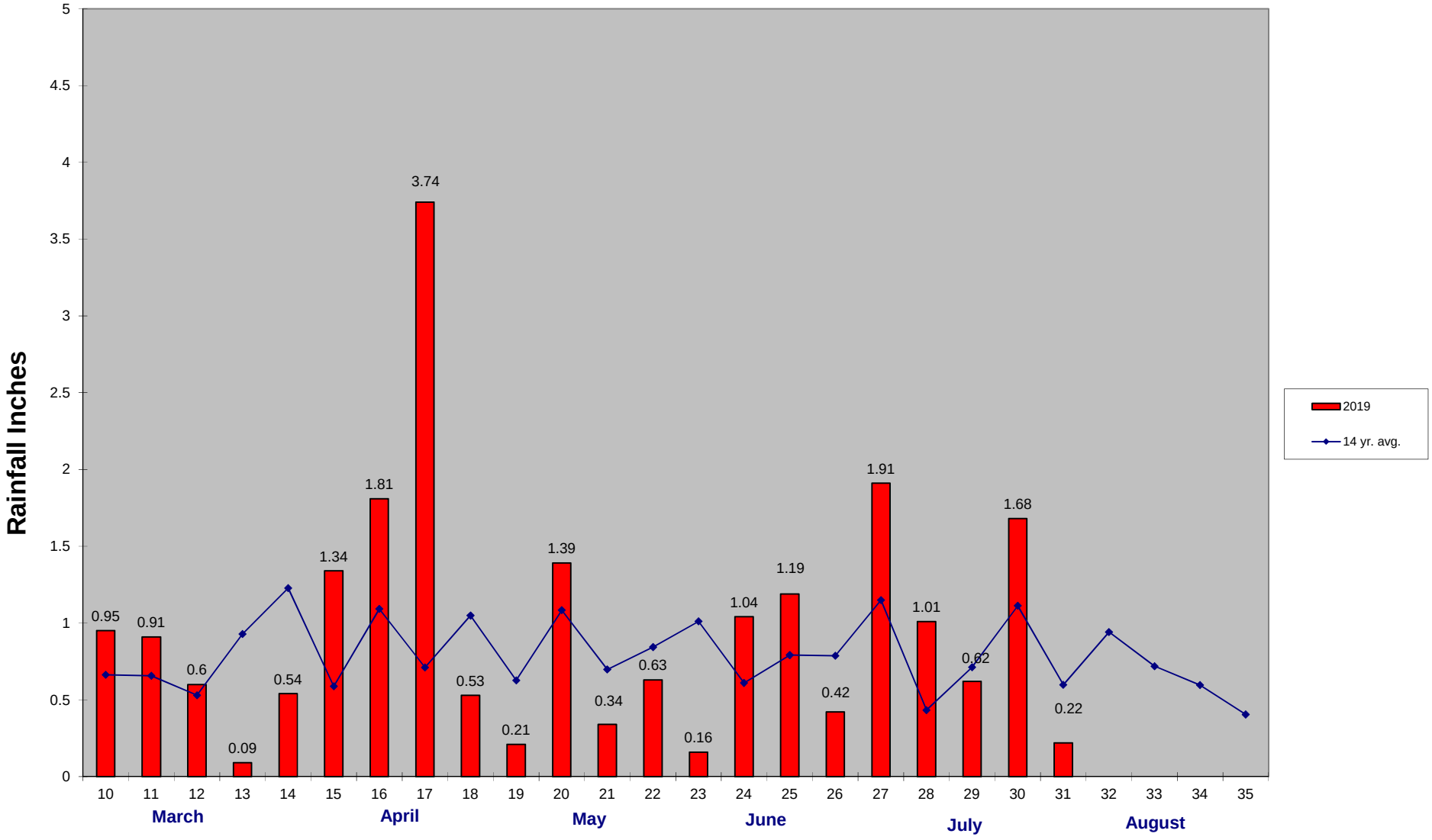
| | # Ovitraps | # Eggs |
|---|---|---|
| EPI Week #22 | 31 | 4 |
| EPI Week #23 | 21 | 221 |
| EPI Week #24 | 33 | 530 |
| EPI Week #25 | 37 | 1294 |
| EPI Week #26 | 37 | 1100 |
| EPI Week #27 | - | - |
| EPI Week #28 | 35 | 3527 |
| EPI Week #29 | 35 | 1481 |
| EPI Week #30 | 35 | 1946 |
| EPI Week #31 | 35 | 2373 |

## 2019 Mass. Rainfall Data vs. 39 Year Average*



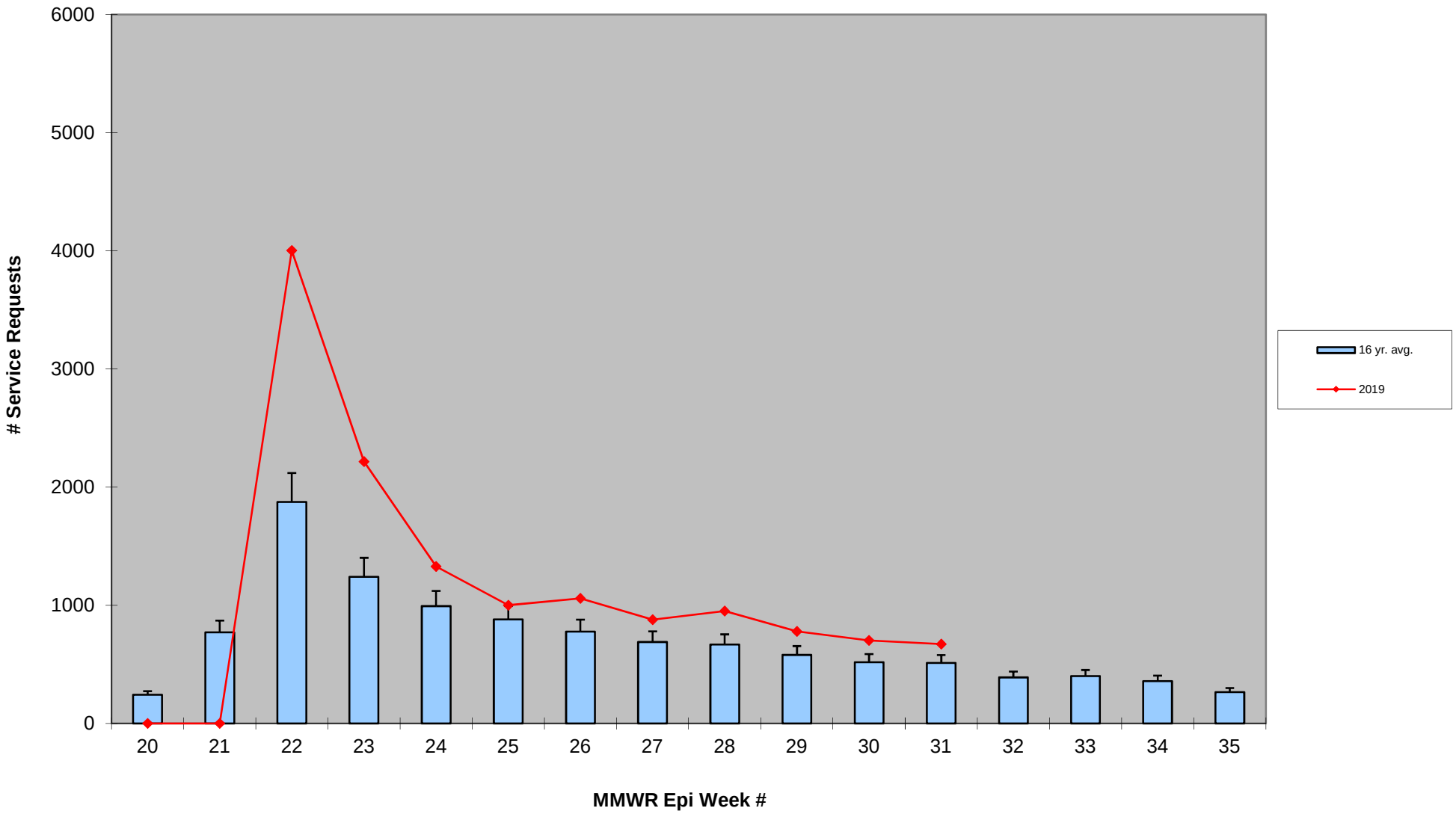

*source: http://www.nrcc.cornell.edu/regional/tables/tables.html

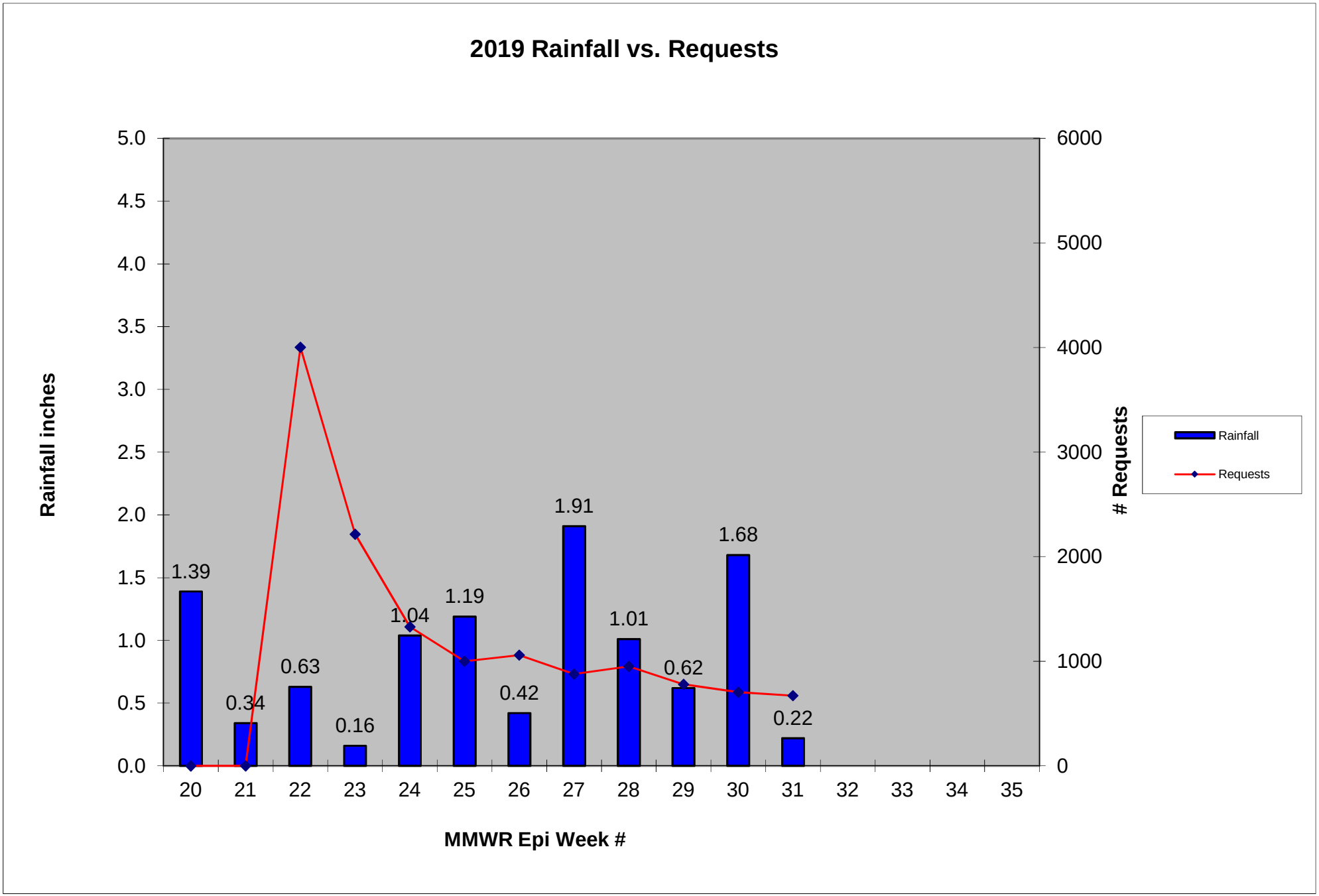
# 2019 CMMCP Weekly Rainfall vs. 14 Year Average*




*source: CMMCP weather station Northborough, MA

# ULV Service Request History Comparison 2003-2019




2019 Rainfall vs. Requests
Rainfall inches
# Requests
MMWR Epi Week #
Rainfall
Requests
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
6000
5000
4000
3000
2000
1000
0
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
1.39
0.34
0.63
0.16
1.04
1.19
0.42
1.91
1.01
0.62
1.68
0.22