

CMMCP WEEKLY SURVEILLANCE REPORT



EPI week #37
Sept. 6-12, 2020

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Central Mass. Mosquito Control Project
Weekly Report- 9/6/20-9/12/20
EPI Week #37

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 | 204 | 744 | 106 | 198 | 612 | 3820 |
| Total Specimens | 2091 | 32578 | 323 | 2825 | 4405 | 49187 |
| 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 67.93°F with a recorded high temperature of 88.40°F and a recorded low temperature of only 47.70°F. There was 0.52 inches of rain observed this week. Compared to the previous week, it was approximately 1.57°F warmer on average, and rained about 0.28 inches more. There has been 0.76 inches of rain accumulated in September, after 3.00 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> | +676.5% | +47.49% | Acton, Lowell |
| <i>Coquilleltidia perturbans</i> | -75.00% | -80.54% | Bolton, Acton |
| <i>Culiseta melanura</i> | +300.0% | -85.76% | Boxborough, Boylston |
| <i>Ochlerotatus canadensis</i> | +00.00% | -48.27% | Fitchburg |
| <i>Culex</i> Species | +22.06% | -72.19% | Worcester |
| All Species | +8.730% | -76.49% | Worcester, Acton |

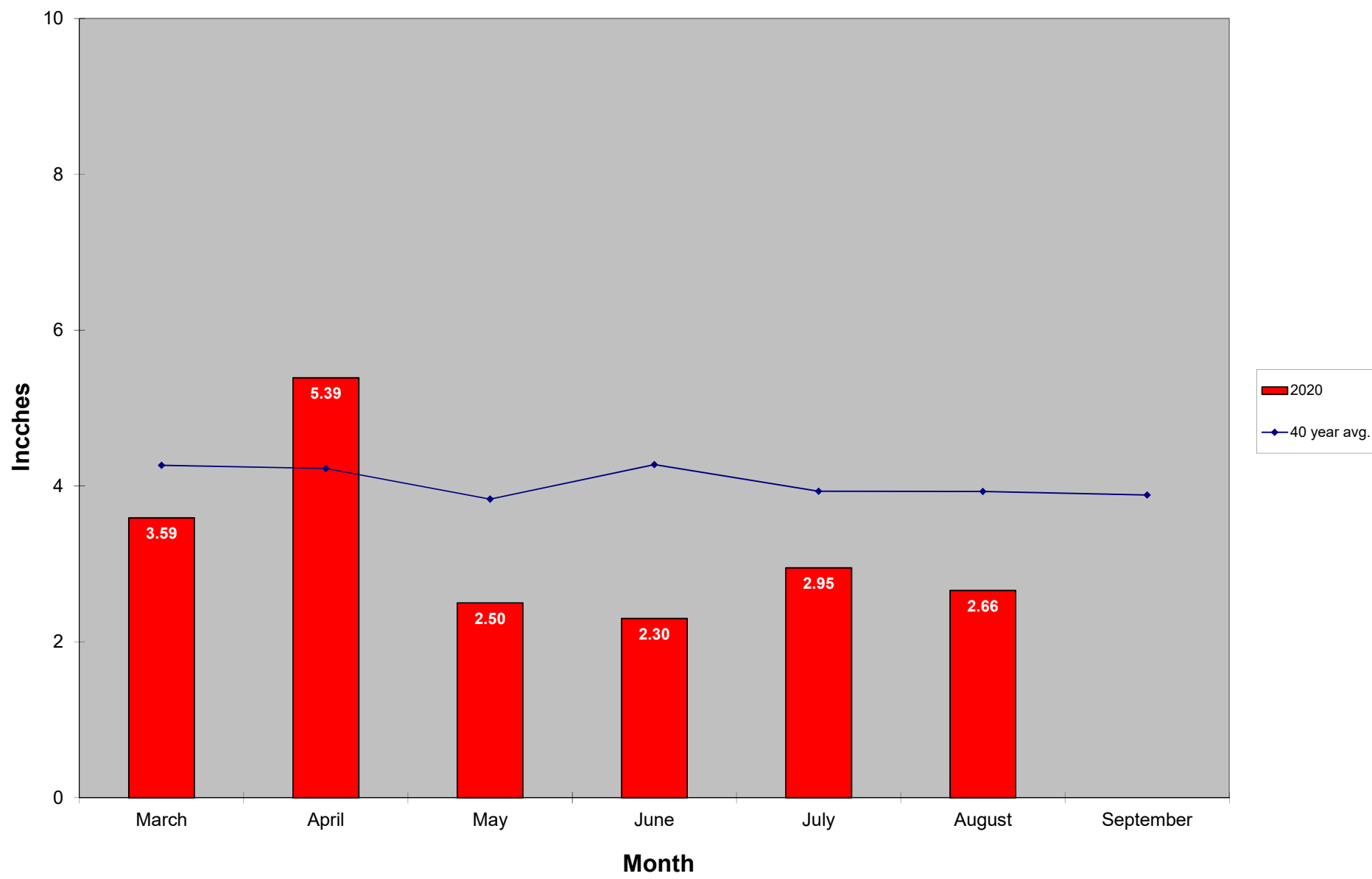
The predominant mosquito for the week was *Culex* spp.,
followed by *Aedes vexans*.

General narrative: The average temperature for EPI week 37 was approximately 1.57°F warmer than the previous week, with 0.52 inches of precipitation observed. This week increased emergence was observed for all target mosquitoes except for *Coquilleltidia perturbans*. The most abundant mosquito this week was once again *Culex* spp., followed now by *Aedes vexans*. Compared to the 2019 season, overall mosquito surveillance numbers are down this year. All target species are lower this season, except for *Aedes vexans*. Every submitted mosquito pool from EPI week 36 tested negative for mosquito-borne disease. *Aedes albopictus* surveillance using ovitraps continued, with 598 eggs collected and submitted for identification this week.

Service requests for the year area 56.7% greater than the 17-year average and an 17.7% decrease over 2019 numbers. Weekly catch basin treatments for *Culex* control have ended, bringing the final total for the year to 88,650 basins. Final results are still pending

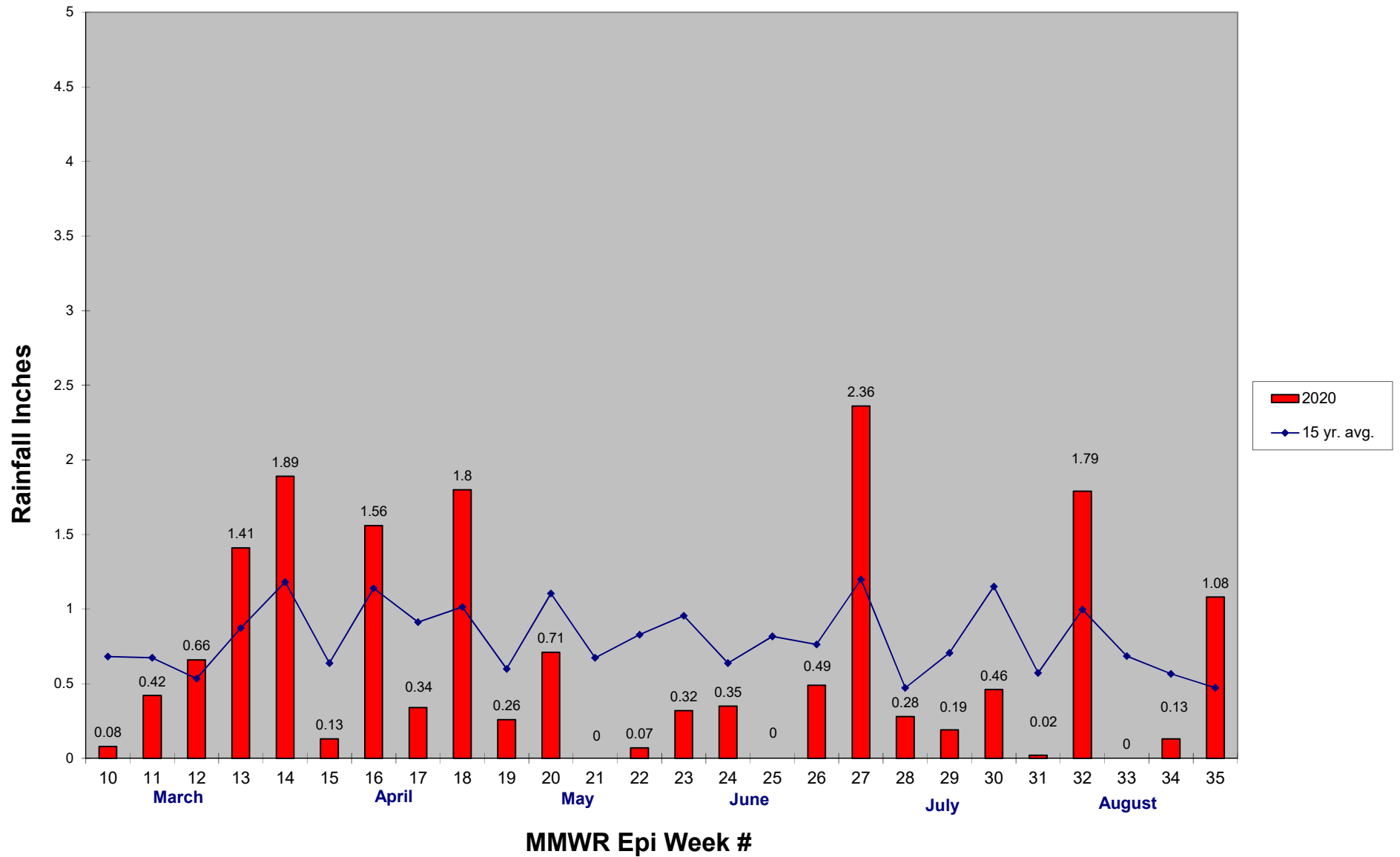
from the analysis laboratories but initial results do not look positive for control in most *Cs. melanura* crypt habitat. Data is still being collected and analyzed from emergence traps in *Cq. perturbans* habitat.

2020 Mass. Rainfall Data vs. 40 Year Average*



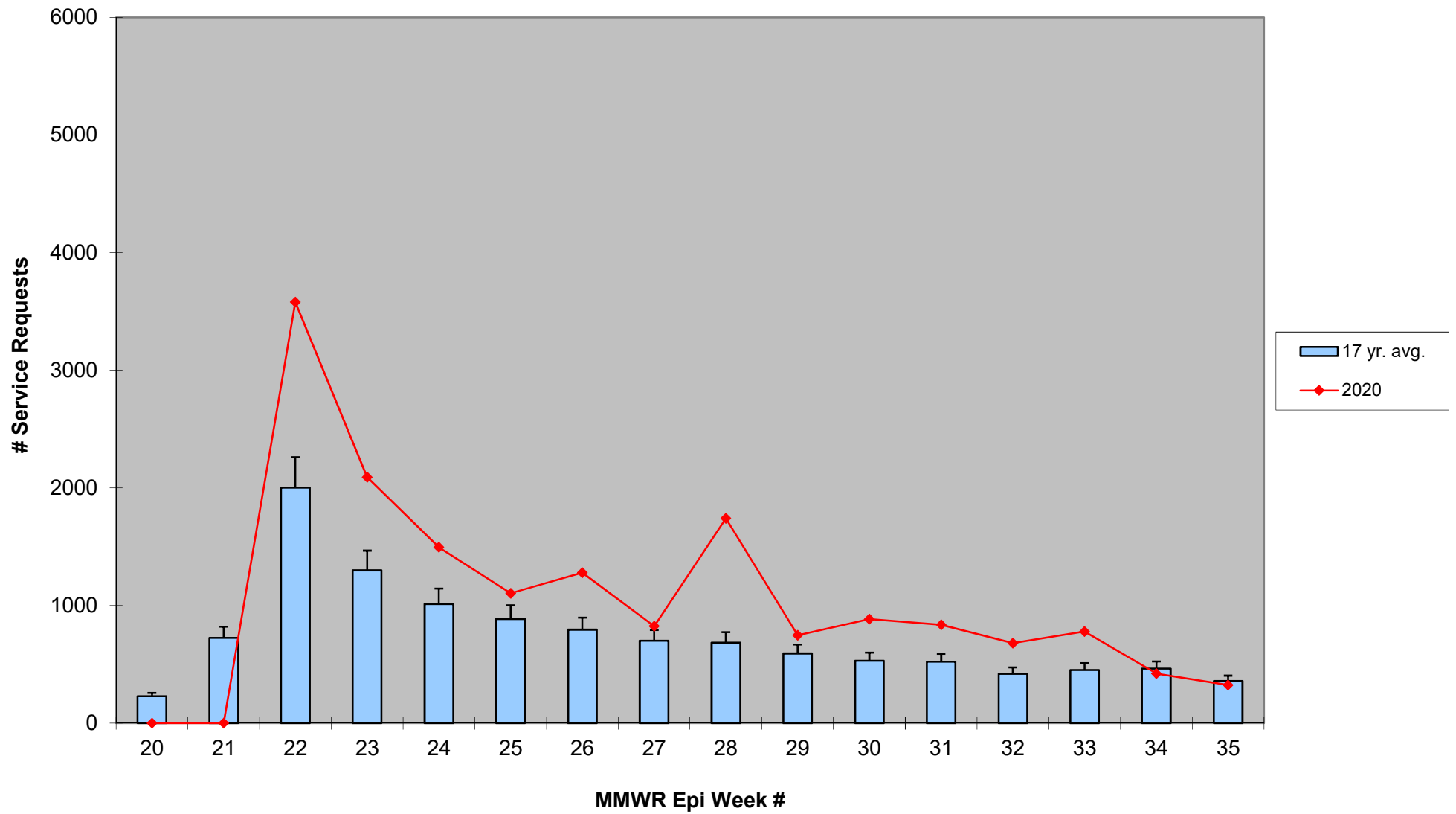
*source: <http://www.nrcc.cornell.edu/regional/tables/tables.html>

2020 CMMCP Weekly Rainfall vs. 15 Year Average*



*source: CMMCP weather station Northborough, MA

ULV Service Request History Comparison 2003-2020



2020 Rainfall vs. Requests

