

CMMCP WEEKLY SURVEILLANCE REPORT



EPI week #25
June 20 – 26, 2021

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Central Mass. Mosquito Control Project
Weekly Report- 6/20/21-6/26/21
EPI Week #25

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	46	120	18	59	38	473
Total Specimens	245	7291	46	861	158	10455
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 69.81°F with a recorded high temperature of 90.70°F and a recorded low temperature of only 47.20°F. For this week there was also a total of 0.58 inches of rain observed. Compared to the previous week, it was approximately 1.90°F warmer on average, and rained about 0.54 inches less. There has been 2.10 inches of rain accumulated in June, after 3.04 inches for the month of May.

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>	+370.9%	+240.3%	Sherborn, Westborough
<i>Coquillettidia perturbans</i>	+433.1%	+194.6%	Tewksbury, Westford
<i>Culiseta melanura</i>	+7.140%	-78.70%	Westborough, Hopedale
<i>Ochlerotatus canadensis</i>	+108.2%	-15.34%	Westborough, Westford
<i>Culex</i> Species	+395.7%	-49.36%	Lowell, Shrewsbury
All Species	+351.9%	+89.06%	Tewksbury, Westford

The predominant mosquito for the week was *Coquillettidia perturbans* followed by *Anopheles punctipennis*.

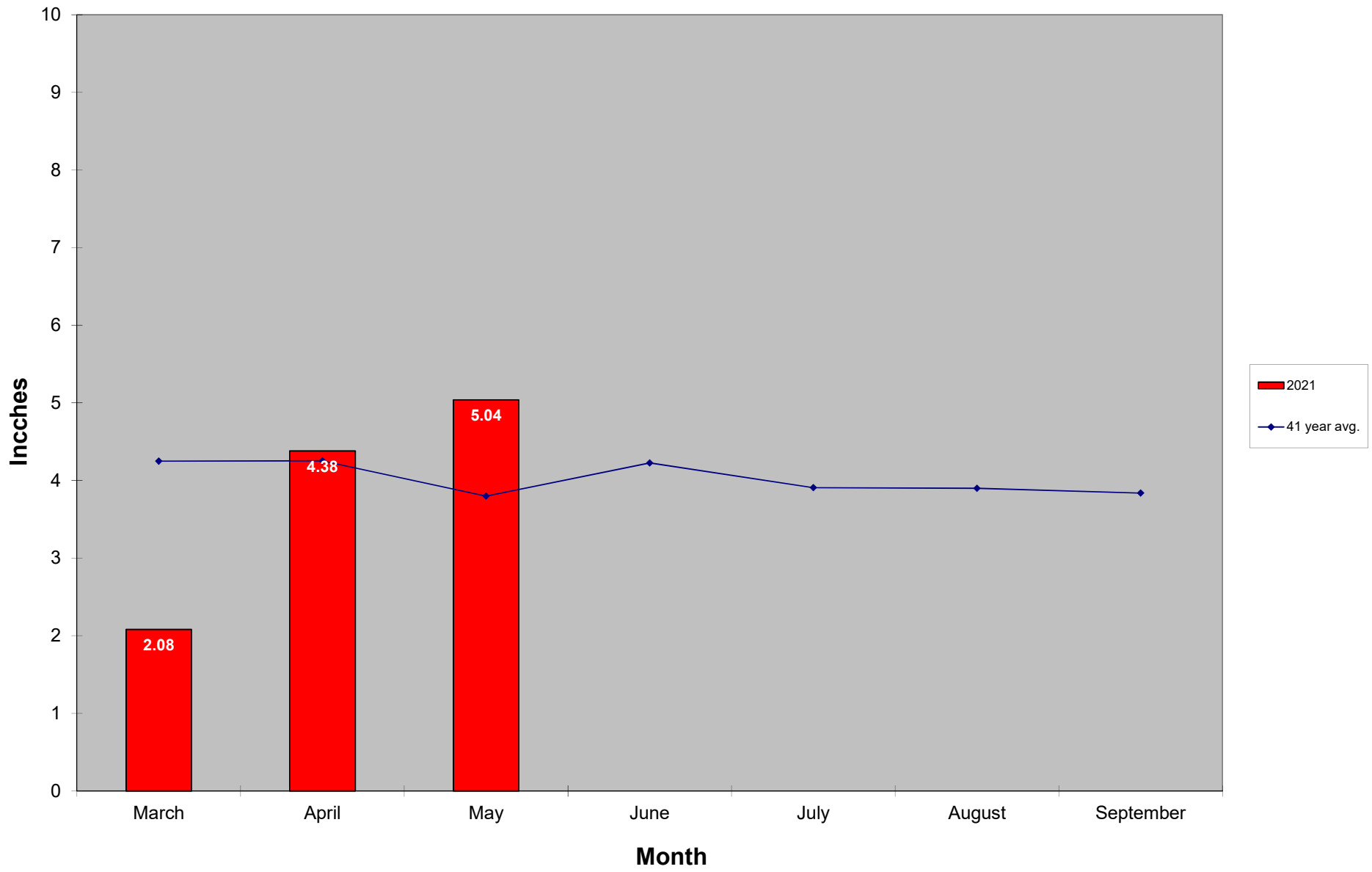
General narrative:

The temperatures for EPI week 25 averaged approximately 1.90°F warmer than the previous week, with 0.58 inches of precipitation observed. The emergence of adult *Coquillettidia perturbans* has continued to be observed. *Coquillettidia perturbans* was most abundant mosquito species for the week, followed this week by *Anopheles punctipennis*. Increasing temperatures and additional emergence should contribute to higher collections moving forward. All target species were more abundant in EPI week 25 compared to the previous week. Compared to the 2020 season, overall mosquito surveillance numbers are up this year, primarily due to increases in *Coquillettidia perturbans* and *Aedes vexans*. Every submitted mosquito pool from EPI week 24 tested negative for mosquito-borne disease. Gravid traps have yet to be deployed. *Aedes*

albopictus surveillance using ovitraps has continued, with an additional 530 eggs submitted to the Massachusetts Department of Public Health.

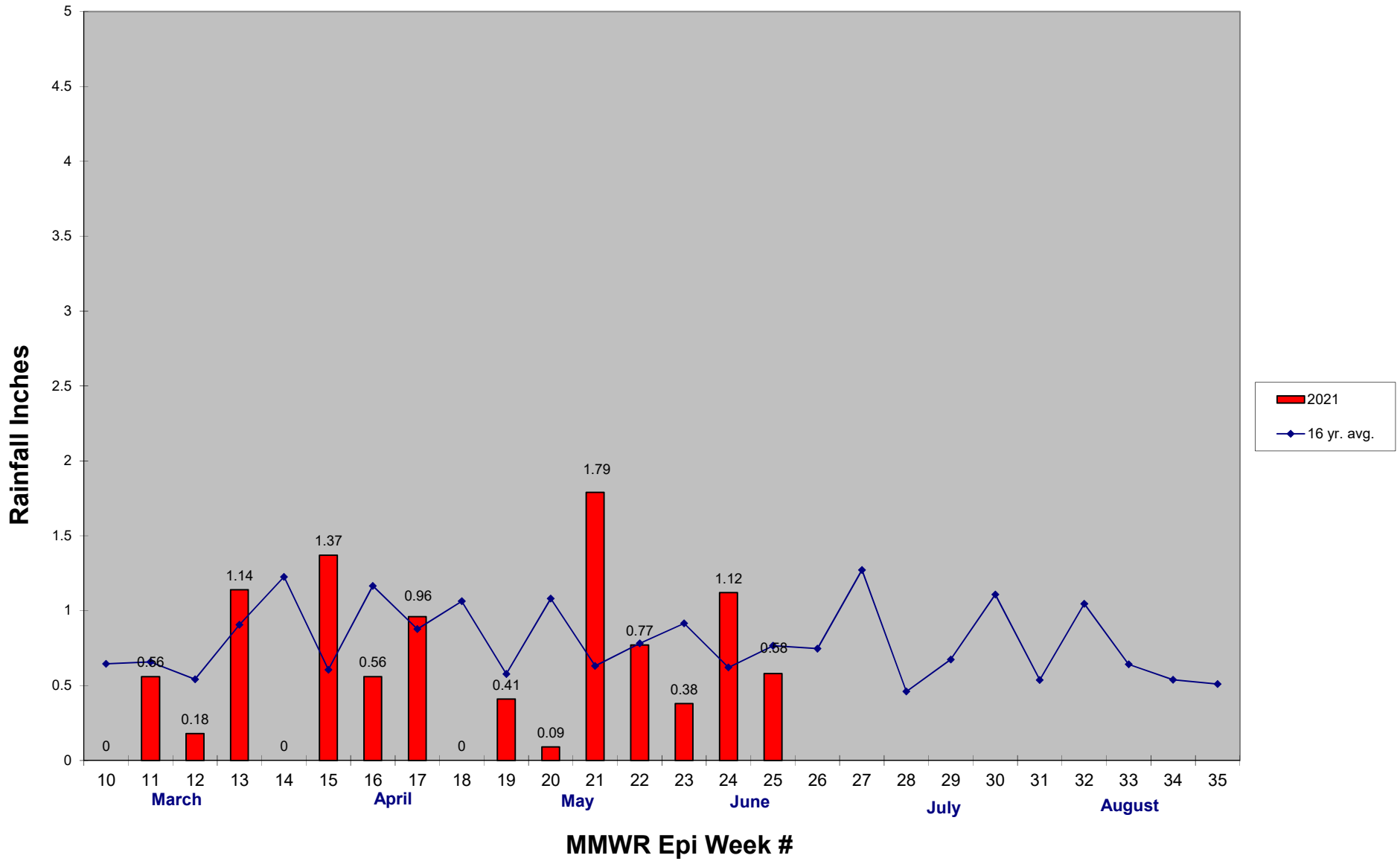
Service requests are 17.7% greater than the 18-year average but a 27% decrease over 2020 numbers to date. Work crews are performing catch basins treatments in all member communities for *Culex* control. 4,810 catch basins were treated in Epi week 25, bringing the total to 41,847 basins to date. Water sampling and bioassay results are still pending from the analysis laboratories for our enhanced control applications of Spinosad in *Cs. melanura* crypt habitats. Data is being collected and analyzed from emergence traps in *Cq. perturbans* habitat.

2021 Mass. Rainfall Data vs. 41 Year Average*



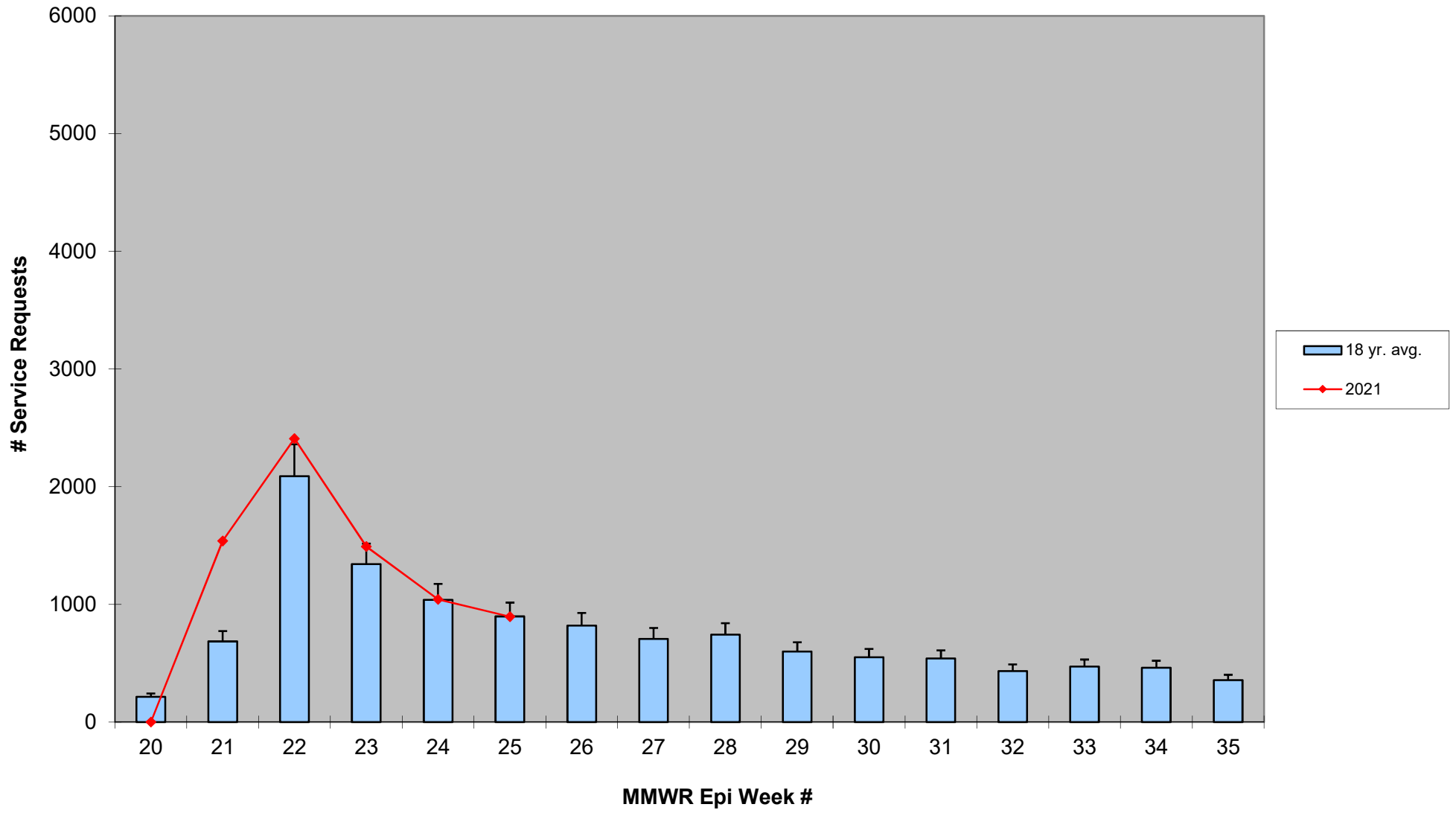
*source: <http://www.nrcc.cornell.edu/regional/tables/tables.html>

2021 CMMCP Weekly Rainfall vs. 16 Year Average*



*source: CMMCP weather station Northborough, MA

ULV Service Request History 2003-2021



2021 Rainfall vs. Requests

