

CMMCP WEEKLY SURVEILLANCE REPORT



EPI week #27
July 4-10, 2021

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**Central Mass. Mosquito Control Project
Weekly Report- 7/4/21-7/10/21
EPI Week #27**

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	73	268	29	94	139	1045
Total Specimens	433	26752	61	1310	675	32205
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 68.46°F with a recorded high temperature of 92.60°F and a recorded low temperature of only 54.40°F. For this week there was also a total of 2.94 inches of rain observed. Compared to the previous week, it was approximately 5.47°F cooler on average, and rained about 0.77 inches less. There has already been 6.20 inches of rain accumulated in July, after 2.55 inches for the month of June.

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>	-84.97%	+38.46%	Chelmsford, Wilmington, Lowell
<i>Coquillettidia perturbans</i>	-64.31%	+491.3%	Boxborough, Westborough
<i>Culiseta melanura</i>	-44.44%	-73.93%	Chelmsford, Acton, Boxborough
<i>Ochlerotatus canadensis</i>	-71.88%	-42.61%	Westford
<i>Culex</i> Species	-39.85%	-43.10%	Northbridge, Millville, Billerica
All Species	-63.34%	+206.9%	Boxborough, Westborough

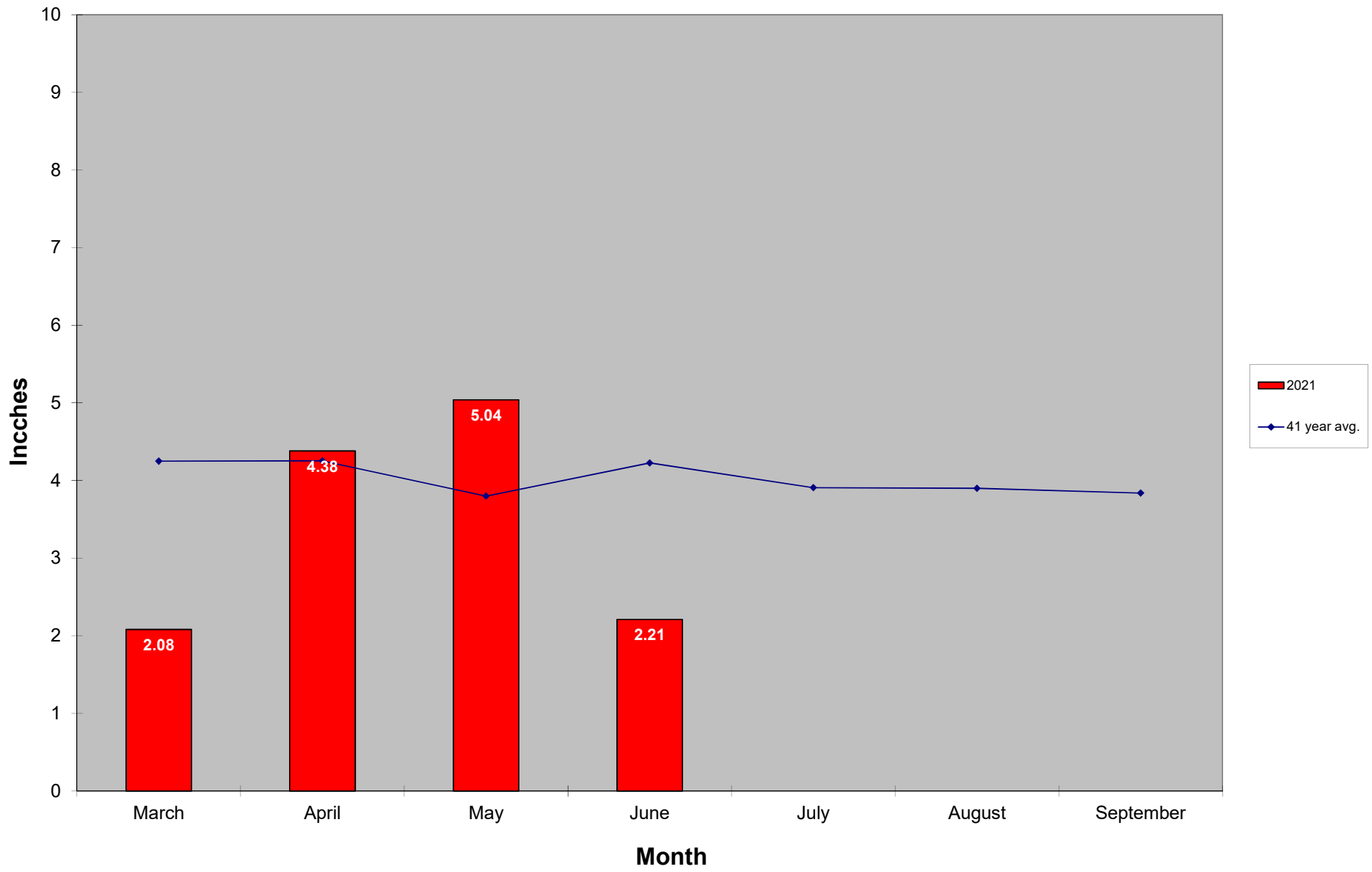
The predominant mosquito for the week was *Coquillettidia perturbans* followed by *Culex* spp.

General narrative:

The temperatures for EPI week 27 averaged approximately 5.47°F cooler than the previous week, with 2.94 inches of precipitation observed. *Coquillettidia perturbans* was again the most abundant mosquito for the week, followed this week by *Culex* species. All target species were less abundant in EPI week 27 compared to the previous week, possible influenced by cooler temperatures. 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 26 tested negative for mosquito-borne disease. *Aedes albopictus* surveillance using ovitraps has continued, with an additional 399 eggs submitted to the Massachusetts Department of Public Health. One detection of *Ae. albopictus* was confirmed from a collection in Lowell. Our ATM protocols will be implemented in this area starting July 13.

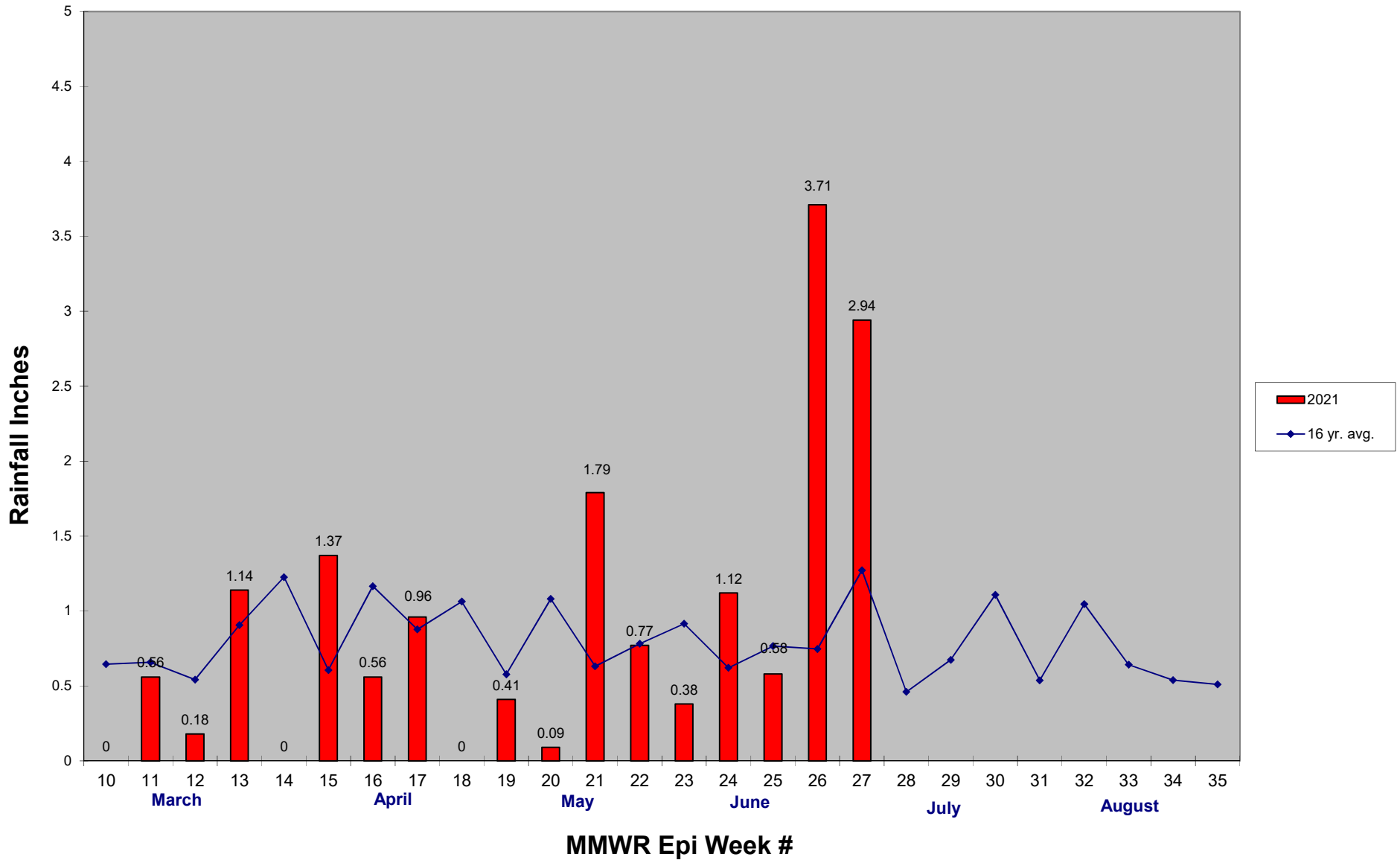
Service requests are 10.6% greater than the 18-year average but a 33.1% decrease over 2020 numbers to date. Work crews are performing catch basins treatments in all member communities for *Culex* control. 4,541 catch basins were treated in Epi week 27, bringing the total to 53,243 basins to date. Water 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*



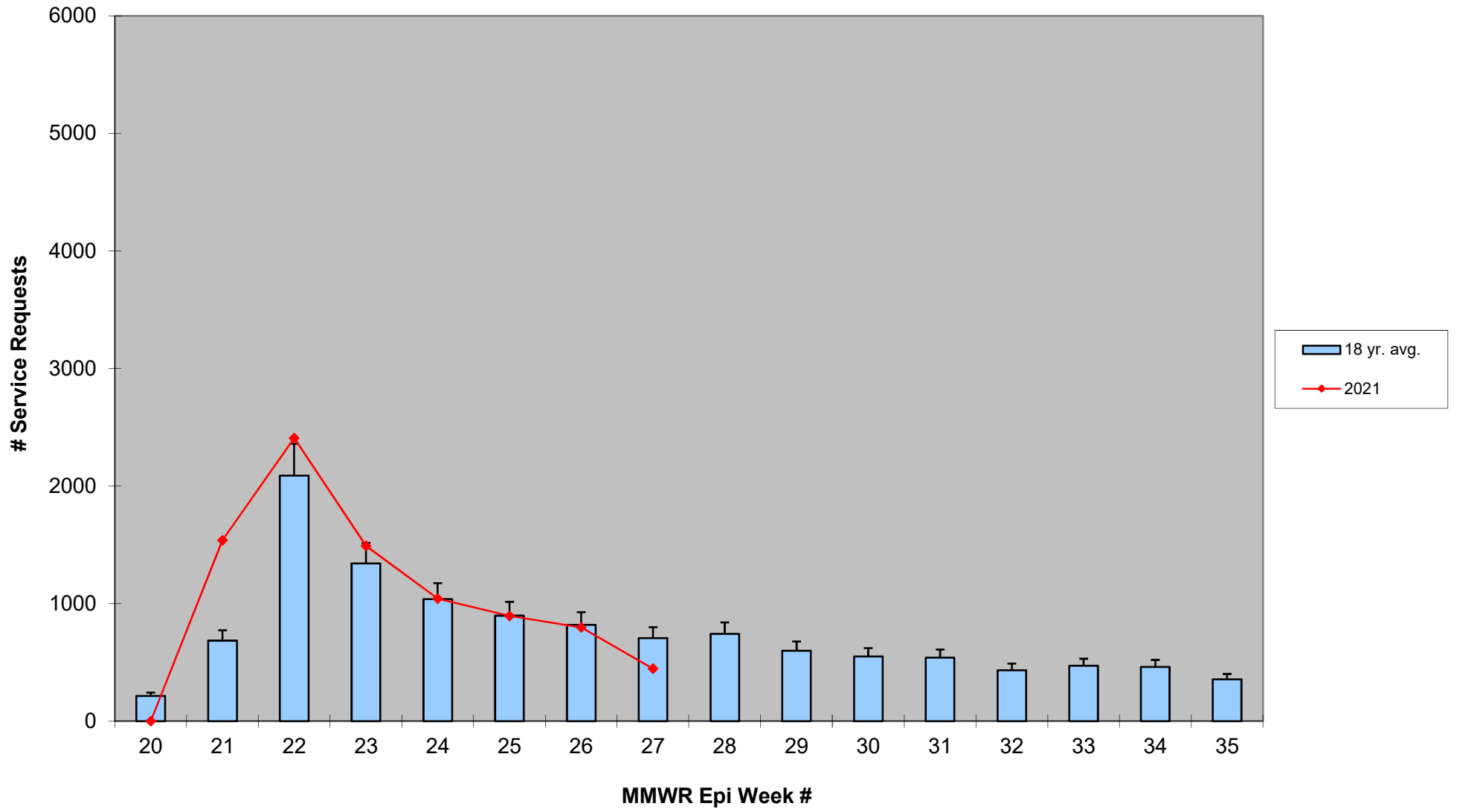
*source: <http://www.nrcc.cornell.edu/regional/tables/tables.html>

2021 CMMCP Weekly Rainfall vs. 16 Year Average*



*source: CMMCP weather station Northborough, MA

ULV Service Request History 2003-2021



2021 Rainfall vs. Requests

