

CMMCP WEEKLY SURVEILLANCE REPORT



EPI week #28
July 11-17, 2021

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Central Mass. Mosquito Control Project
Weekly Report- 7/11/21-7/17/21
EPI Week #28

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	91	349	40	114	196	1355
Total Specimens	575	30969	97	1489	1286	37843
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 71.84°F with a recorded high temperature of 95.20°F and a recorded low temperature of only 57.60°F. For this week there was also a total of 1.93 inches of rain observed. Compared to the previous week, it was approximately 3.38°F warmer on average, and rained about 1.01 inches less. There has already been 8.13 inches of rain accumulated in July, after 2.55 inches for the month of June.

CMMCP Mosquito Summary-

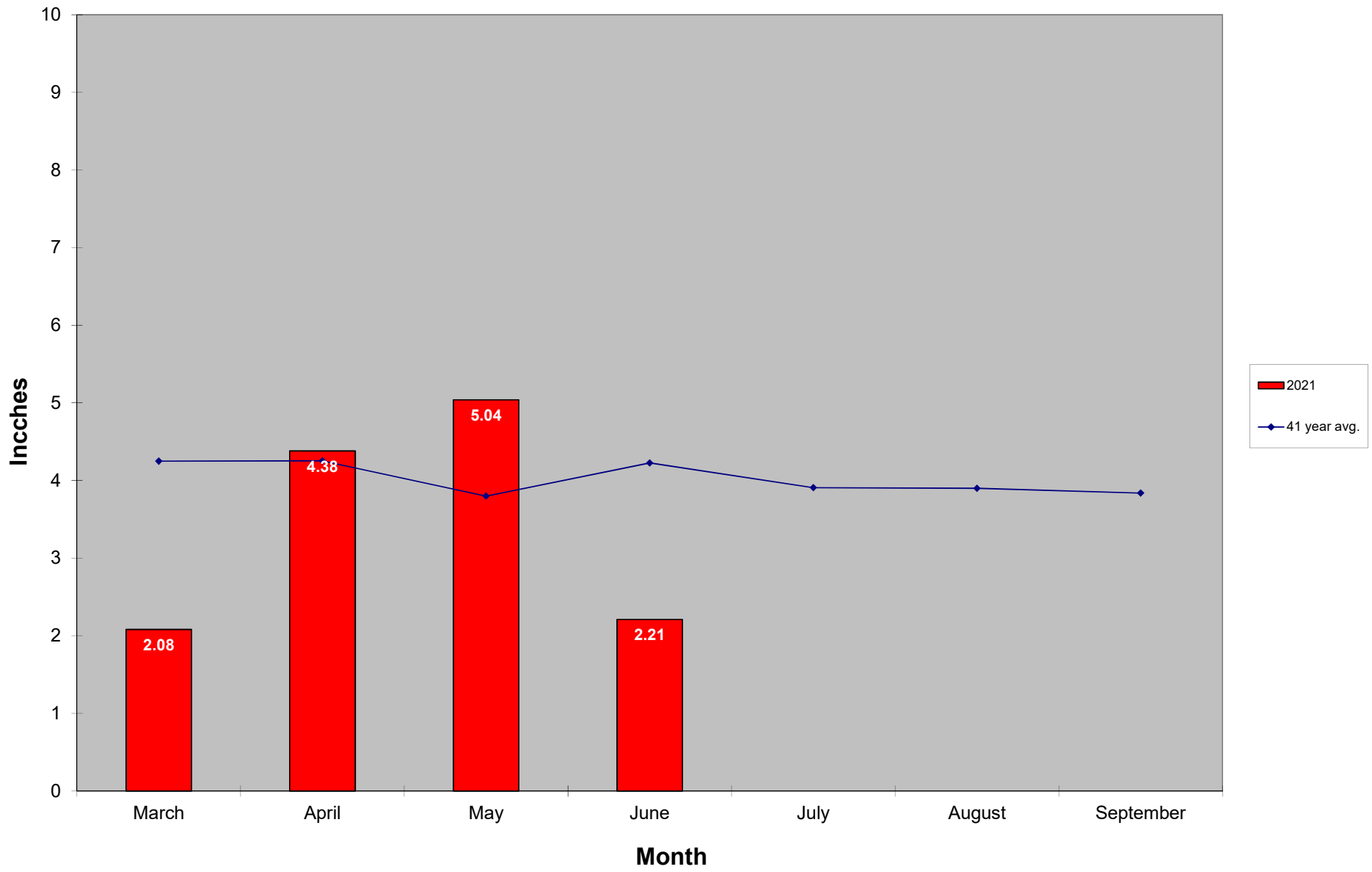
Target Species	Δ From Last Week	Δ From Last Year	Predominant Trap Site(s)
<i>Aedes vexans</i>	+321.7%	+61.69%	Lowell, Tewksbury
<i>Coquilleltidia perturbans</i>	-0.920%	+191.1%	Tewksbury, Boylston, Billerica
<i>Culiseta melanura</i>	+540.0%	-62.40%	Wilmington, Boylston
<i>Ochlerotatus canadensis</i>	+52.27%	-37.60%	Littleton, Westford, Boylston
<i>Culex</i> Species	+217.5%	-4.710%	Devens, Wilmington
All Species	+14.49%	+118.9%	Boylston, Tewksbury

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

General narrative: The temperatures for EPI week 28 averaged approximately 3.38°F warmer than the previous week, with 1.93 inches of precipitation observed. *Coquilleltidia perturbans* was again the most abundant mosquito for the week, followed this week by *Culex* species. All target species were more abundant in EPI week 28 compared to the previous week, except for *Coquilleltidia perturbans*, which decreased slightly. Compared to the 2020 season, overall mosquito surveillance numbers are up this year, primarily due to increases in *Coquilleltidia perturbans* and *Aedes vexans*. Every submitted mosquito pool from EPI week 27 tested negative for mosquito-borne disease. *Aedes albopictus* surveillance using ovitraps has continued, with an additional 362 eggs submitted to the Massachusetts Department of Public Health. One egg collected from 6/25/21 was identified as an *Ae. albopictus* by the MDPH. Additional control and surveillance measures have been conducted by CMMCP in the area of this detection.

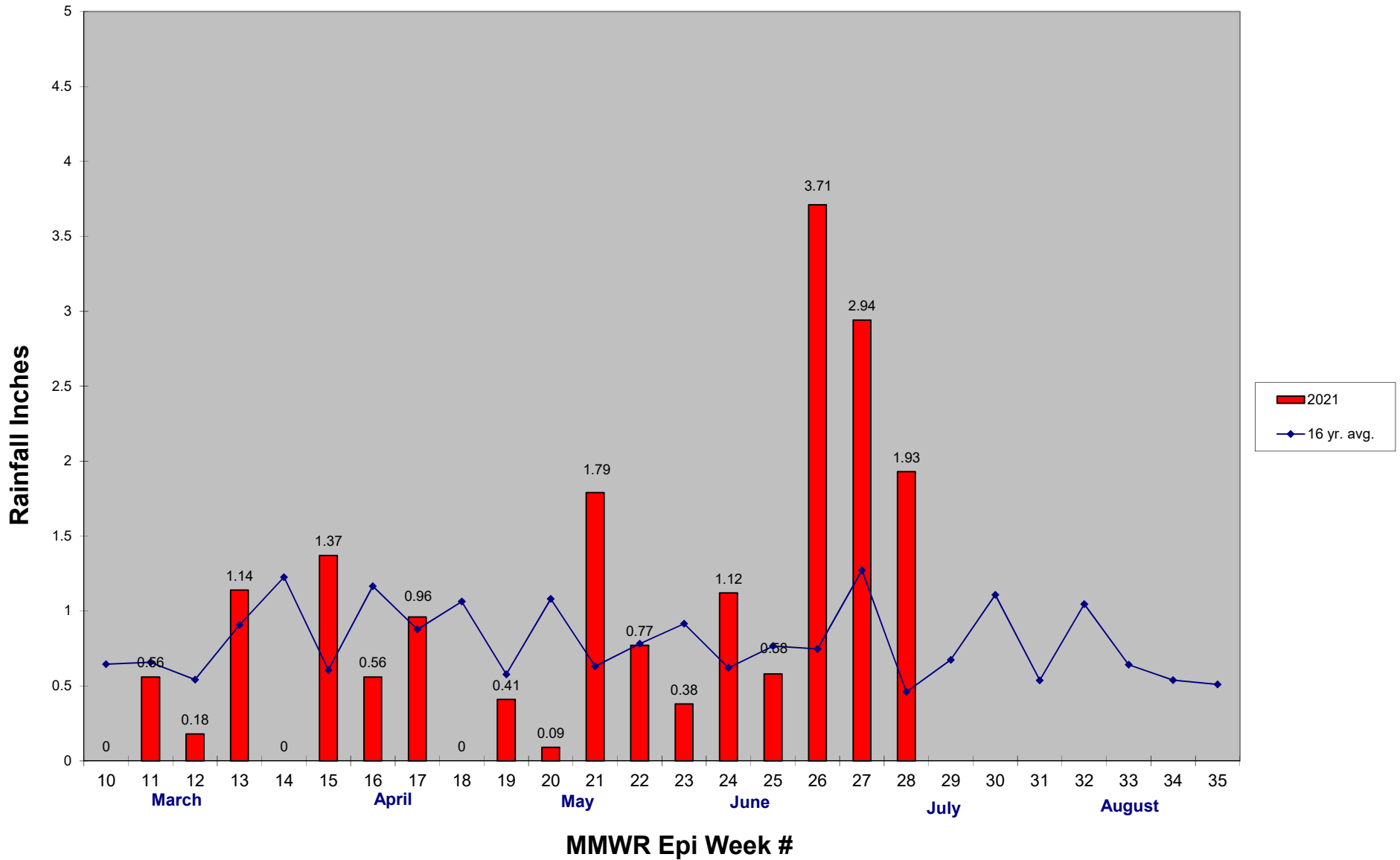
Service requests are 9.6% greater than the 18-year average but a 41.1% decrease over 2020 numbers to date. However requests did increase 65.9% from the previous week as mosquito emergence from earlier rain events have begun to appear. Work crews are performing catch basins treatments in all member communities for *Culex* control. 5,754 catch basins were treated in Epi week 28, bringing the total to 58,997 basins to date. Crews will switch to wetland inspections and treatments next week. 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*



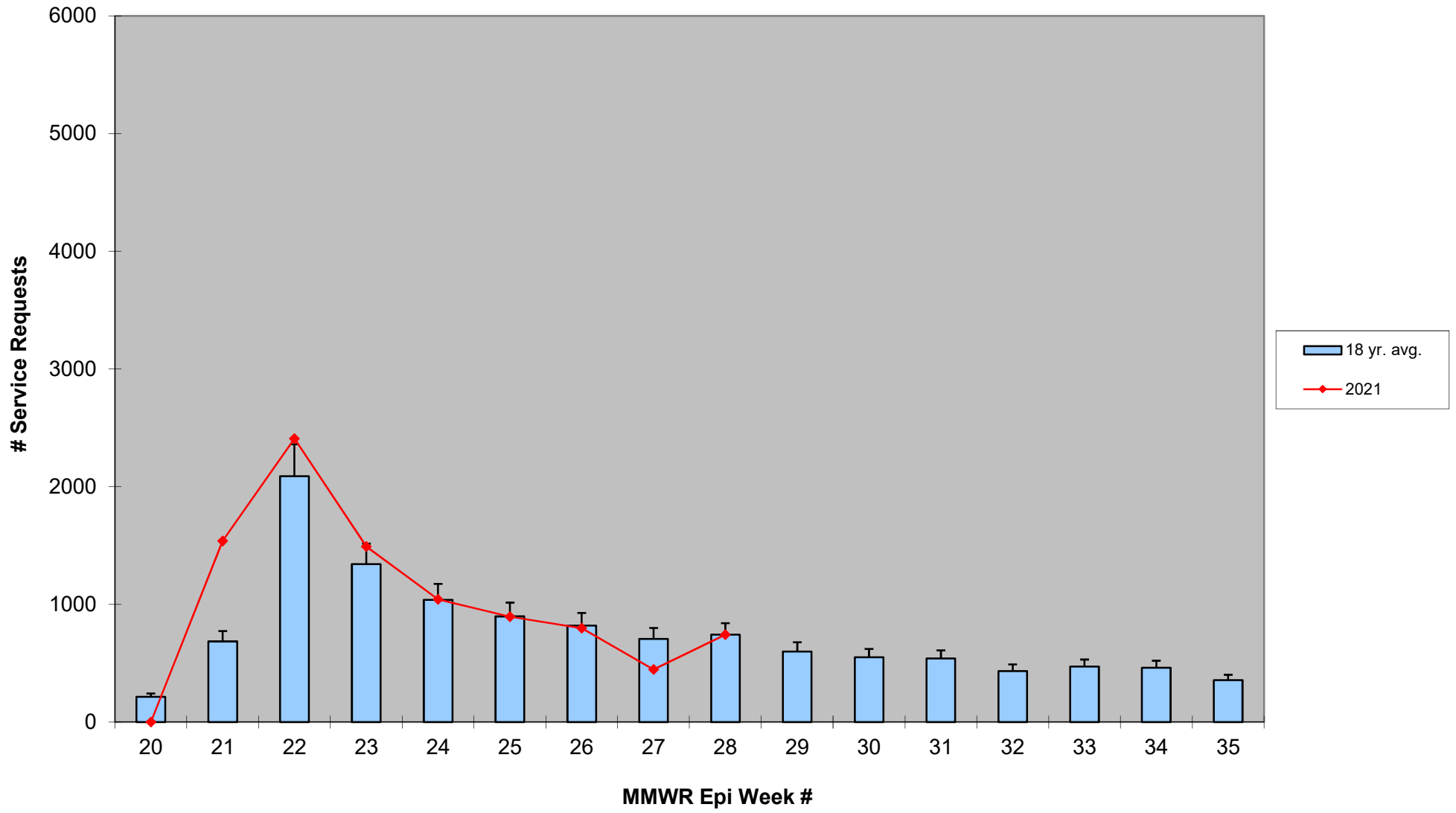
*source: <http://www.nrcc.cornell.edu/regional/tables/tables.html>

2021 CMMCP Weekly Rainfall vs. 16 Year Average*



*source: CMMCP weather station Northborough, MA

ULV Service Request History 2003-2021



2021 Rainfall vs. Requests

