

CMMCP WEEKLY SURVEILLANCE REPORT



EPI week #30
July 25-31, 2021

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**Central Mass. Mosquito Control Project
Weekly Report- 7/25/21-7/31/21
EPI Week #30**

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	152	490	54	168	339	2139
Total Specimens	1292	39005	160	1875	2533	50544
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 69.46°F with a recorded high temperature of 89.90°F and a recorded low temperature of only 53.00°F. For this week there was also a total of 0.92 inches of rain observed. Compared to the previous week, it was approximately 0.73°F cooler on average, and rained about 0.42 inches more. There has already been 9.53 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>	-17.56%	+87.10%	Westford, Acton
<i>Coquilleltidia perturbans</i>	-62.16%	+68.28%	Hopkinton, Lancaster
<i>Culiseta melanura</i>	-29.73%	-40.74%	Chelmsford, Littleton, Lunenburg
<i>Ochlerotatus canadensis</i>	+432.8%	-26.17%	Boxborough, Littleton
<i>Culex</i> Species	+174.5%	+11.35%	Littleton, Chelmsford
All Species	-42.74%	+56.15%	Hopkinton, Westford, Chelmsford

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

General narrative:

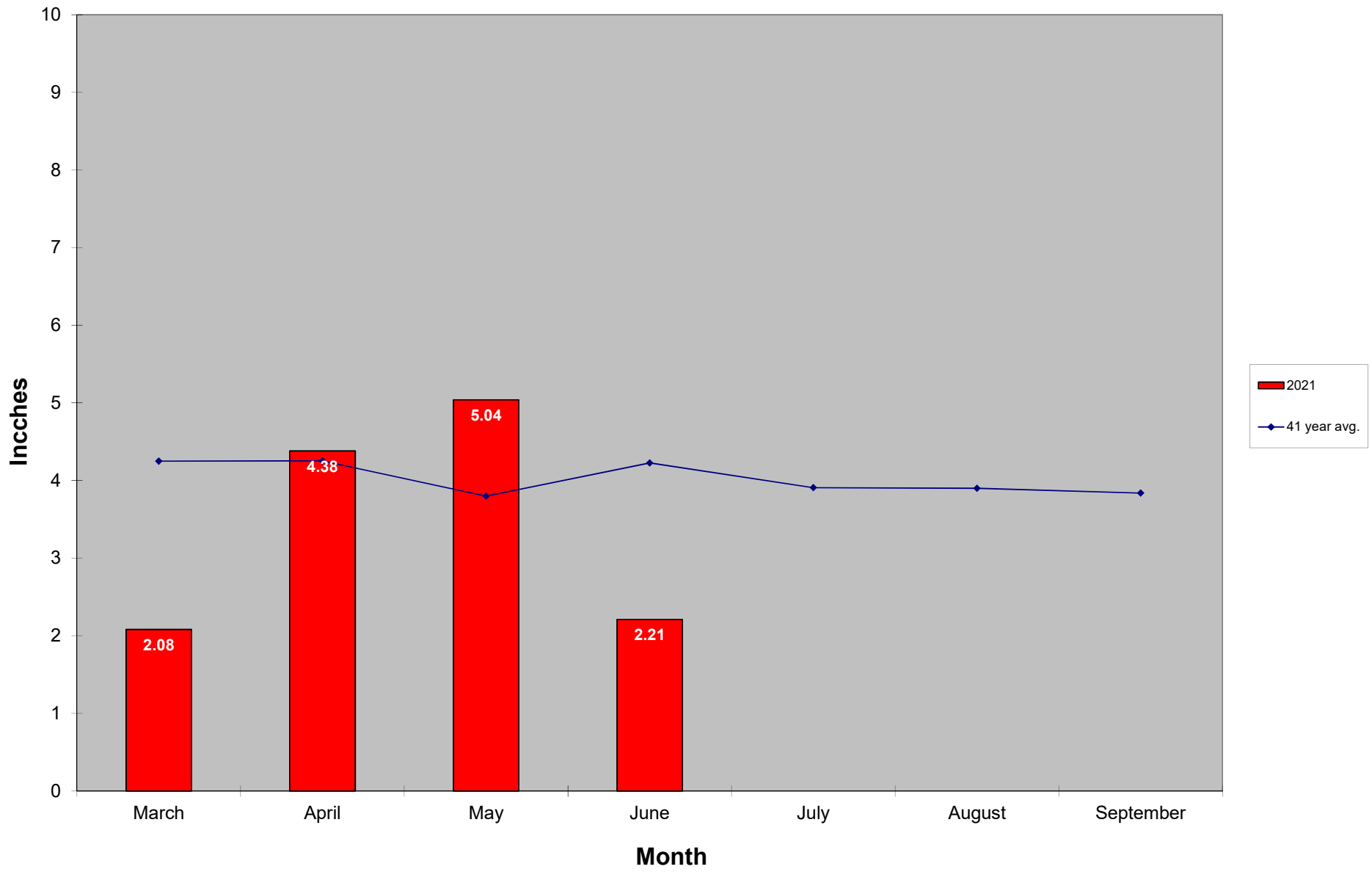
The temperatures for EPI week 30 averaged approximately 0.73°F cooler than the previous week, with 0.92 inches of precipitation observed. *Coquilleltidia perturbans* was again the most abundant mosquito for the week, followed this week by *Culex*. Most target mosquitoes were less abundant in EPI week 30 compared to the previous week, except for *Ochlerotatus canadensis* and *Culex* species. 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 29 tested negative for mosquito-borne disease. *Aedes albopictus* (ATM) surveillance using ovitraps has continued, with an additional 21 eggs submitted to the Massachusetts Department of Public Health.

Service requests are 29.3% greater than the 18-year average but a 18.5% decrease over 2020 numbers to date. However requests did increase 42.3% from the previous week as mosquito emergence from several earlier rain events have appeared. All work crews are performing catch basins treatments for *Culex* control. 6,315 catch basins were treated in Epi week 30, bringing the total to 70,503 basins to date.

Our Asian Tiger Mosquito (ATM) protocols are instituted in Epi week 28 in Lowell after confirmation of a positive specimen from one of our ovitraps. To date no additional ATM has been identified in this area, and we will continue to monitor for this invasive species throughout the remainder of the season.

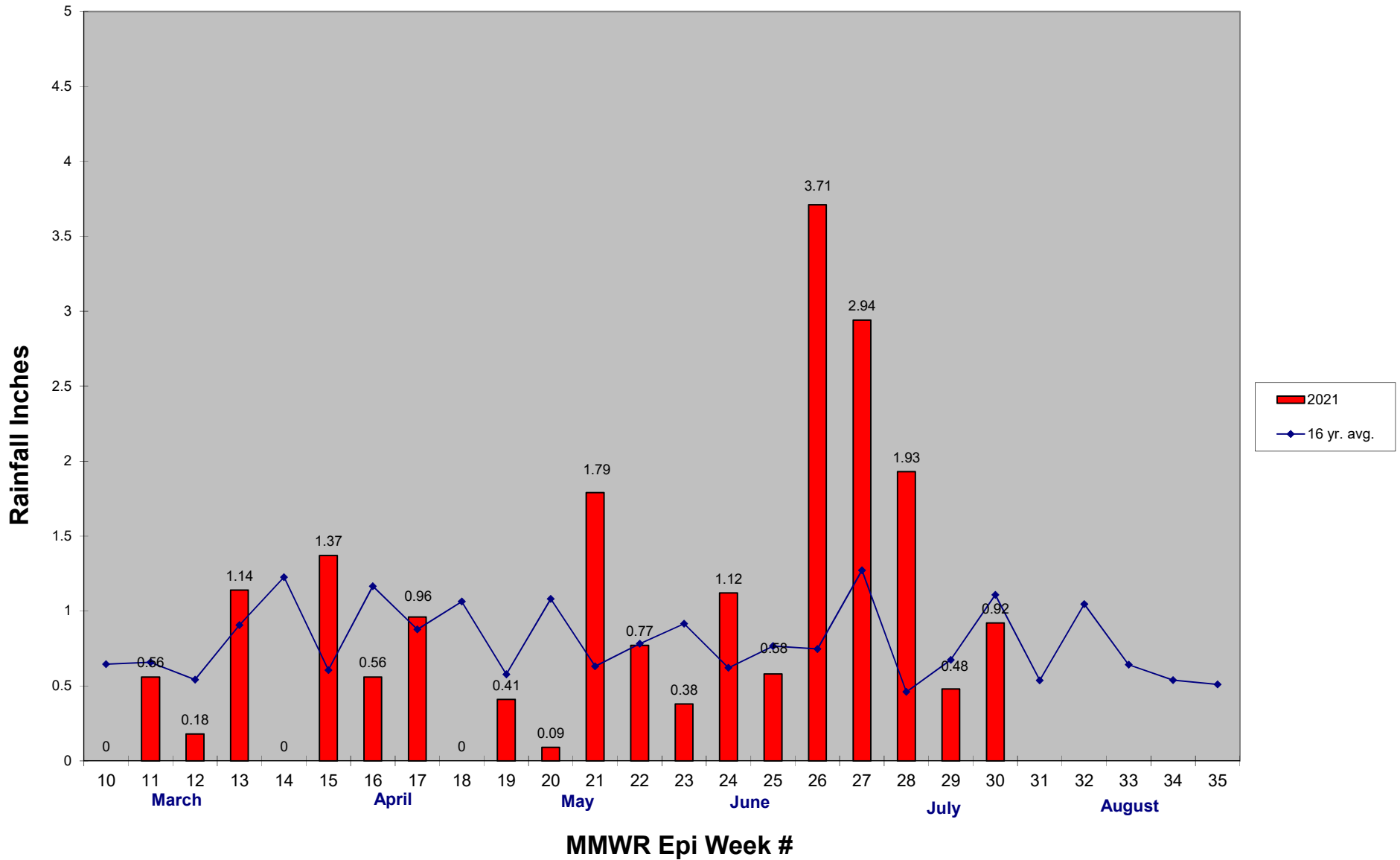
Water sampling and bioassay results are still pending from the analysis laboratories for our enhanced control applications of spinosad in *Cs. melanura* crypt habitats. Data is being collected and analyzed from emergence traps in *Cq. perturbans* habitat.

2021 Mass. Rainfall Data vs. 41 Year Average*



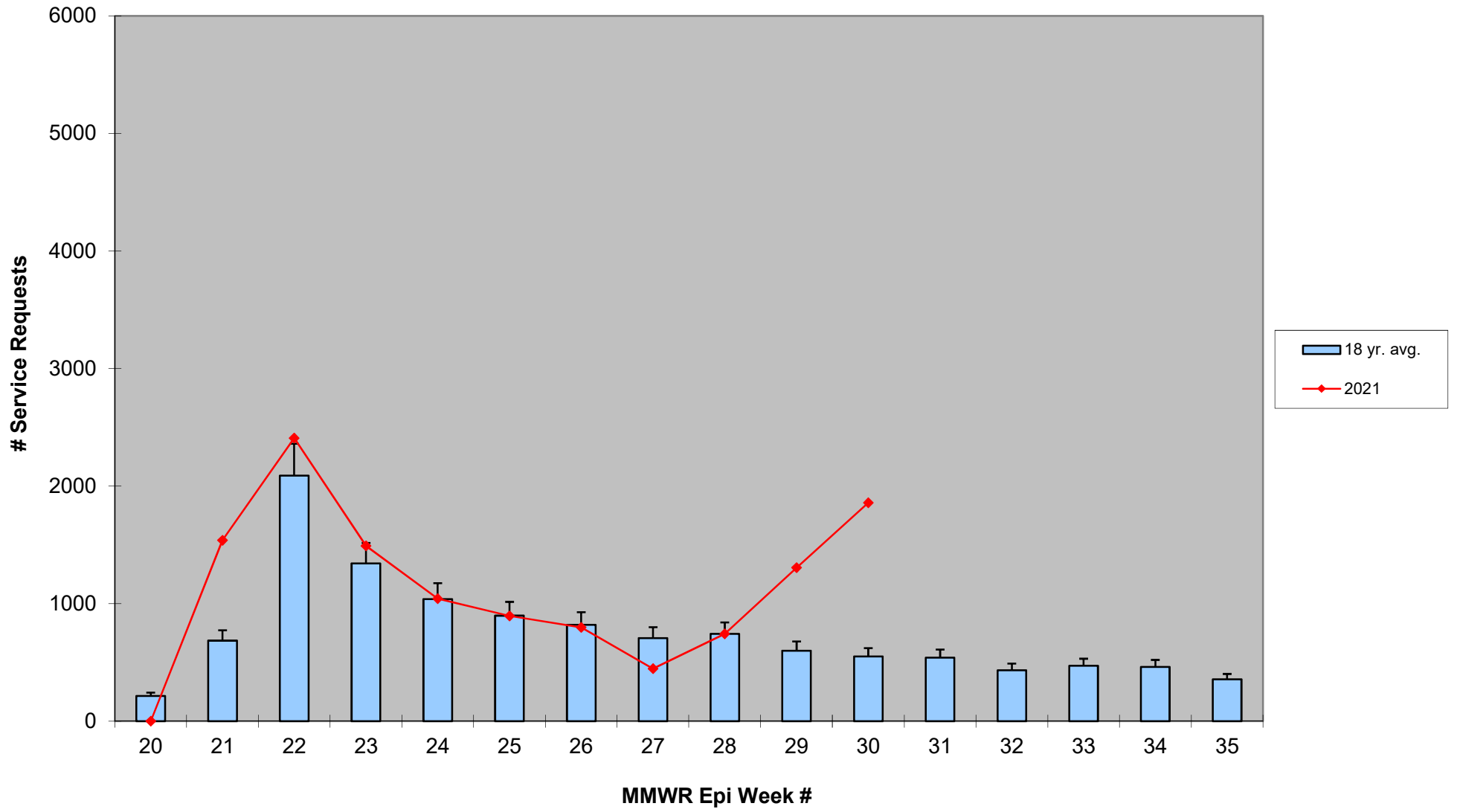
*source: <http://www.nrcc.cornell.edu/regional/tables/tables.html>

2021 CMMCP Weekly Rainfall vs. 16 Year Average*



*source: CMMCP weather station Northborough, MA

ULV Service Request History 2003-2021



2021 Rainfall vs. Requests

