

NEW JERSEY ADULT MOSQUITO SURVEILLANCE Report

June 19 to June 25, CDC Week 25
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 Center for Vector Biology



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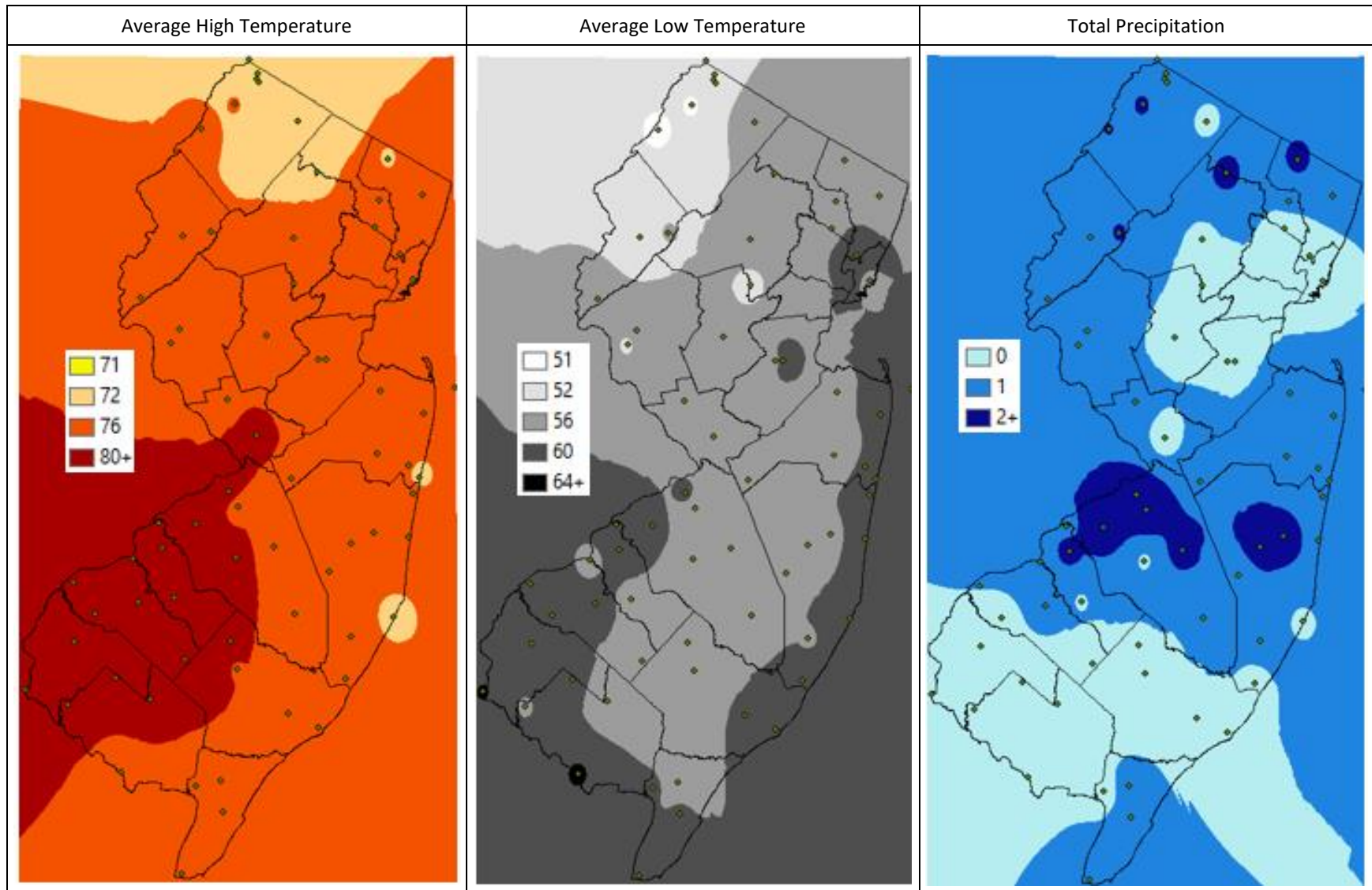
Summary Table – Week 25

Region	<i>Aedes vexans</i>			<i>Culex Mix</i>			<i>Coquillettidia perturbans</i>			<i>Aedes sollicitans</i>		
	This Week	Average*	Increase	This Week	Average*	Increase	This Week	Average*	Increase	This Week	Average*	Increase
Agricultural	1.02	9.77	0	2.02	18.45	0	0.10	0.97	0	0.00	1.85	0
Coastal	1.78	6.49	0	1.05	11.44	0	2.73	0.96	4	0.17	3.22	0
Delaware Bayshore	1.52	2.49	0	10.38	17.75	0	3.77	6.85	0	1.94	2.99	0
Delaware River Basin	2.64	10.94	0	1.57	14.41	0	0.86	3.56	0	0.00	0.00	0
New York Metro	0.41	2.77	0	1.39	8.47	0	2.61	1.29	3	0.00	0.26	0
North Central Rural	0.00	0.36	0	0.00	0.28	0	0.00	0.08	0	0.00	0.00	0
Northwest Rural	4.09	12.71	0	0.51	4.05	0	0.07	2.41	0	0.00	0.00	0
Philadelphia Metro	0.00	8.50	0	0.00	7.57	0	0.00	6.01	0	0.00	0.00	0
Pinelands	0.30	1.59	0	0.17	2.32	0	1.01	5.59	0	0.00	0.55	0
Suburban Corridor	0.75	2.82	0	1.18	3.24	0	0.01	0.39	0	0.00	0.00	0

*Averages represent data from, at most, the previous 5 years. Increase is a scale of current values from historical values where no difference or a decrease is represented by 0 (blue), up to 50% greater difference by 1 (green), up to 100% greater difference by 2 (yellow), up to 150% greater difference by 3 (orange) and greater than 150% increase by 4 (red). White cells in the increase column denote increases from an historic zero and thus no value can be appropriately given. nd=no data reported.

State Summary: Apart from *Coquillettidia perturbans*, low population numbers are trending for the three other pestiferous species. For the former, significant population numbers continue in the Coastal region as well as in the New York Metropolitan region.

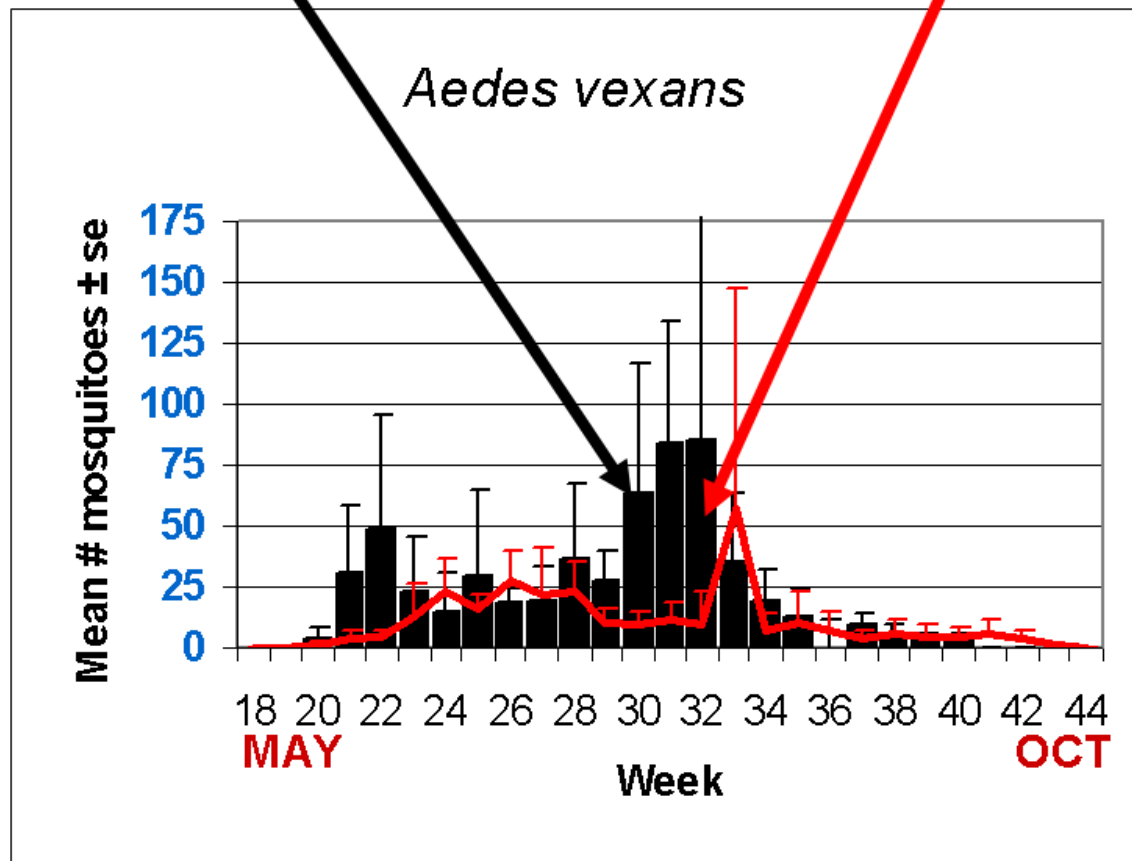
Climate Factors




The three figures show the interpolation of average maximum (°F) and minimum temperature (°F) and total precipitation (inches) for 14 days prior to 26 June 2022 in New Jersey. Data points are from about 45 weather stations maintained through the New Jersey Weather & Climate Network and the State Climatologist. Interpolation between points was performed using ArcMap 10.1.

The Species Graphs: The species graph pages include a graph with two plots for each of the ten regions defined on the first page (Agricultural, Coastal, Delaware Bayshore, Delaware River, New York Metro, North-Central, Northwestern, Philadelphia Metro, Pinelands, and Suburban Corridor). Below is an example of one graph from one species within one region. The bar plot show the average number of mosquitoes per trap within the region (weekly means) and line plots show the historical trend as the average number of mosquitoes from the previous 5 years (5-year average). In general, historical data are running means from the previous 5 years, but on occasion, will include data from fewer years. Adjustments are made to account for year discrepancies. Data for this week are from Atlantic, Cumberland, Hudson, Middlesex, Salem, Somerset, Union, and Warren counties. Data for the previous week are from Atlantic, Cape May, Cumberland, Essex, Hudson, Middlesex, Morris, Ocean, Passaic, Salem, Somerset, Sussex, Union, and Warren counties.

Weekly Means Against 5-year Average

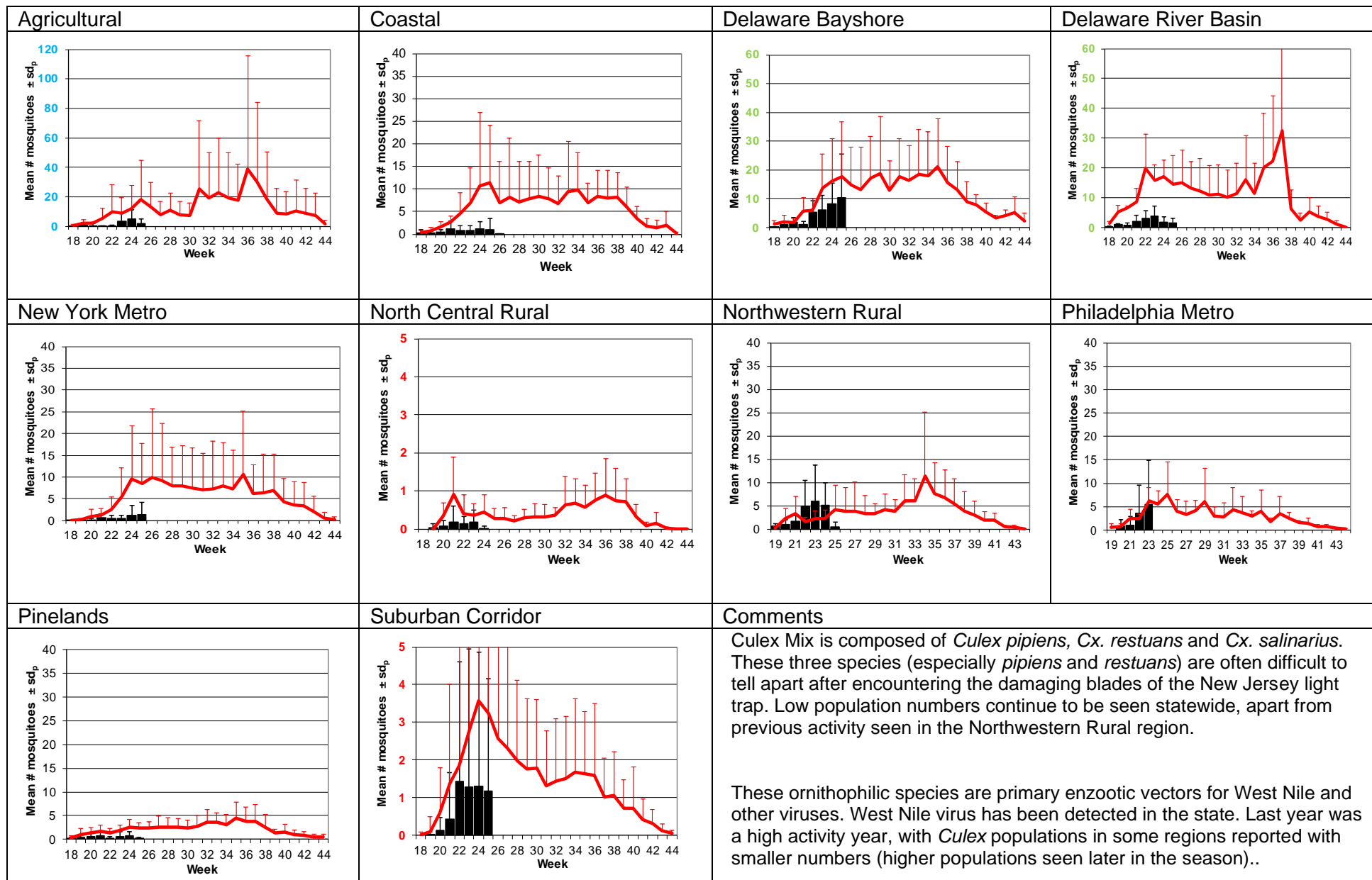


Aedes vexans - Fresh Floodwater Species Multivoltine Aedine (*Ae. vexans* Type)

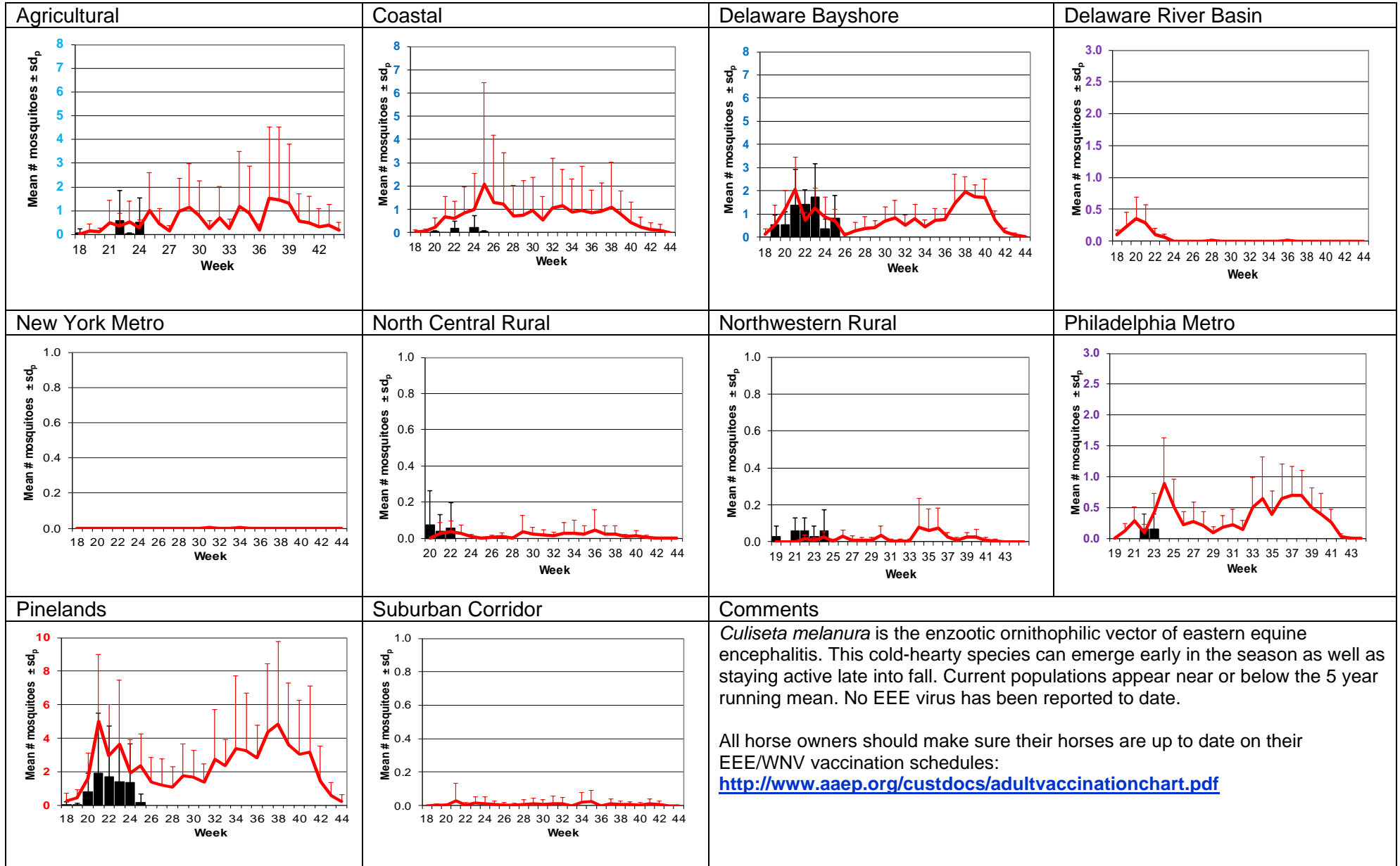
<p>Agricultural</p>	<p>Coastal</p>	<p>Delaware Bayshore</p>	<p>Delaware River Basin</p>
<p>New York Metro</p>	<p>North Central Rural</p>	<p>Northwestern Rural</p>	<p>Philadelphia Metro</p>
<p>Pinelands</p>	<p>Suburban Corridor</p>	<p>Comments</p> <p><i>Aedes vexans</i> is the model for fresh floodwater species. With abundant precipitation, this species can emerge in very significant numbers. <i>Aedes vexans</i> populations are currently near or below historical averages, although recent precipitation resulted in local increases in the Agricultural and Northwestern Rural regions two weeks ago.</p> <p style="text-align: right;">  </p> <p>https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?NJ</p>	

Culex Mix – Permanent Water Species

Multivoltine *Culex/Anopheles* (*Cx. pipiens* Type)



Culiseta melanura – Miscellaneous Group Unique (*Cs. melanura* Type)

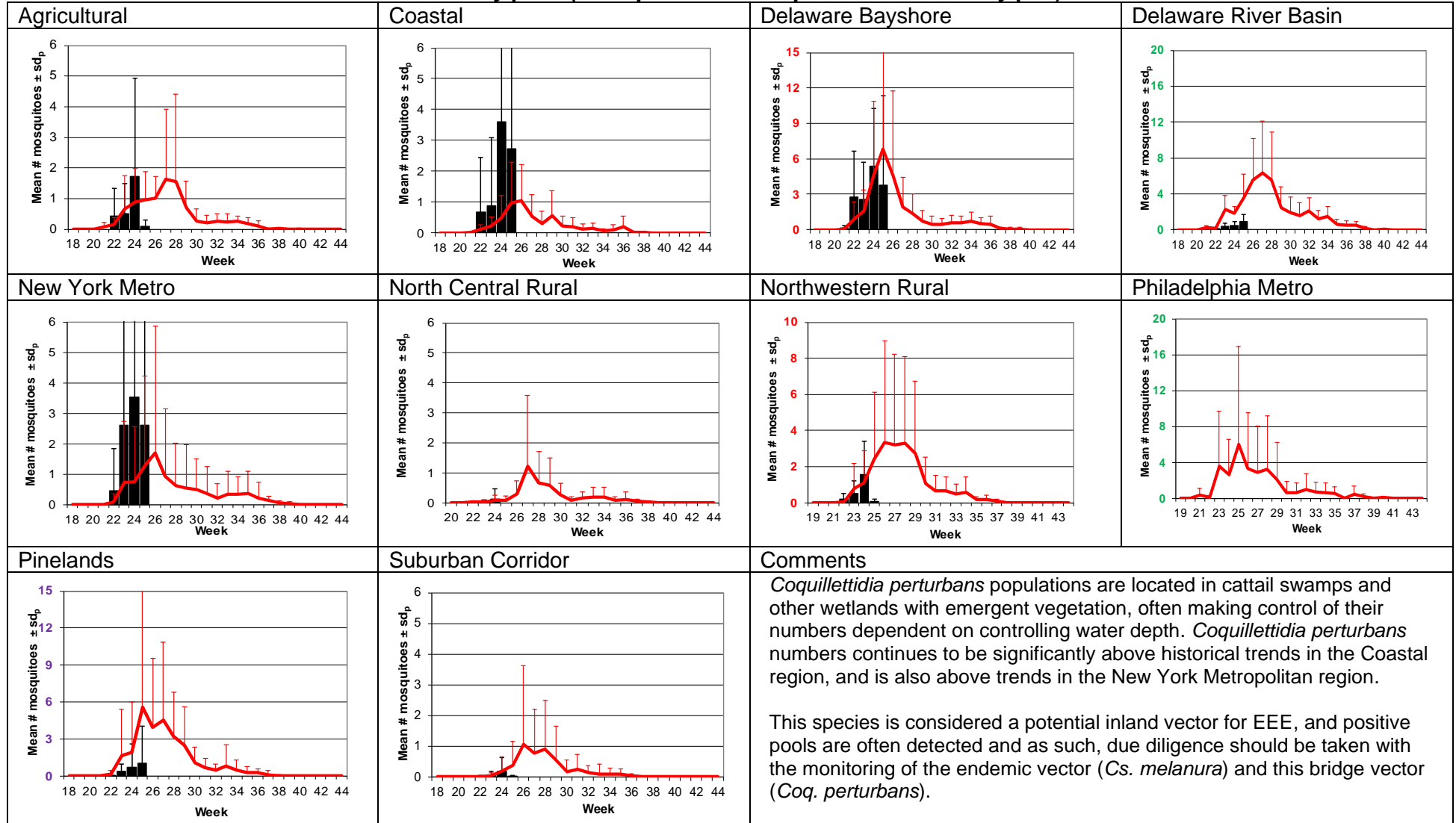


Aedes sollicitans - Salt Floodwater Species Multivoltine Aedine (Ae. sollicitans Type)

<p>Agricultural</p>	<p>Coastal</p>	<p>Delaware Bayshore</p>	<p>Delaware River Basin</p>
<p>New York Metro</p>	<p>North Central Rural</p>	<p>Northwestern Rural</p>	<p>Philadelphia Metro</p>
<p>Pinelands</p>	<p>Suburban Corridor</p>	<p>Comments</p> <p><i>Aedes sollicitans</i> is a salt floodwater species and responds to both lunar tidal patterns as well as rainfall. <i>Aedes sollicitans</i> populations have declined, but the second significant emergence should begin soon.</p> <p>Next full moon is July 13th.</p> <p>Salt line on the Delaware River is within expected values along the Basin region: https://www.nj.gov/drbc/programs/flow/salt-front.html</p>	

Coquillettidia perturbans

Monotypic (*Coquillettidia perturbans* Type)

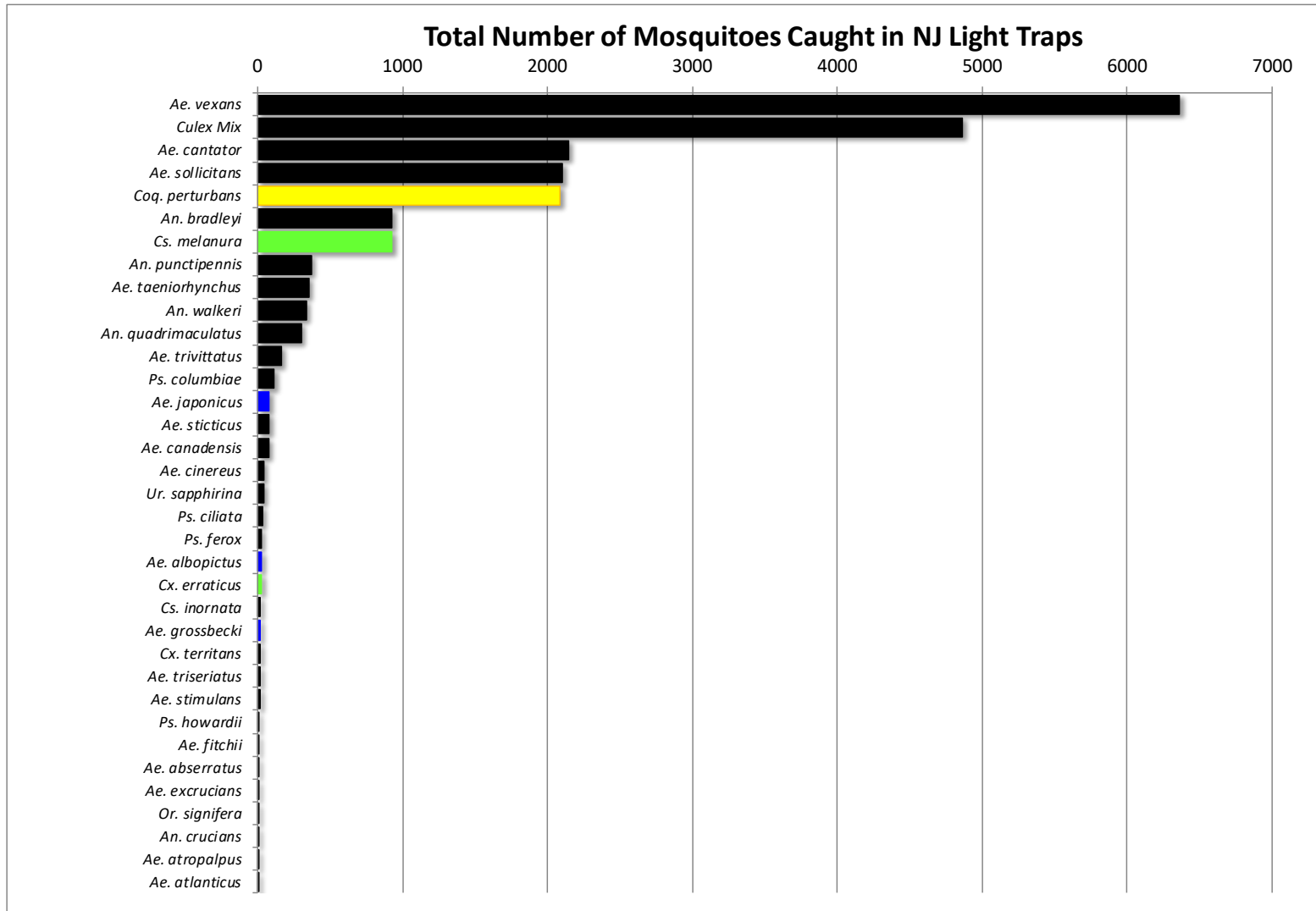


WNV

EEE

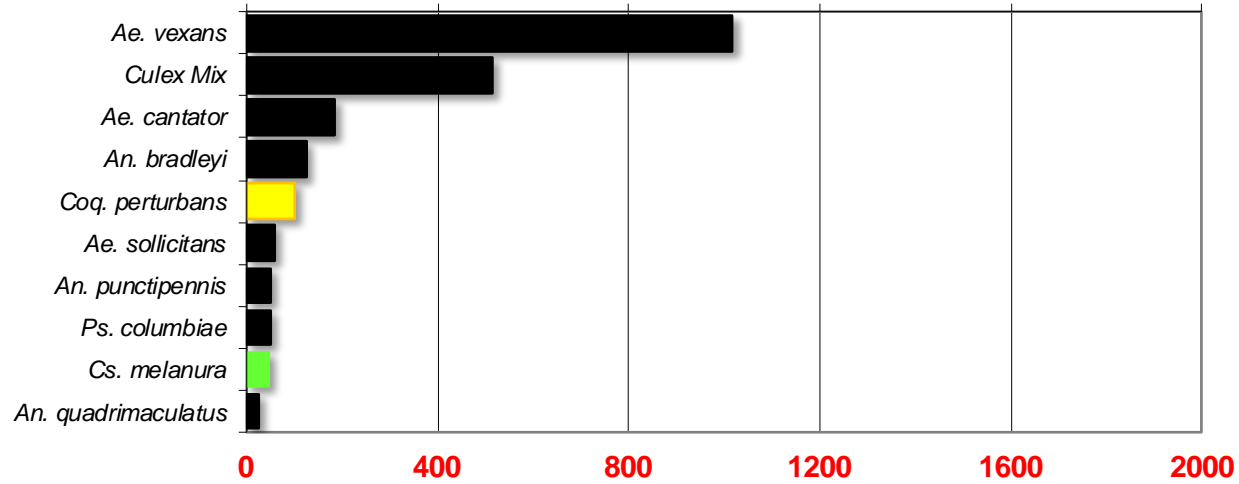
Top Ten Mosquito Species/Region - ■ *Ae. albopictus*, ■ *Ae. japonicus* (invasives); ■ *Cs. melanura* or *Cx. erraticus* ■ *Coq. perturbans*

Note: In early season when fewer species are caught, graphs may show less than ten species/region or 25 statewide.



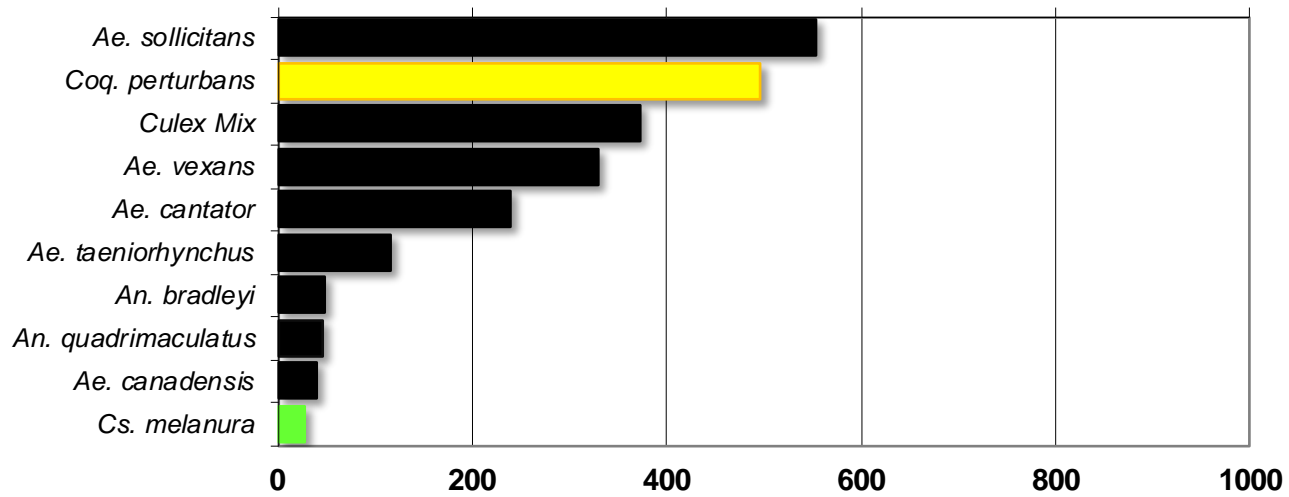
Agricultural

Total # mosquitoes



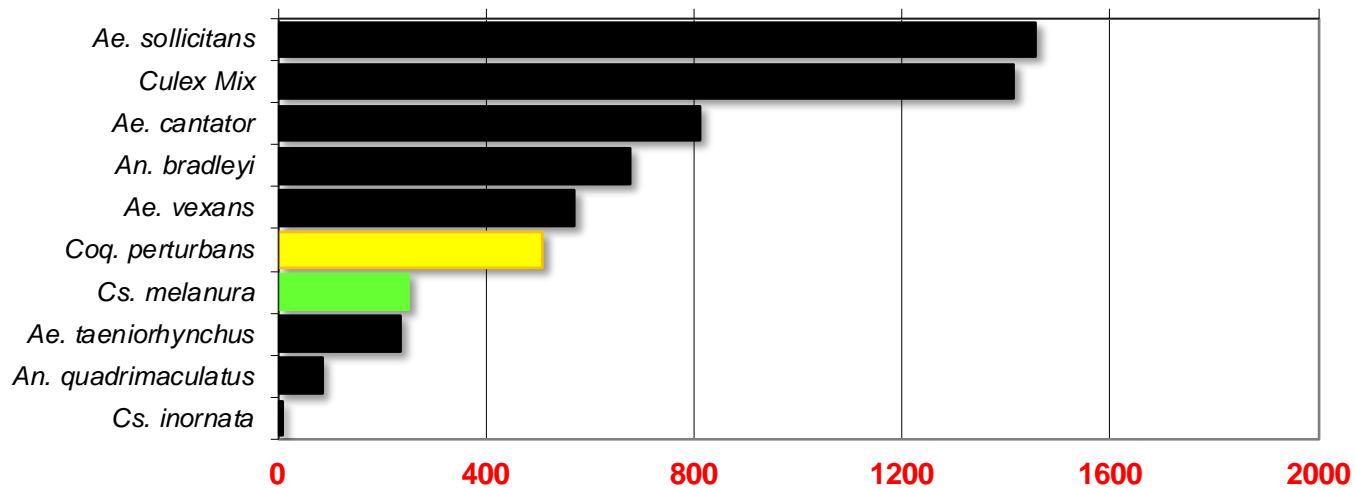
Coastal

Total # mosquitoes



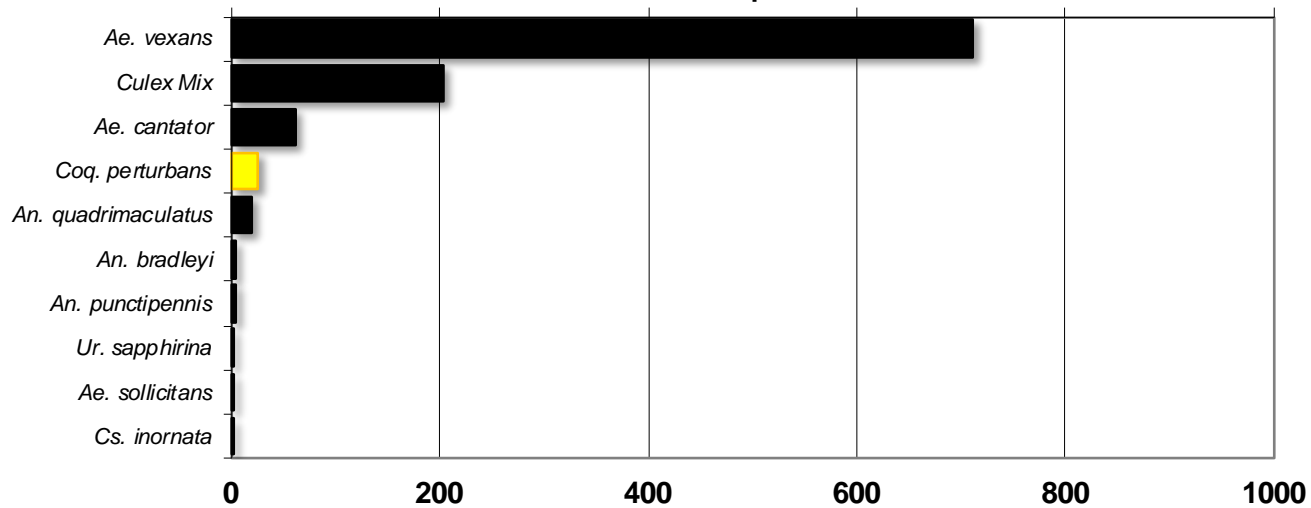
Delaware Bayshore

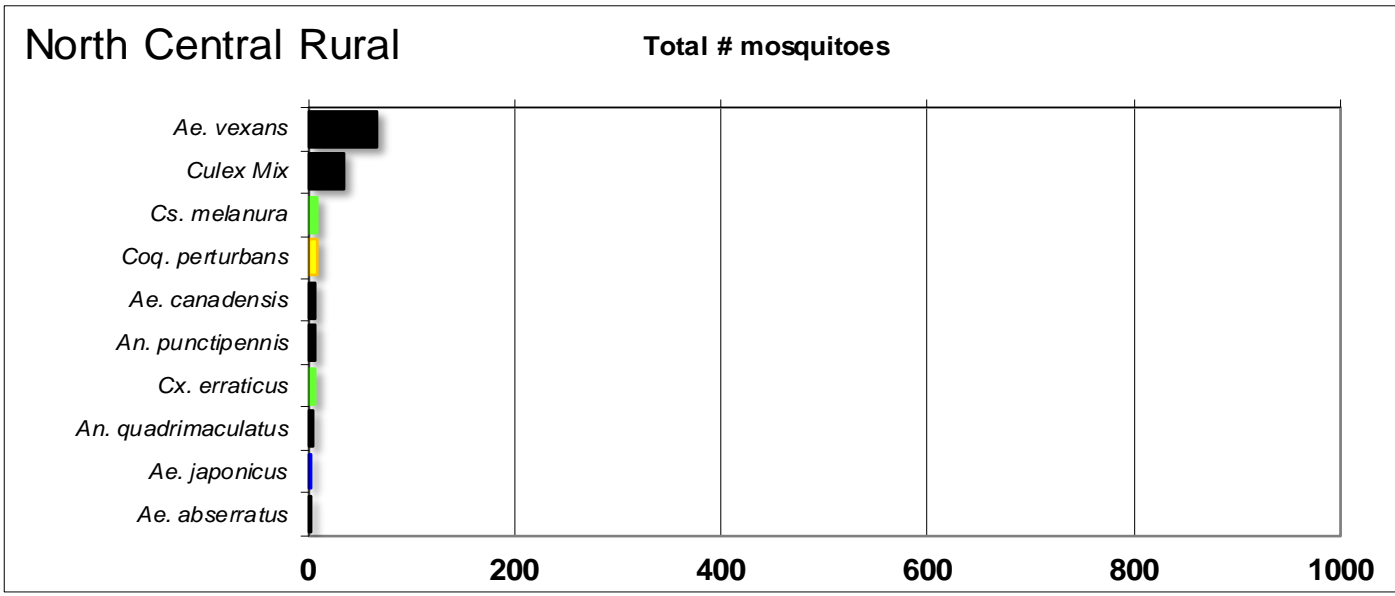
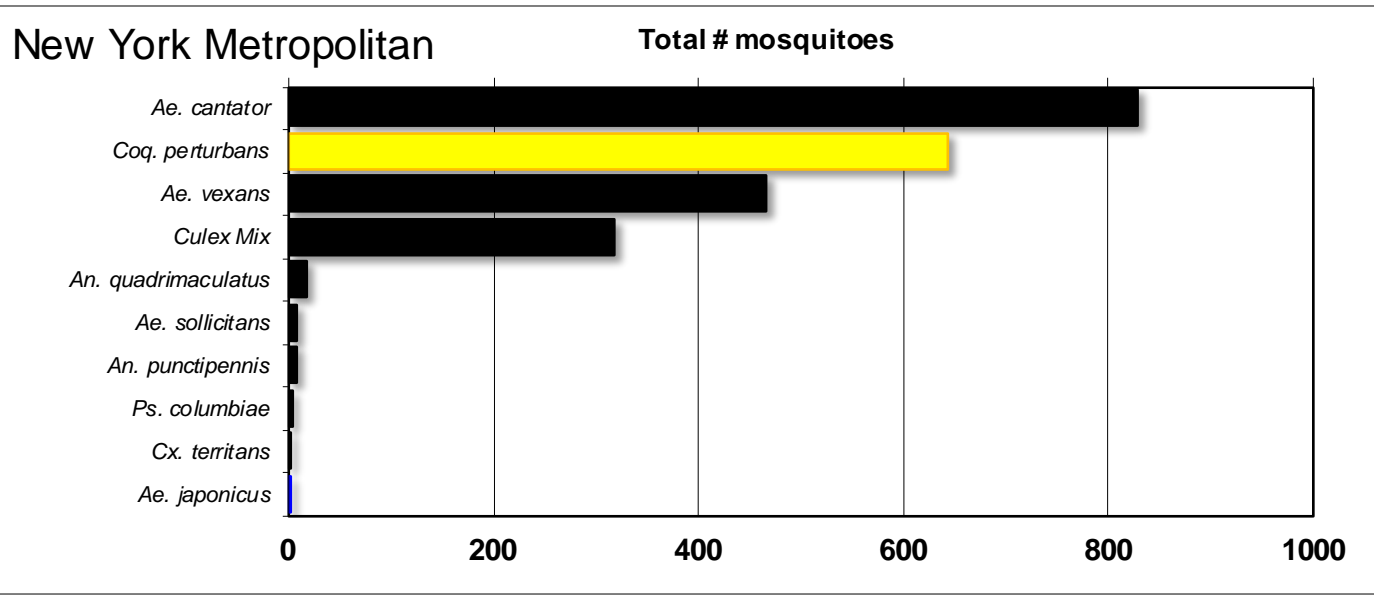
Total # mosquitoes



Delaware River Basin

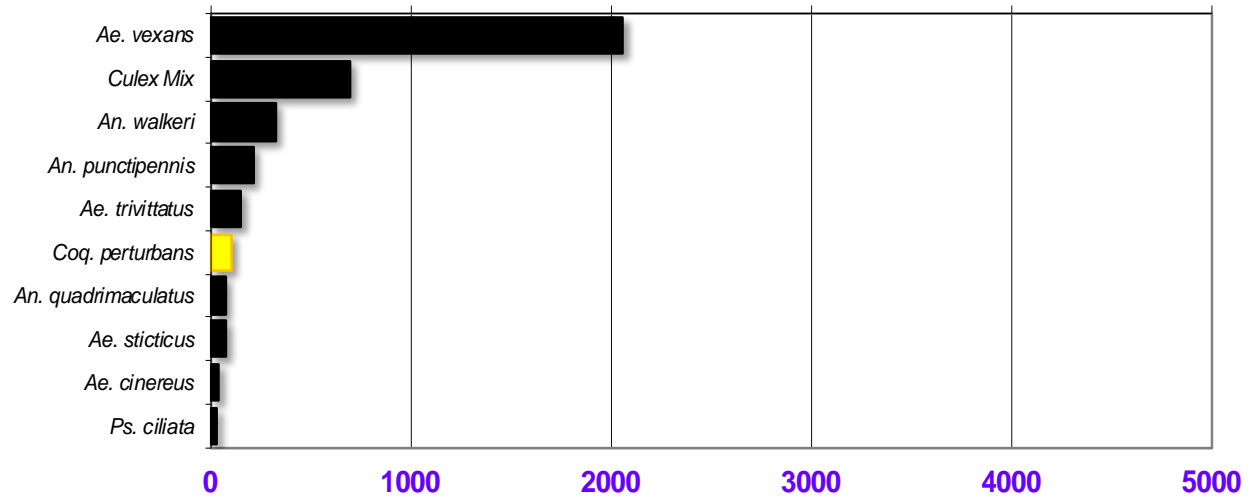
Total # mosquitoes





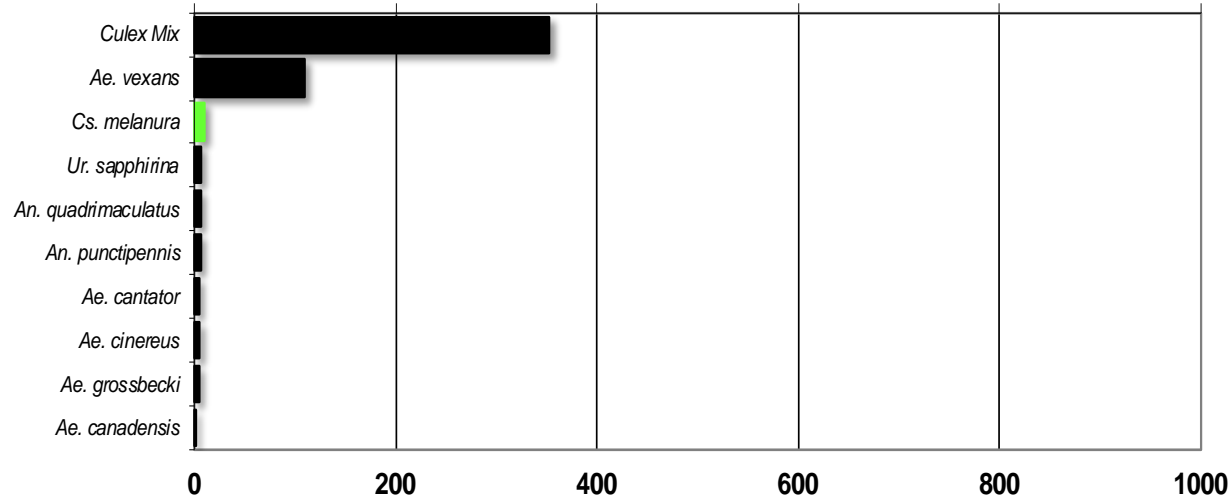
Northwest Rural

Total # mosquitoes



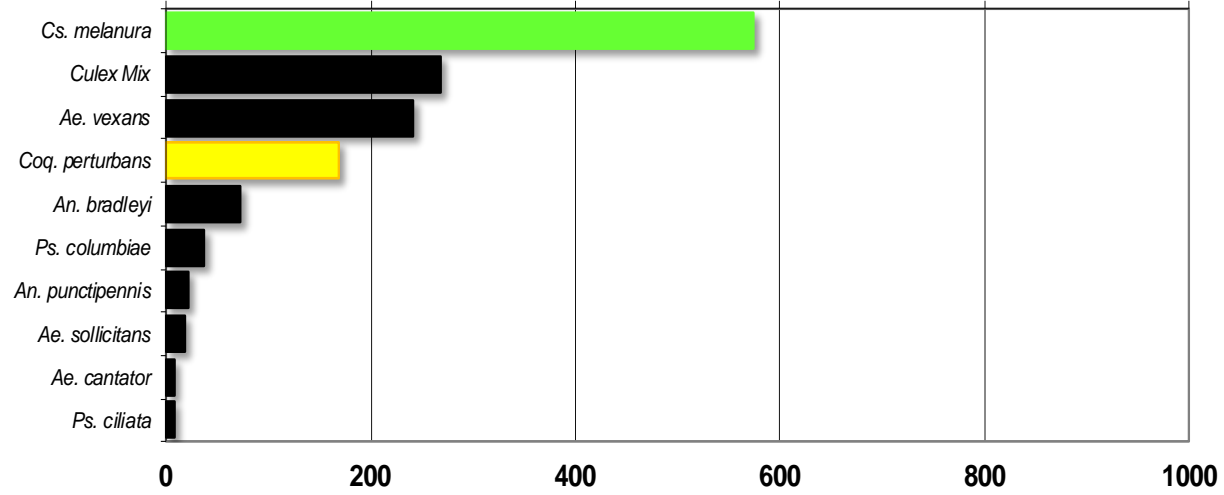
Philadelphia Metropolitan

Total # mosquitoes



Pinelands

Total # mosquitoes



Suburban Corridor

Total # mosquitoes

