

NEW JERSEY ADULT MOSQUITO SURVEILLANCE Report

July 10 to July 16 CDC Week 28

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Center for Vector Biology



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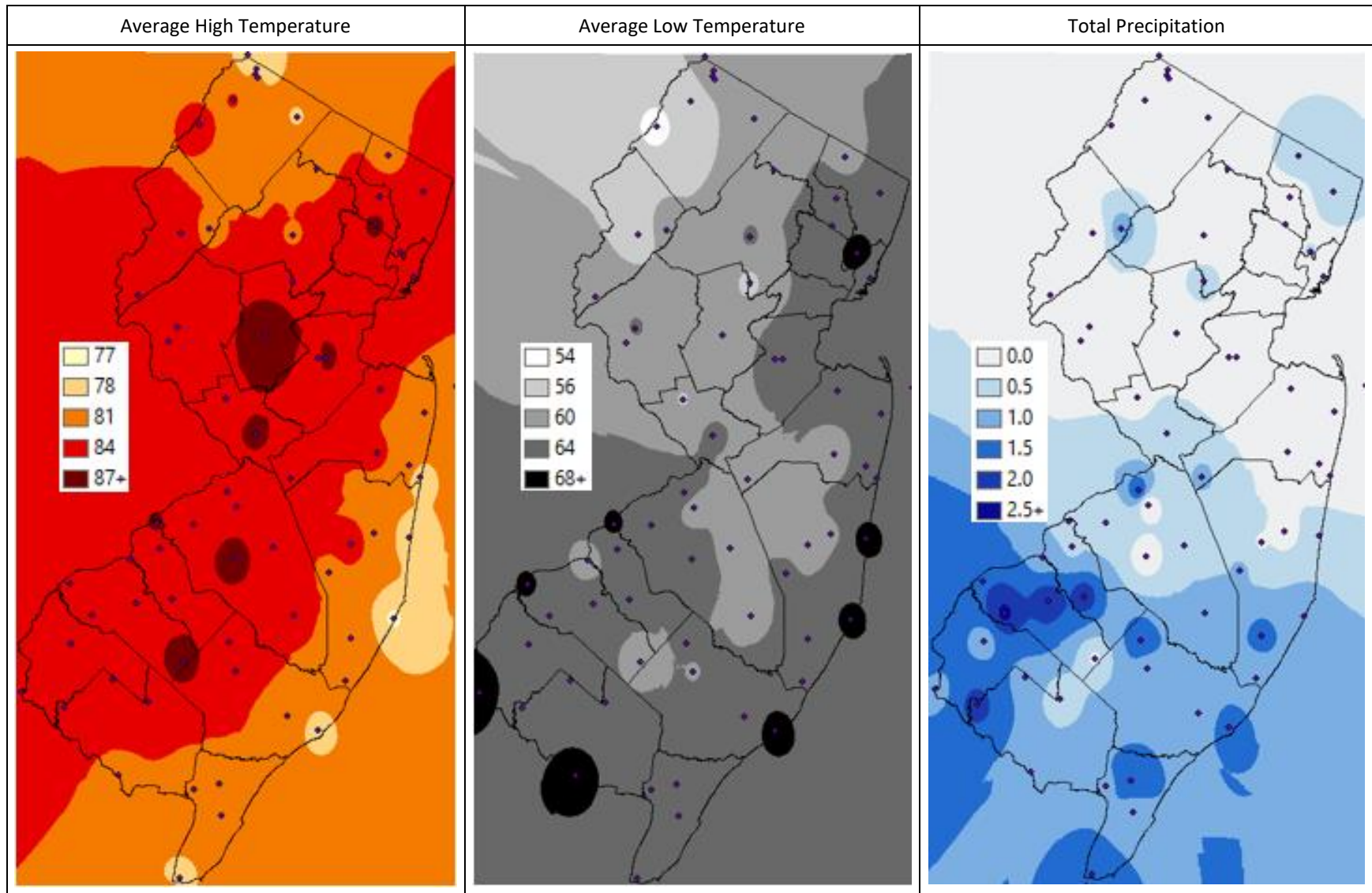
Summary Table – Week 28

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	0.43	4.59	0	0.00	10.95	0	0.00	1.54	0	0.00	0.09	0
Coastal	0.14	3.72	0	0.75	7.19	0	0.35	0.30	1	0.06	3.53	0
Delaware Bayshore	0.19	0.50	0	3.57	17.22	0	0.11	1.42	0	2.17	2.23	0
Delaware River Basin	nd	8.78	0	nd	12.17	0	nd	5.57	0	nd	0.04	0
New York Metro	0.07	3.52	0	0.24	7.96	0	0.01	0.61	0	0.00	0.43	0
North Central Rural	0.02	0.34	0	0.00	0.29	0	0.00	0.63	0	0.00	0.00	0
Northwest Rural	0.86	5.66	0	0.17	3.35	0	0.05	3.29	0	0.00	0.00	0
Philadelphia Metro	nd	5.35	0	nd	4.09	0	nd	3.23	0	nd	0.00	0
Pinelands	0.05	1.30	0	0.31	2.62	0	2.06	3.22	0	0.00	0.14	0
Suburban Corridor	0.15	1.98	0	0.34	1.97	0	0.11	0.90	0	0.01	<0.01	4

*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: For the current week, populations for most of the above pestiferous species were near or below historic trends. Populations for Coastal *Coquillettidia perturbans* were slightly above historic levels and numbers for *Aedes sollicitans* in the Suburban Corridor were noted as significantly above historic levels (but note the absolute low overall values for the latter).

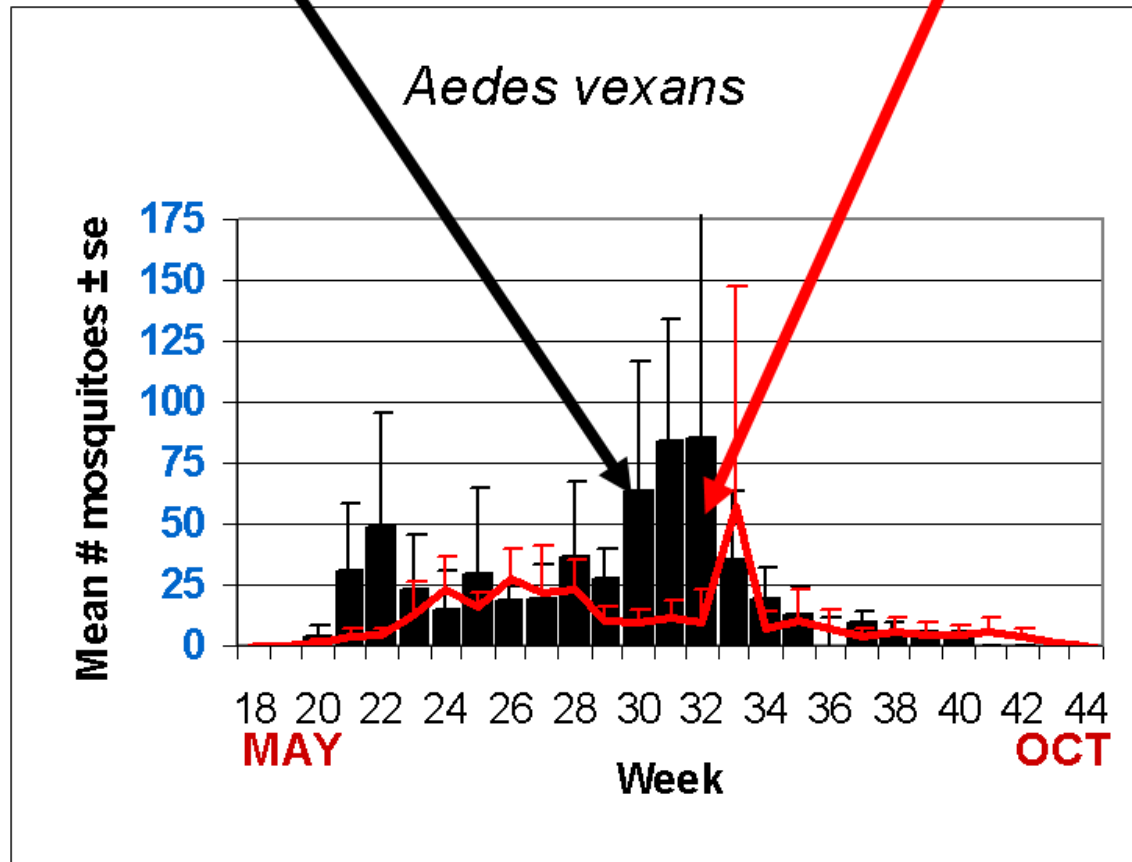
Climate Factors



The three figures show the interpolation of average maximum (°F) and minimum temperature (°F) and total precipitation (inches) for 14 days prior to 17 July 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 shows 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, Bergen, Cumberland, Hudson, Hunterdon, Middlesex, Union, and Warren counties. Data for the previous week are from Atlantic, Bergen, Cape May, Cumberland, Hudson, Hunterdon, Mercer, Middlesex, Passaic, Somerset, Union, and Warren counties.

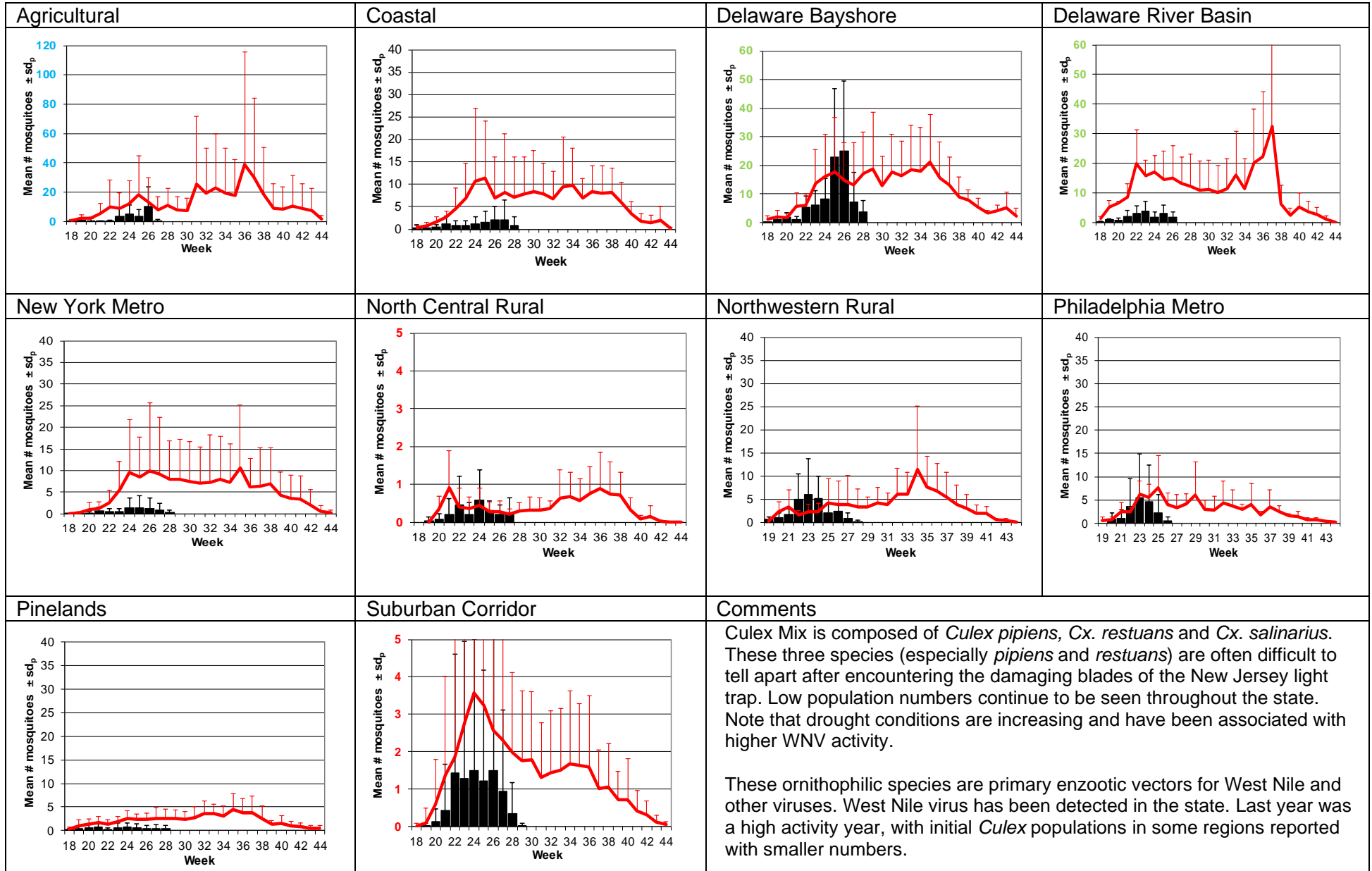
Weekly Means Against 5-year Average



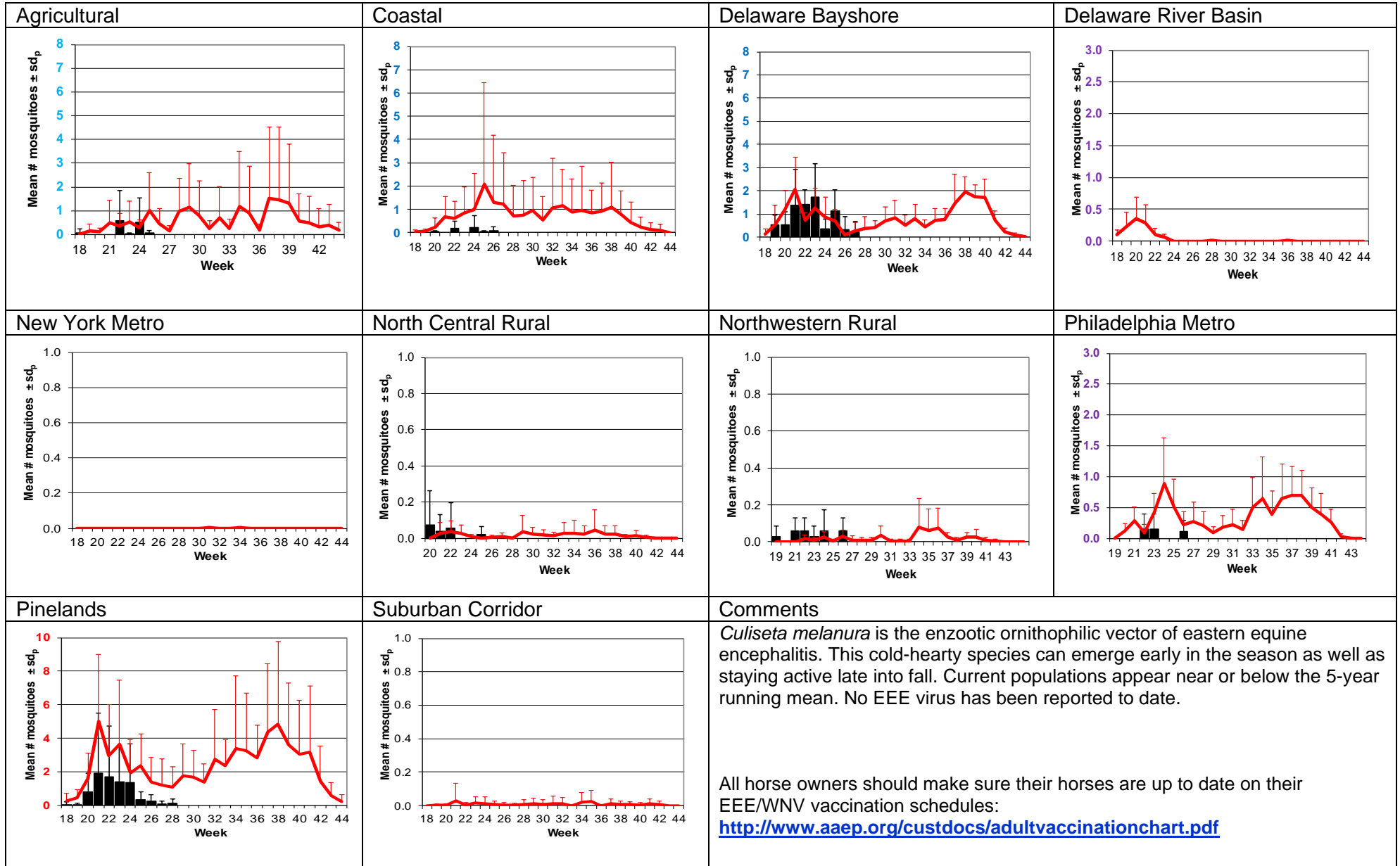
Aedes vexans - Fresh Floodwater Species Multivoltine Aedine (Ae. vexans Type)

<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 continue to be near or well below historical averages and drought conditions increase, reducing populations of this floodwater species.</p> <p>All drought areas are classified as “abnormally dry.” https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?NJ</p>	

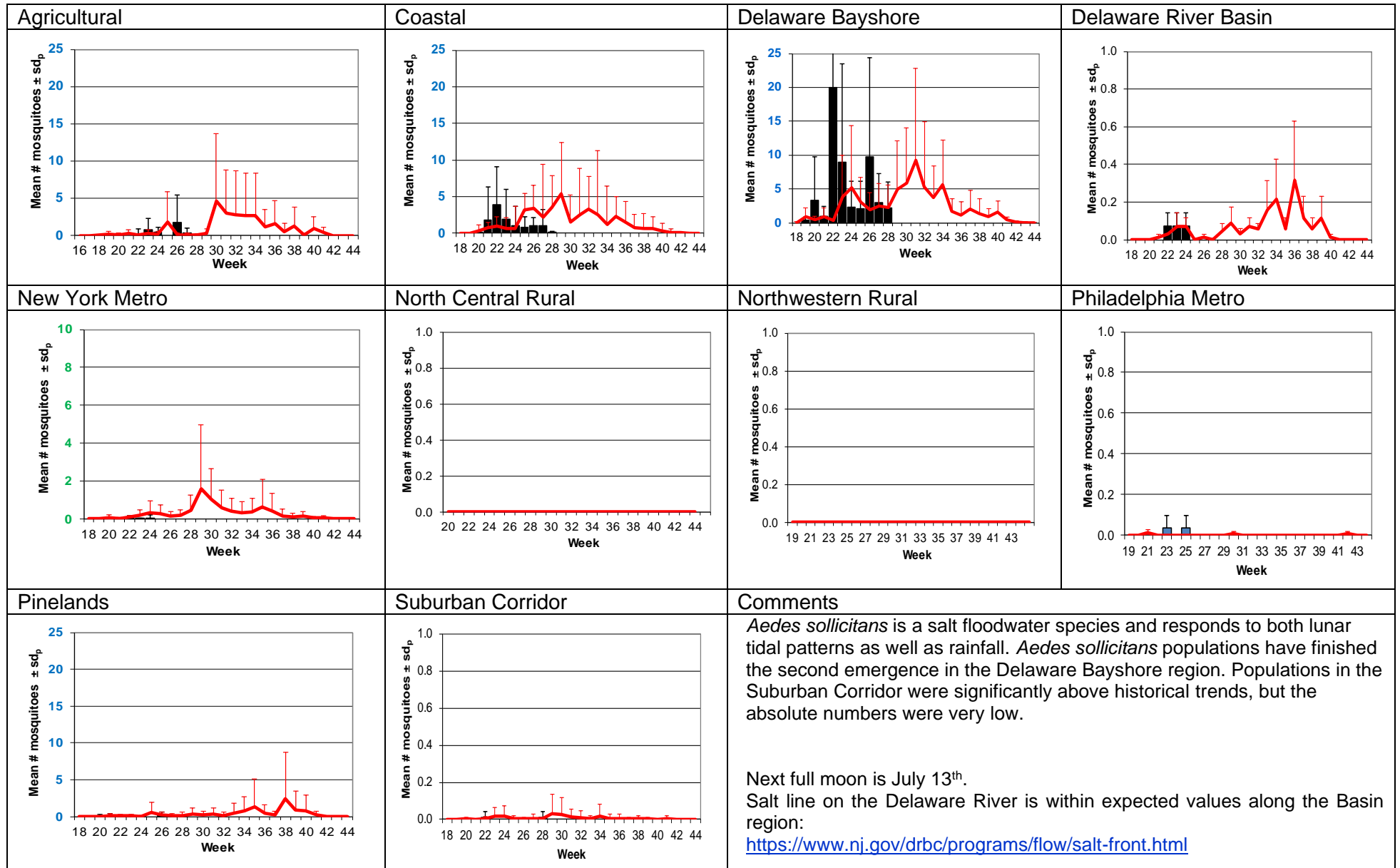
Culex Mix – Permanent Water Species Multivoltine *Culex/Anopheles* (*Cx. pipiens* Type)



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

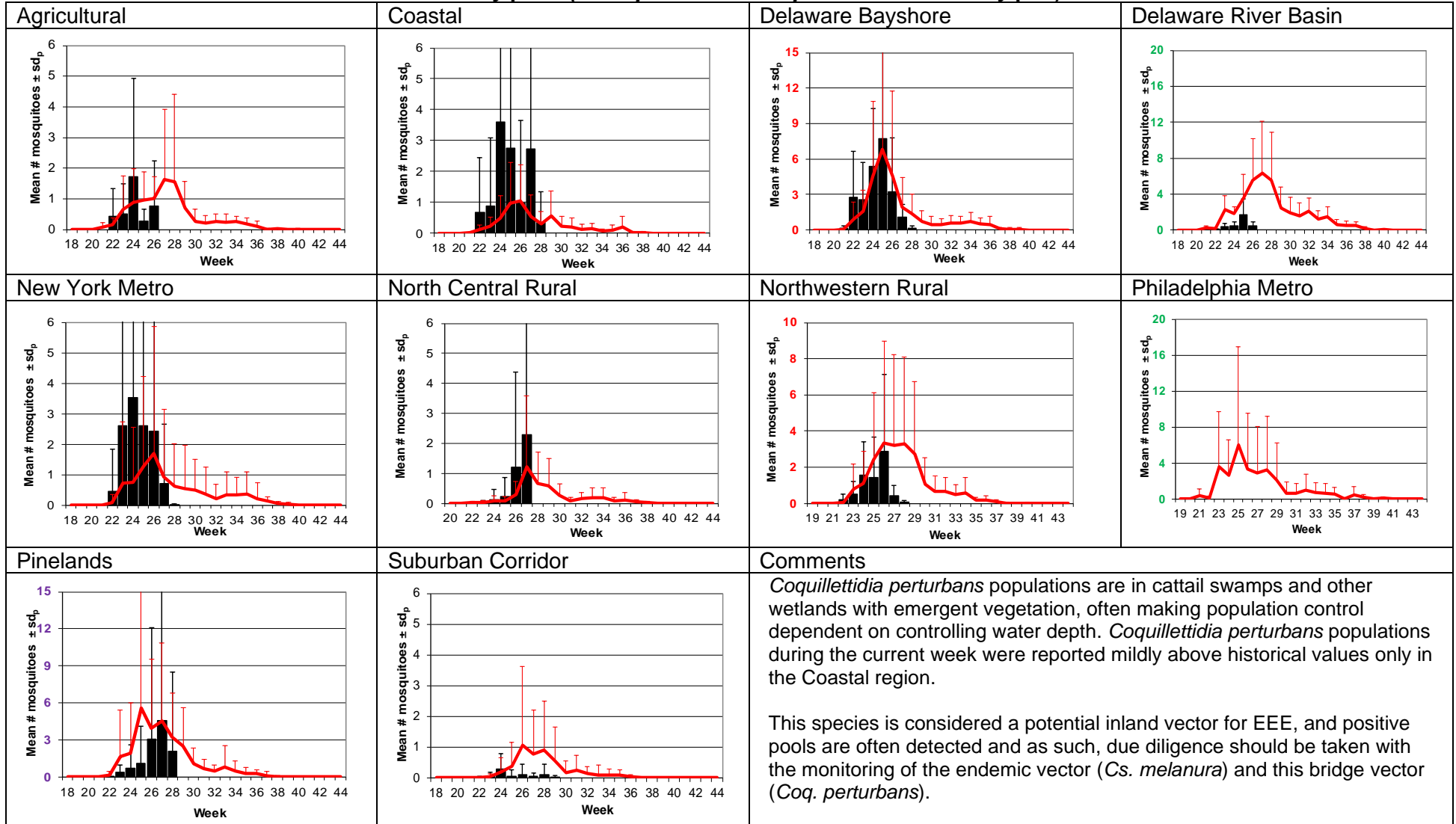


Aedes sollicitans - Salt Floodwater Species Multivoltine Aedine (Ae. sollicitans Type)



Coquillettidia perturbans

Monotypic (*Coquillettidia perturbans* Type)

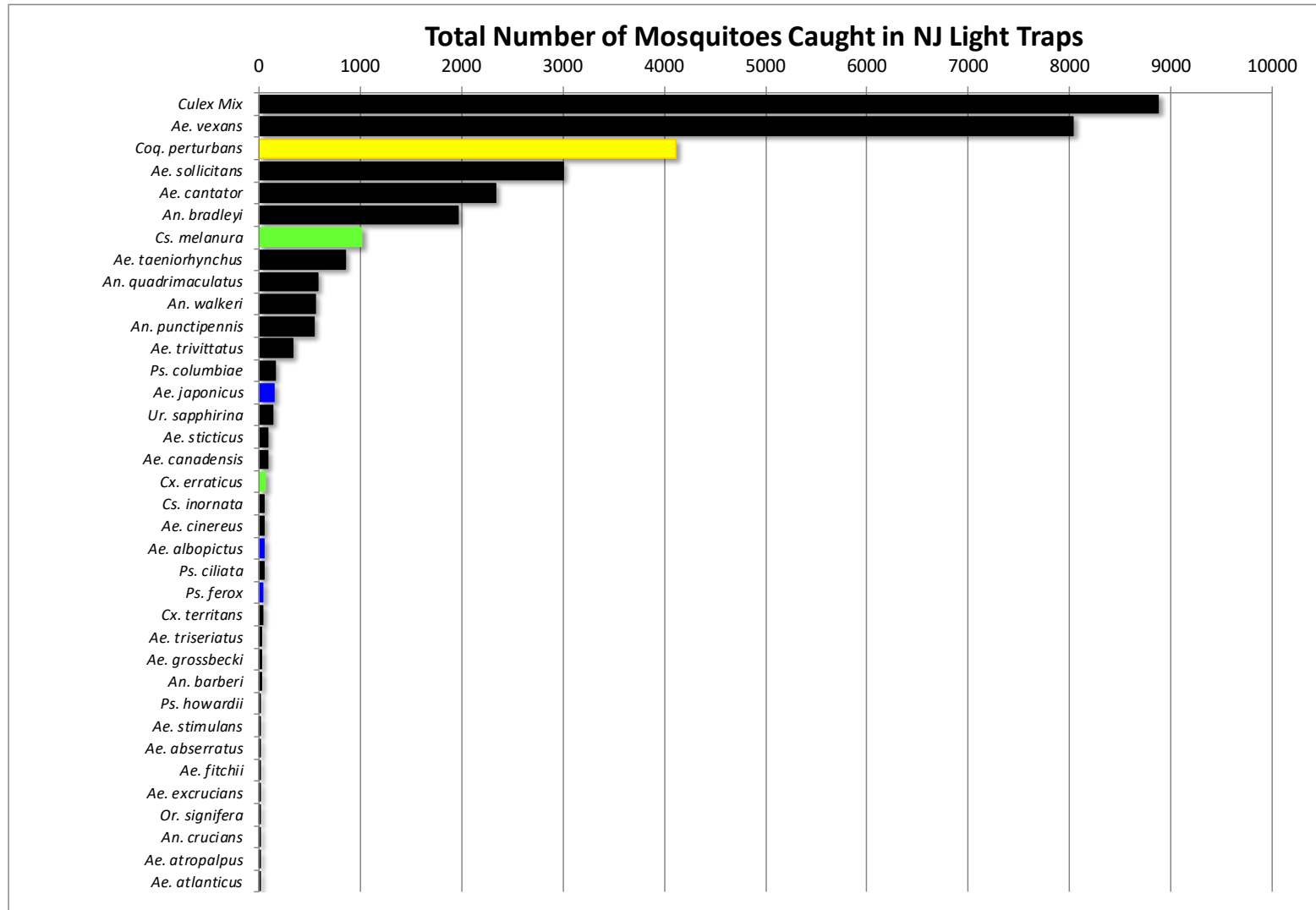


WNV

EEE

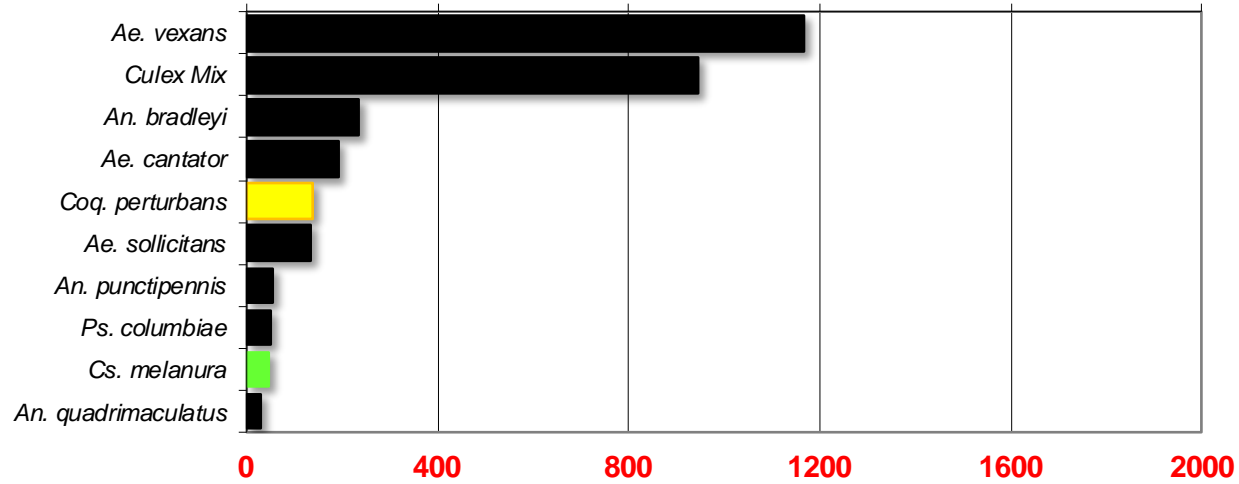
Top Ten Mosquito Species/Region - ■ *Ae. albopictus*, ■ *Ae. japonicus* (invasives); ■ *Cs. melanura* or *Cx. erraticus* ■ *Coq. perturbans*

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



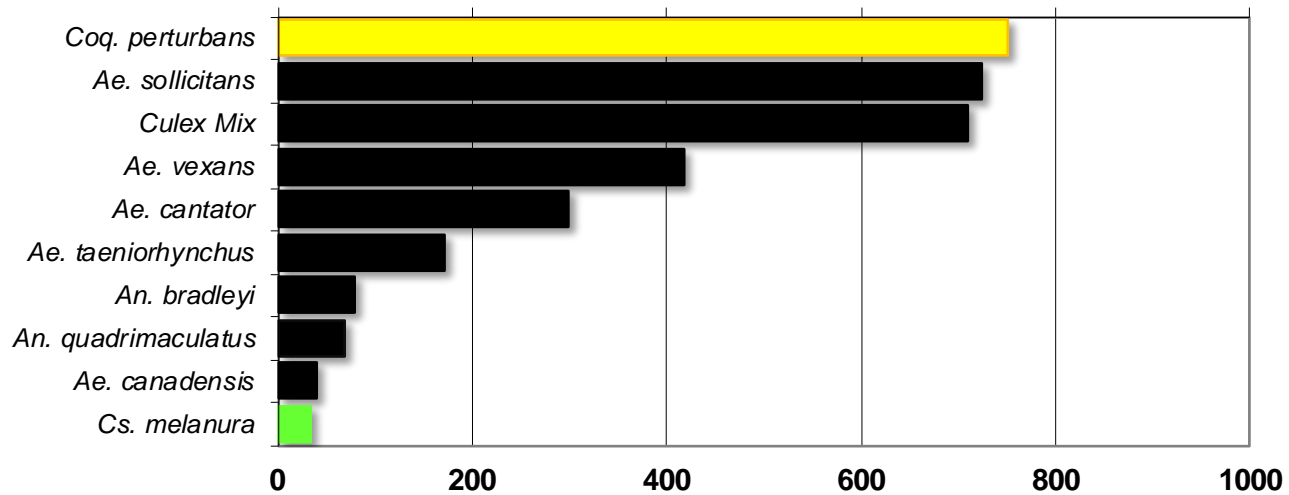
Agricultural

Total # mosquitoes



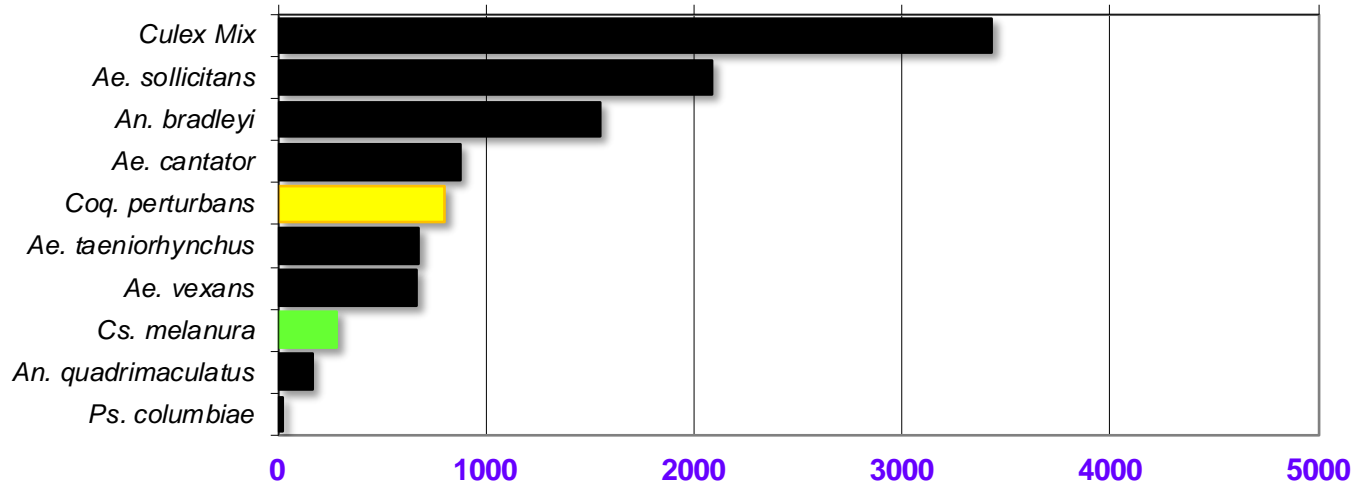
Coastal

Total # mosquitoes



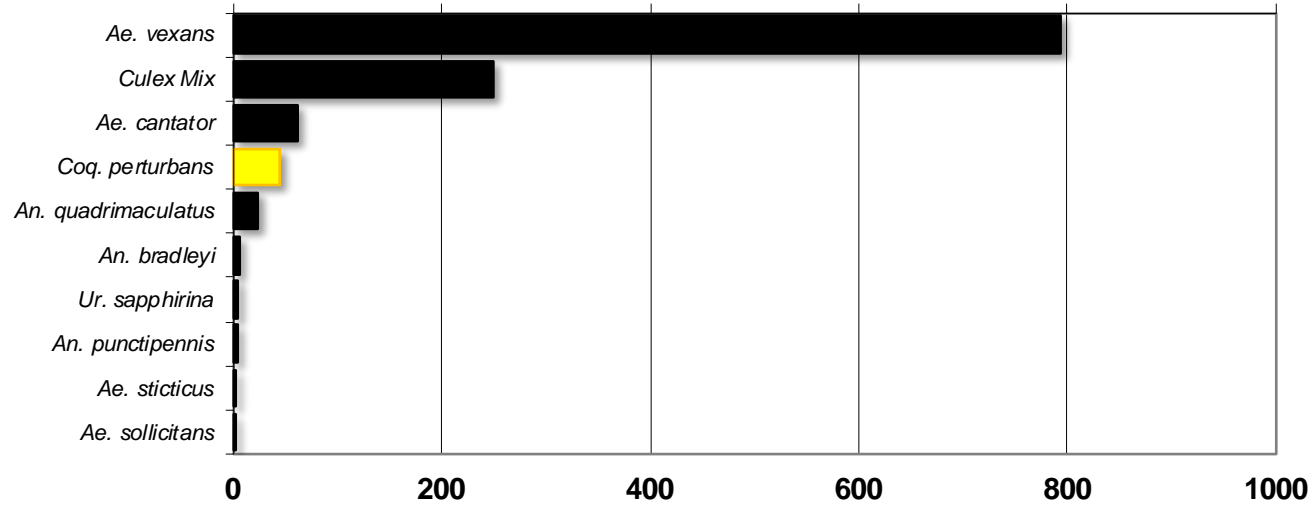
Delaware Bayshore

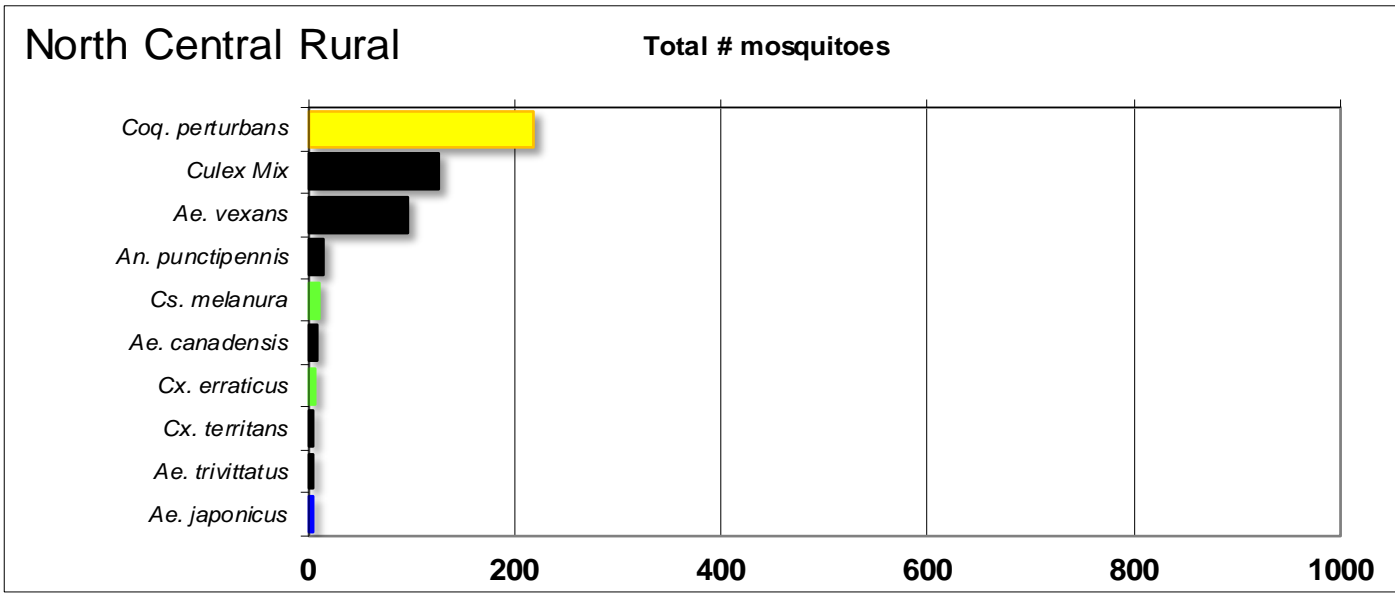
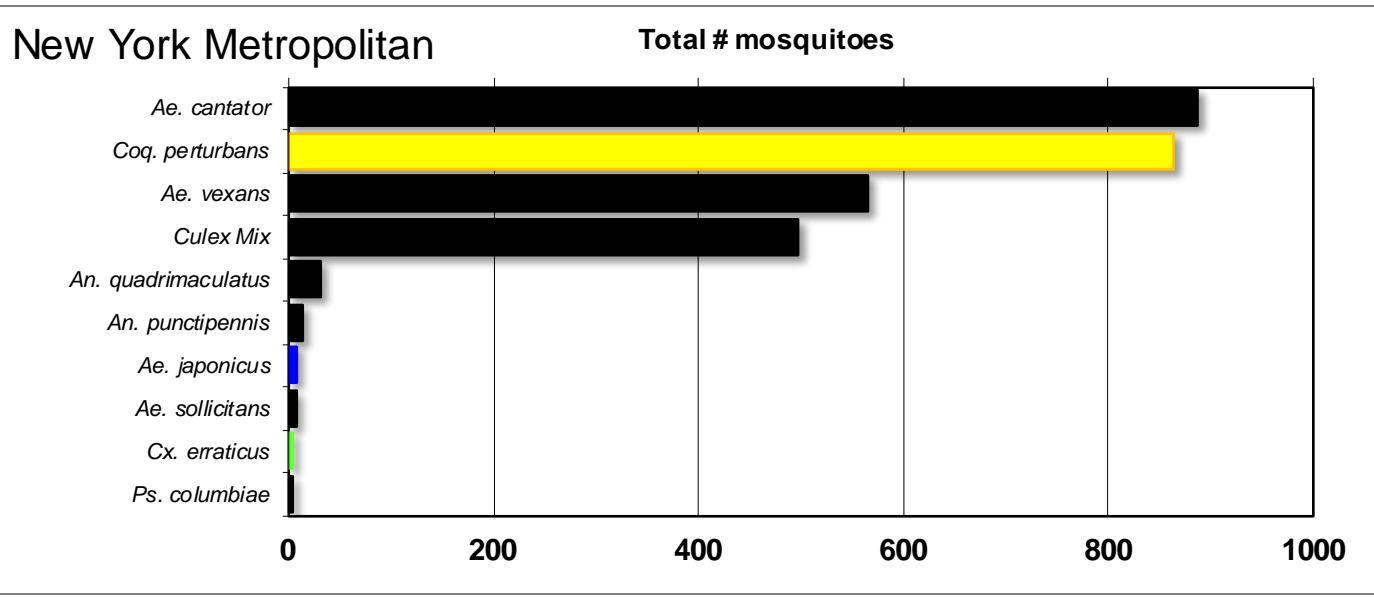
Total # mosquitoes



Delaware River Basin

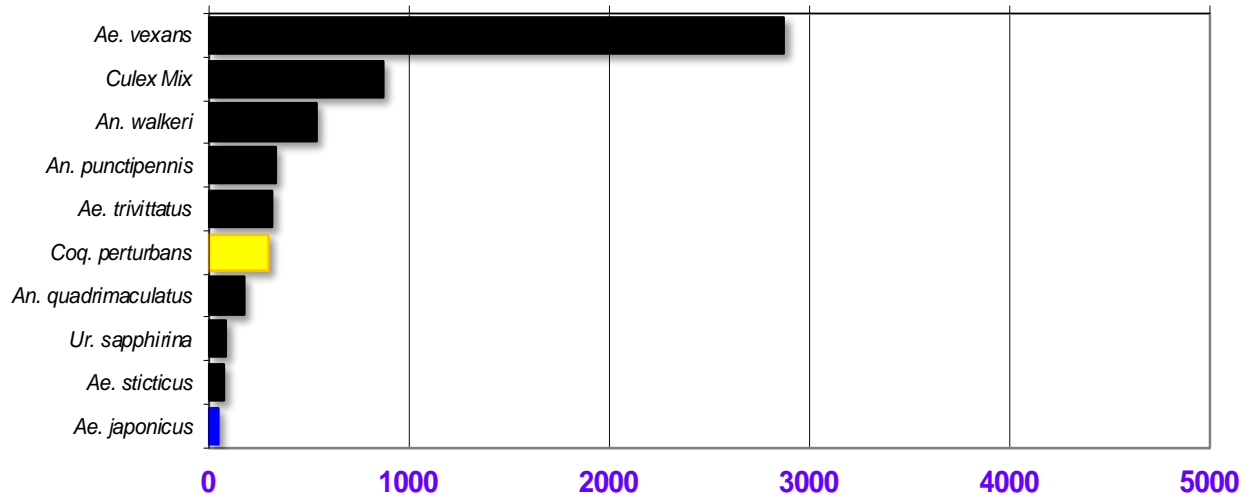
Total # mosquitoes





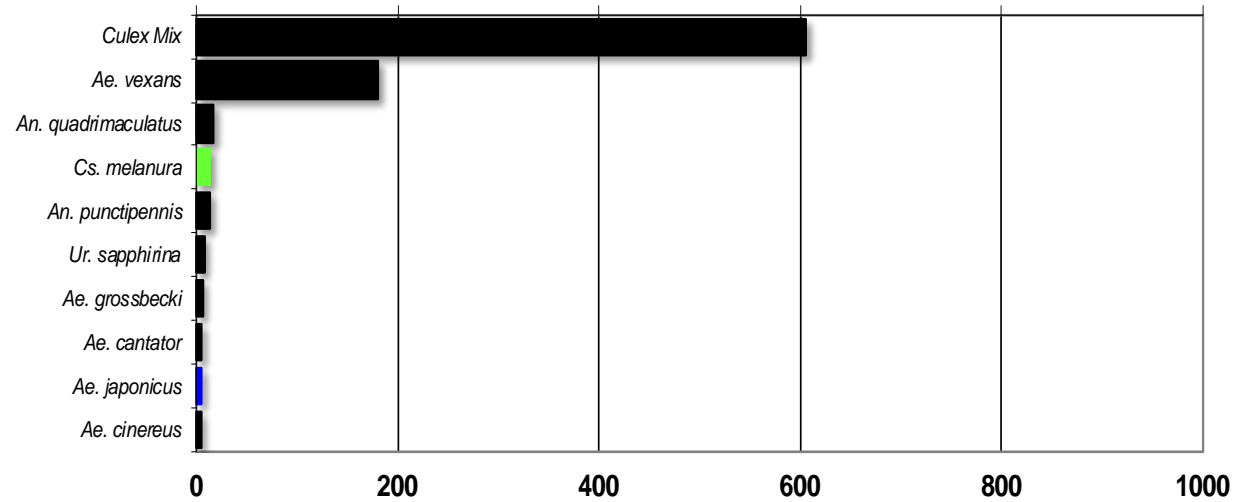
Northwest Rural

Total # mosquitoes



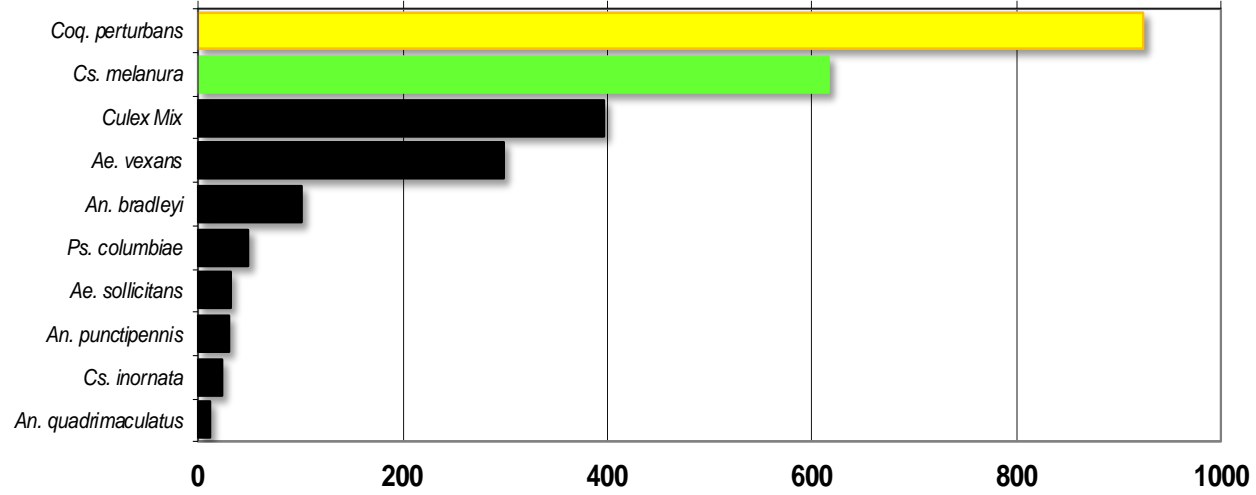
Philadelphia Metropolitan

Total # mosquitoes



Pinelands

Total # mosquitoes



Suburban Corridor

Total # mosquitoes

