

# NEW JERSEY ADULT MOSQUITO SURVEILLANCE Report

August 1 to August 7, CDC Week 31

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Center for Vector Biology



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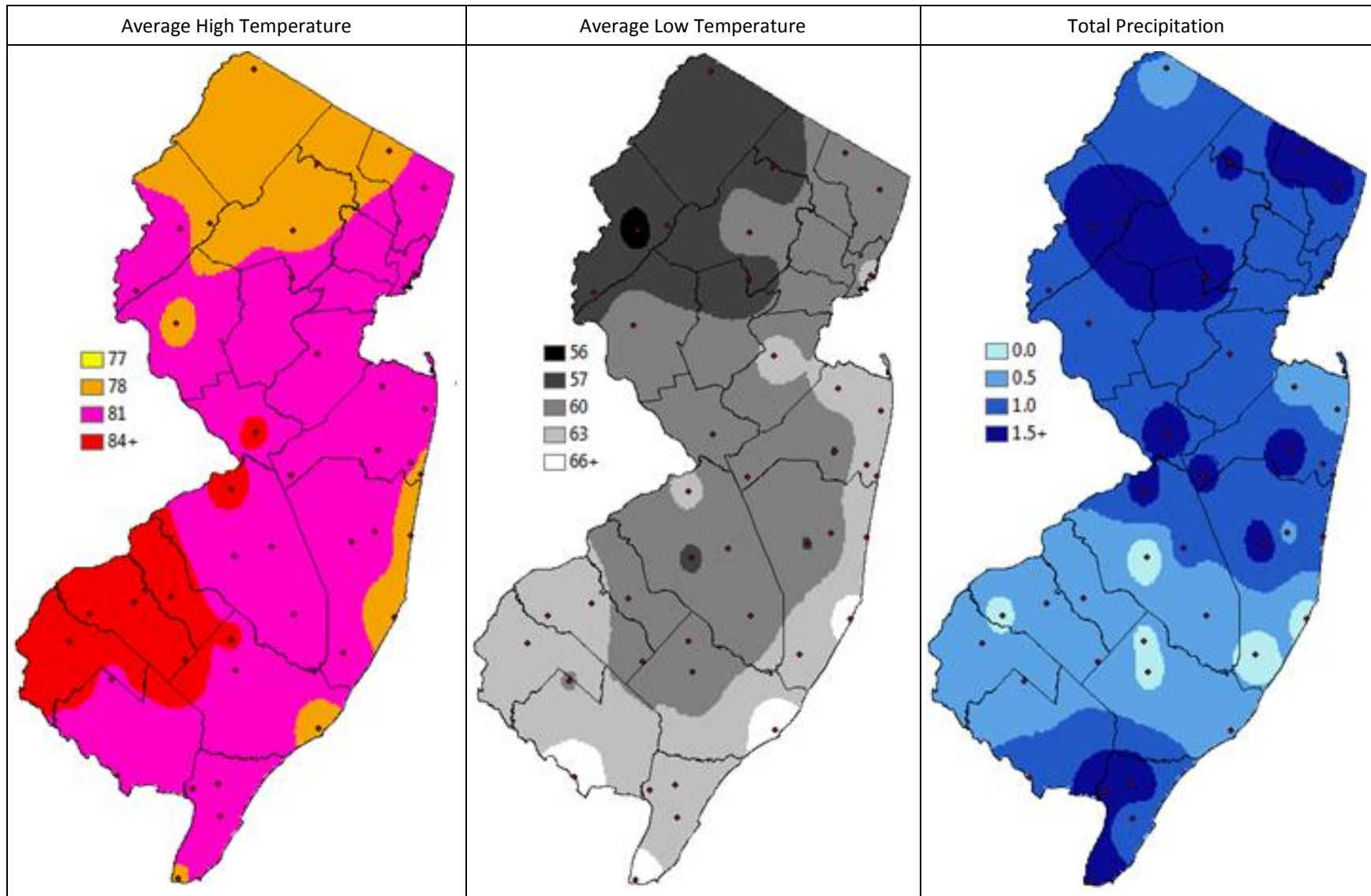
**Summary Table – Week 31**

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	1.69	4.09	0	3.26	29.24	0	0.10	0.21	0	0.05	2.97	0
Coastal	0.60	2.52	0	4.70	7.38	0	0.10	0.19	0	0.54	2.46	0
Delaware Bayshore	1.14	1.35	0	7.43	19.93	0	0.29	0.49	0	1.97	9.11	0
Delaware River Basin	34.50	25.78	1	21.57	8.47	4	0.57	1.56	0	0.00	0.07	0
New York Metro	1.37	1.57	0	3.51	7.07	0	0.06	0.36	0	0.04	0.60	0
North Central Rural	0.25	0.22	1	0.32	0.31	1	0.46	0.11	4	0.00	0.00	0
Northwest Rural	0.54	10.02	0	0.69	3.76	0	0.00	0.59	0	0.00	0.00	0
Philadelphia Metro	2.50	4.08	0	2.07	3.42	0	1.14	0.43	4	0.00	0.00	0
Pinelands	0.73	0.88	0	2.25	3.27	0	0.06	0.82	0	0.00	0.34	0
Suburban Corridor	0.96	2.46	0	1.53	1.69	0	0.00	0.25	0	0.00	0.01	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:** Populations of floodwater species subsided in several regions, with *Aedes vexans* populations either mildly above historical values (in the Delaware River Basin and the North Central Rural regions), and no *Aedes sollicitans* populations above historical values. For *Culex Mix*, the Delaware River Basin population was significantly above average, but only mildly elevated in the North Central Rural region. Populations of *Coquillettidia perturbans* were significantly above average in the North Central Rural and Philadelphia Metropolitan regions while the rest of the regions remained with populations below the running historical averages.

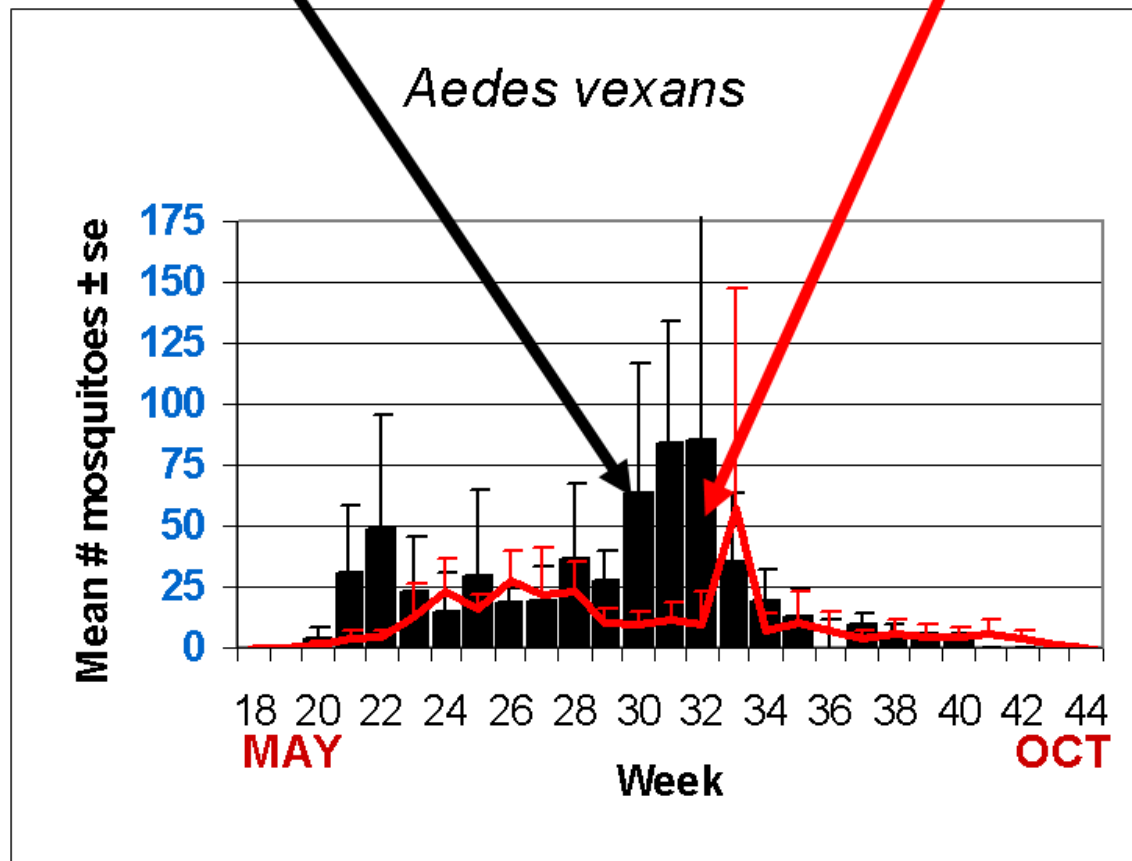
# Climate Factors



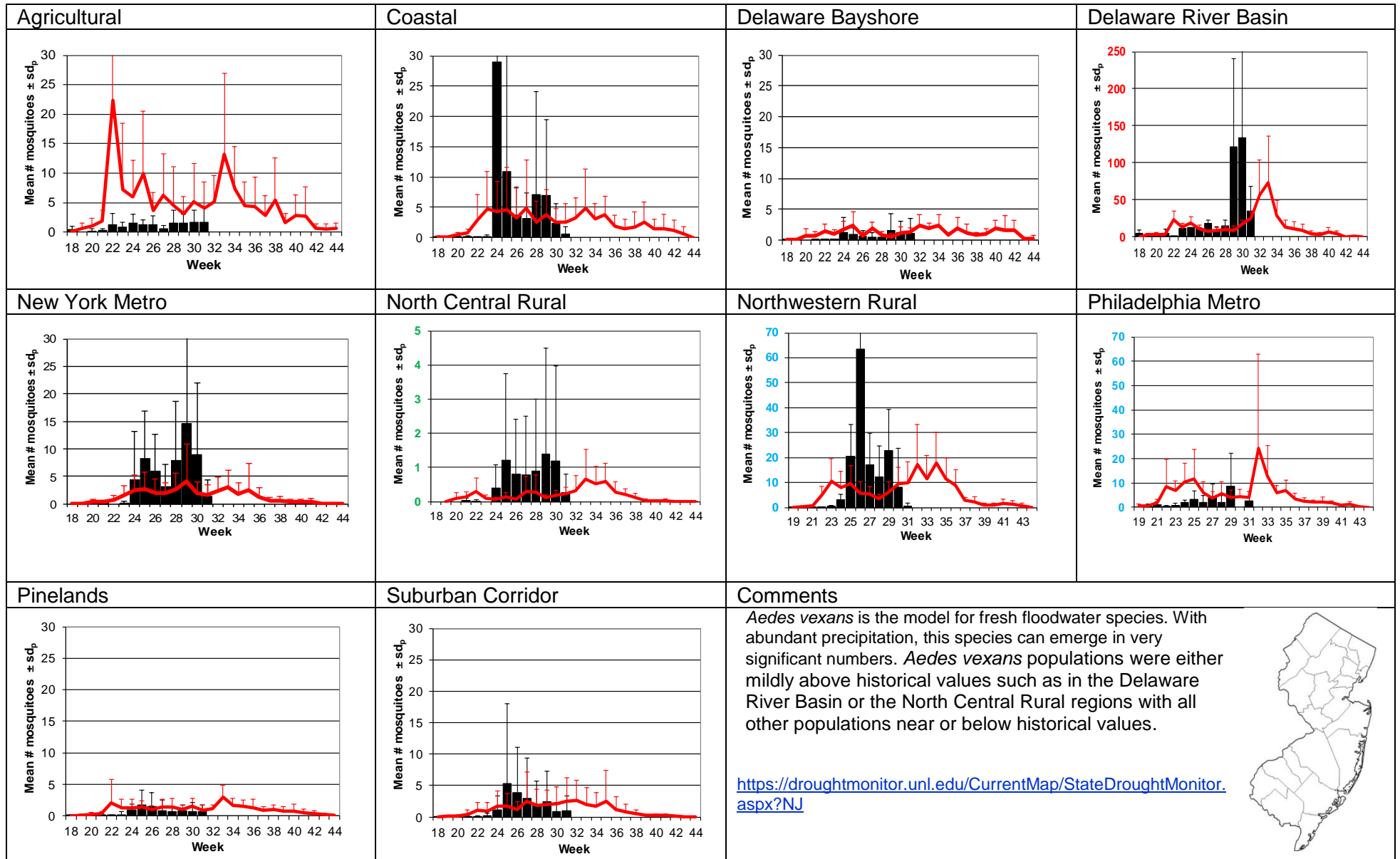
The three figures show the interpolation of average maximum (°F) and minimum temperature (°F) and total precipitation (inches) for 14 days prior to 8 August 2021 in New Jersey. Data points are from about 45 weather stations maintained through the New Jersey Weather & Climate Network and the State Climatologist. 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, Burlington, Cumberland, Hudson, Mercer, Middlesex, Morris, Salem, Somerset, Union, and Warren counties. Data for the previous week are from Atlantic, Bergen, Cape May, Cumberland, Hudson, Hunterdon, Middlesex, Monmouth, Morris, Ocean, Salem, Somerset, Union, and Warren counties.

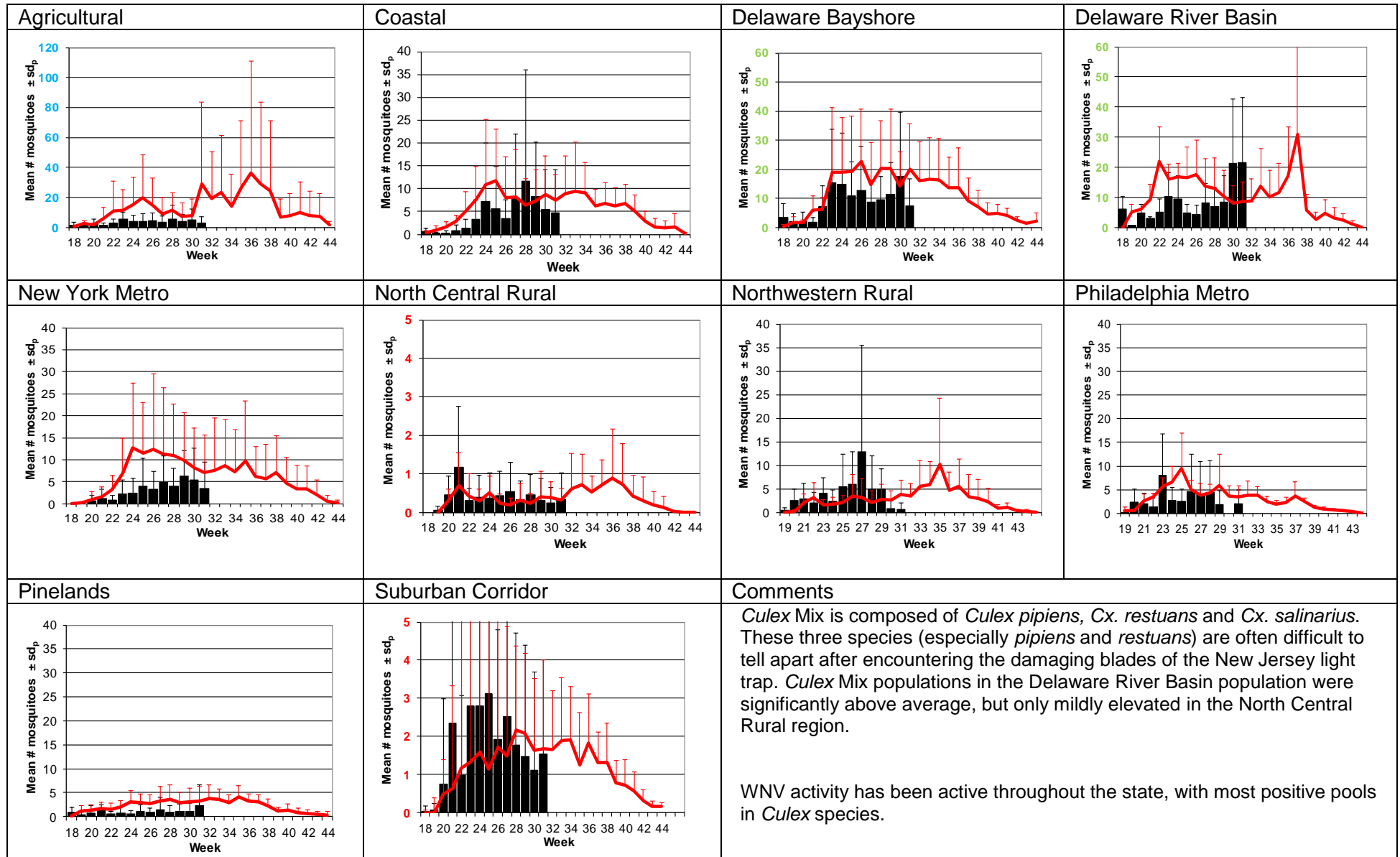
## Weekly Means Against 5-year Average



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



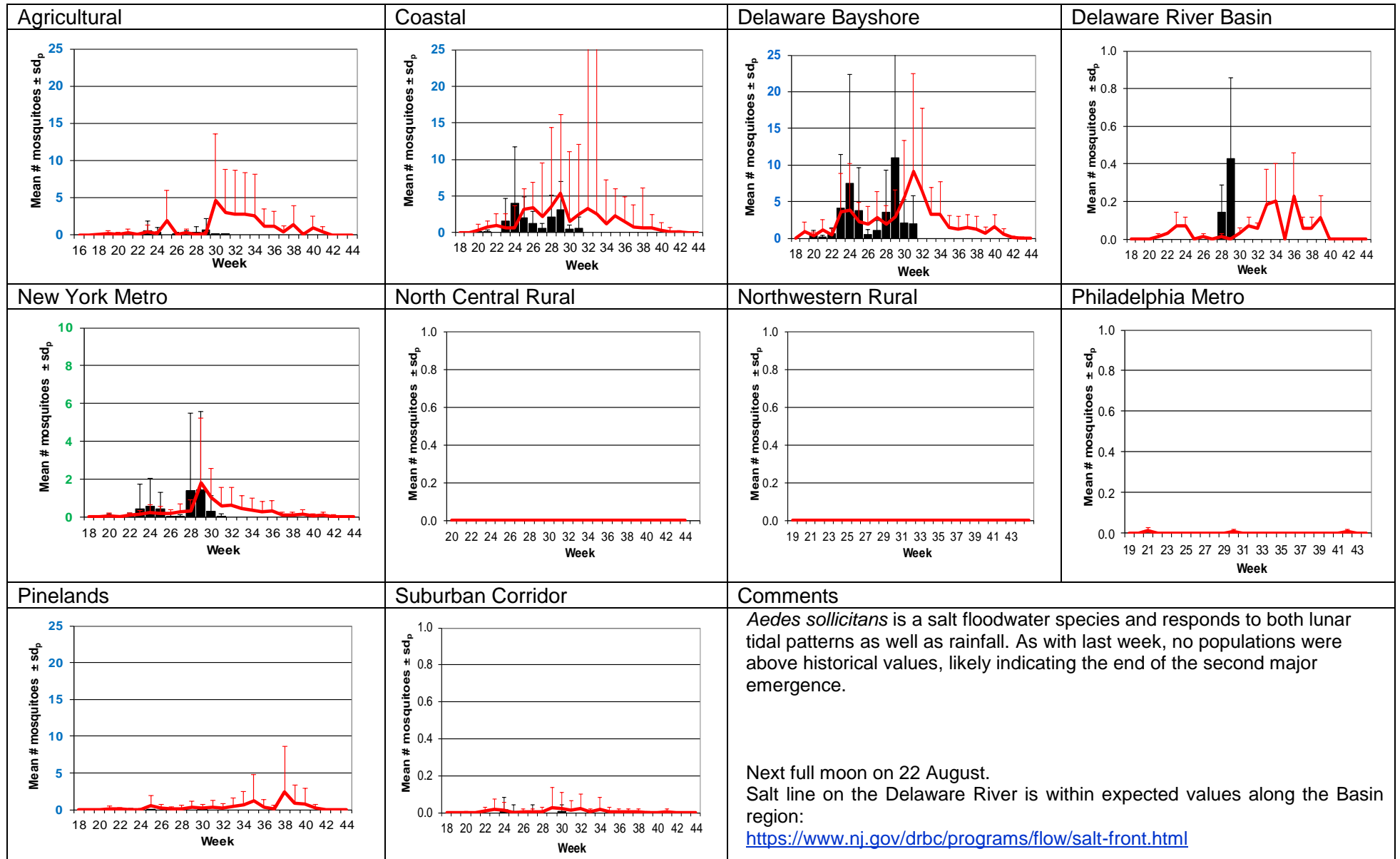
# Culex Mix – Permanent Water Species Multivoltine *Culex/Anopheles* (*Cx. pipiens* Type)



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

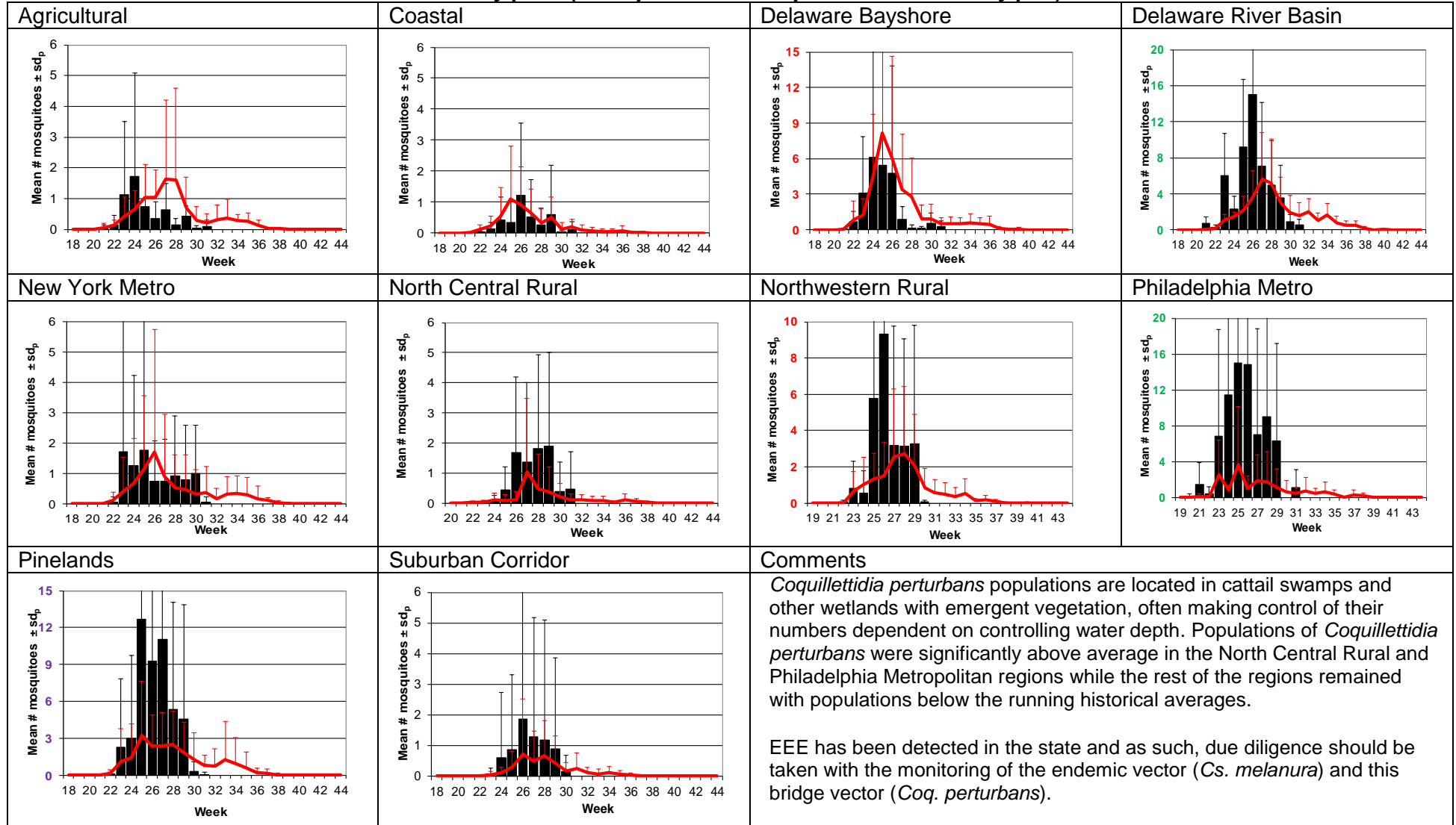
<p><b>Agricultural</b></p>	<p><b>Coastal</b></p>	<p><b>Delaware Bayshore</b></p>	<p><b>Delaware River Basin</b></p>
<p><b>New York Metro</b></p>	<p><b>North Central Rural</b></p>	<p><b>Northwestern Rural</b></p>	<p><b>Philadelphia Metro</b></p>
<p><b>Pinelands</b></p>	<p><b>Suburban Corridor</b></p>	<p><b>Comments</b></p> <p><i>Culiseta melanura</i> is the enzootic ornithophilic vector of eastern equine encephalitis. This cold-hardy species can emerge early in the season as well as staying active later. Mildly elevated numbers continue for the Pinelands regions while other regions report numbers at or below historic averages. EEE activity has now been reported in Gloucester and Camden County and as such, due diligence in monitoring this species as well as <i>Coquillettidia perturbans</i> is needed.</p> <p>EEE activity has been significant in Florida. All horse owners should make sure their horses are up to date on their EEE/WNV vaccination schedules:  <a href="http://www.aep.org/custdocs/adultvaccinationchart.pdf">http://www.aep.org/custdocs/adultvaccinationchart.pdf</a></p>	

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



# *Coquillettidia perturbans*

## Monotypic (*Coquillettidia perturbans* Type)



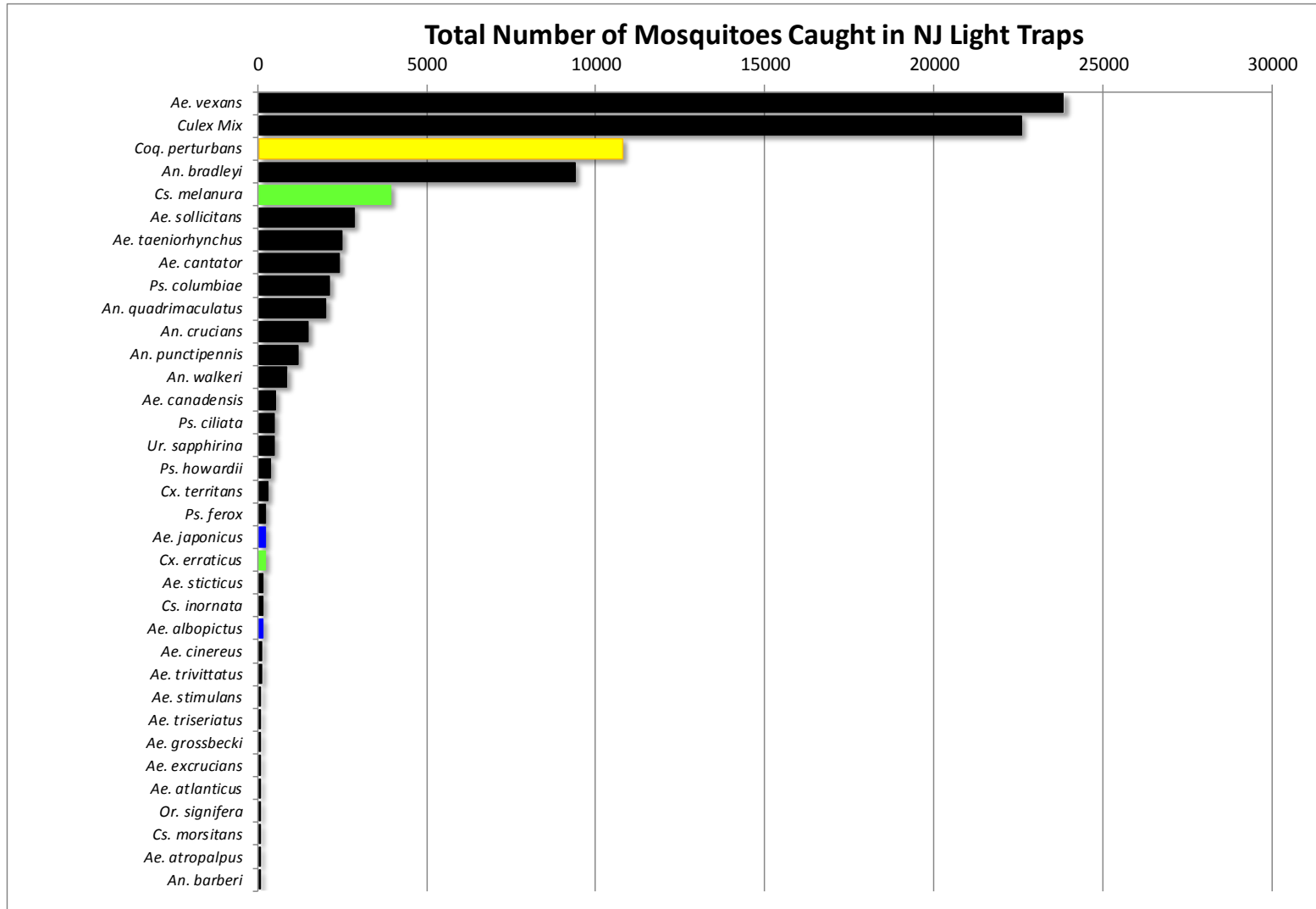


WNV

EEE

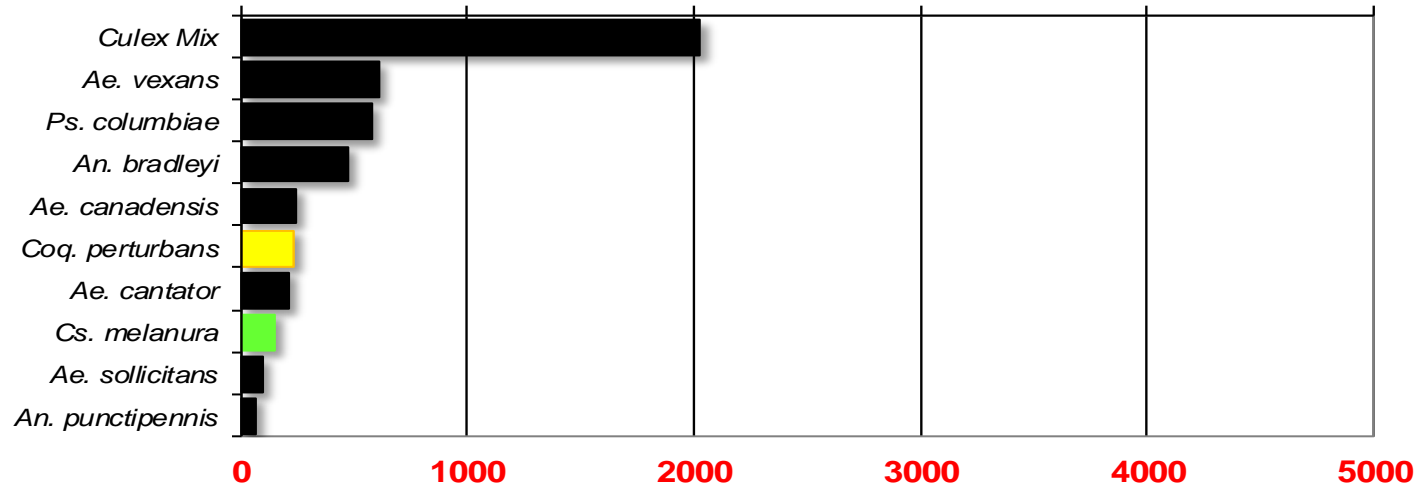
**Top Ten Mosquito Species/Region -** ■ *Ae. albopictus*, ■ *Ae. japonicus* (invasives); ■ *Cs. melanura* or *Cx. erraticus* ■ *Coq. perturbans*

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



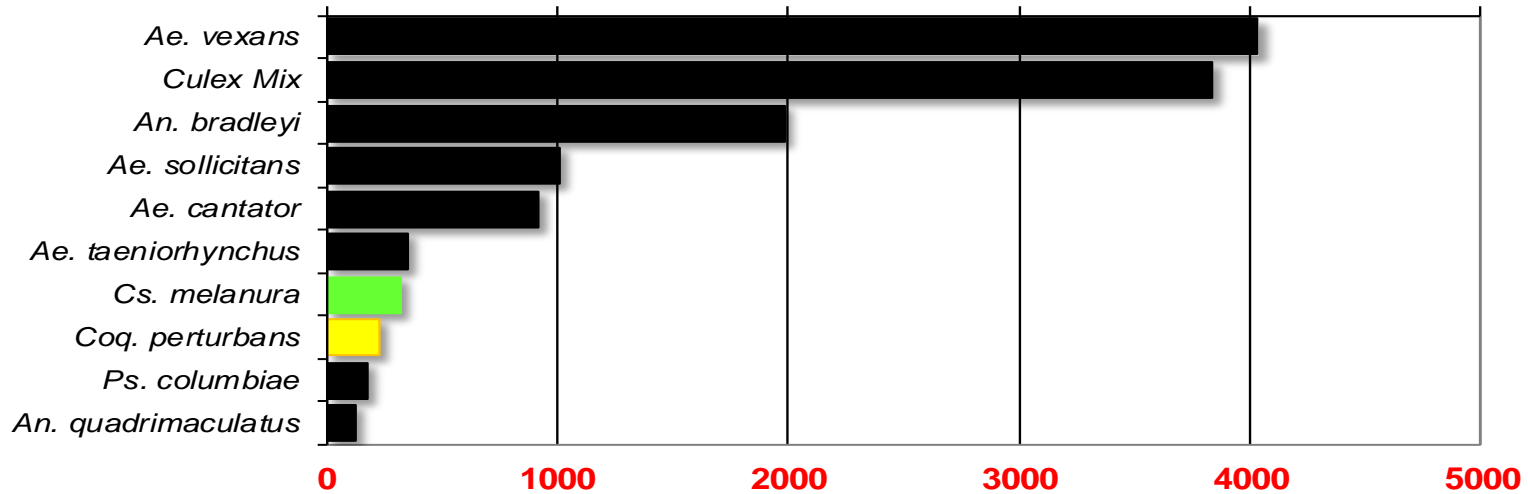
## Agricultural

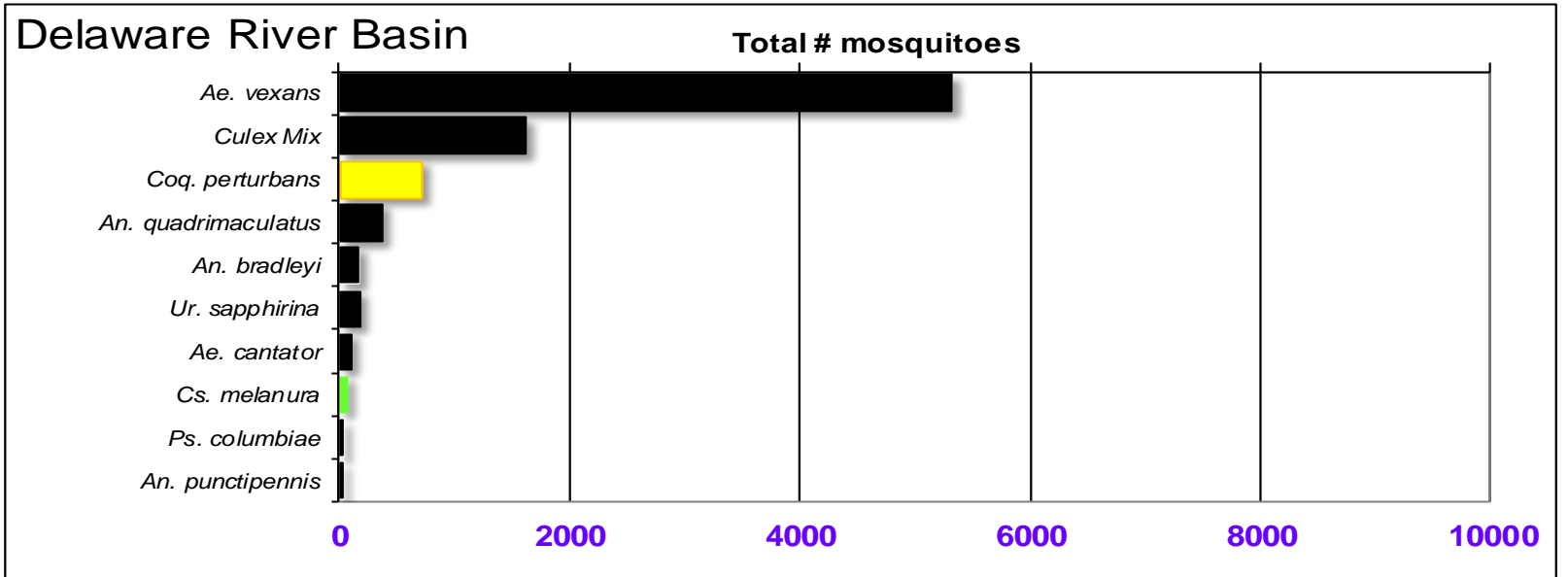
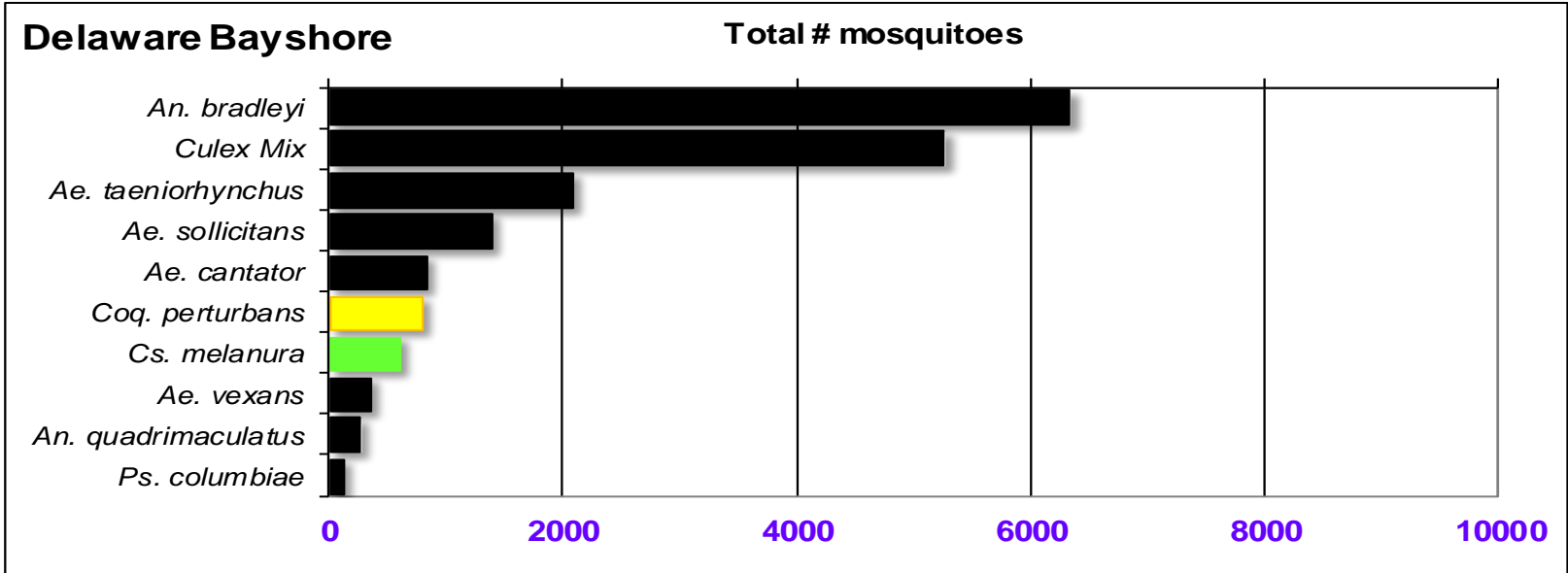
Total # mosquitoes



## Coastal

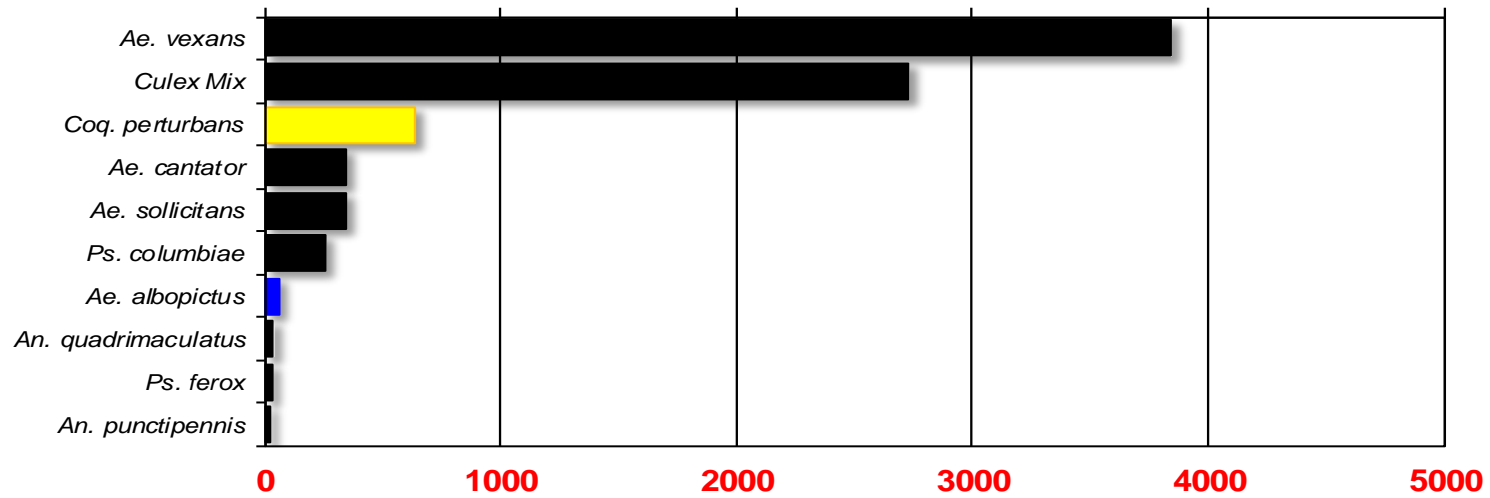
Total # mosquitoes





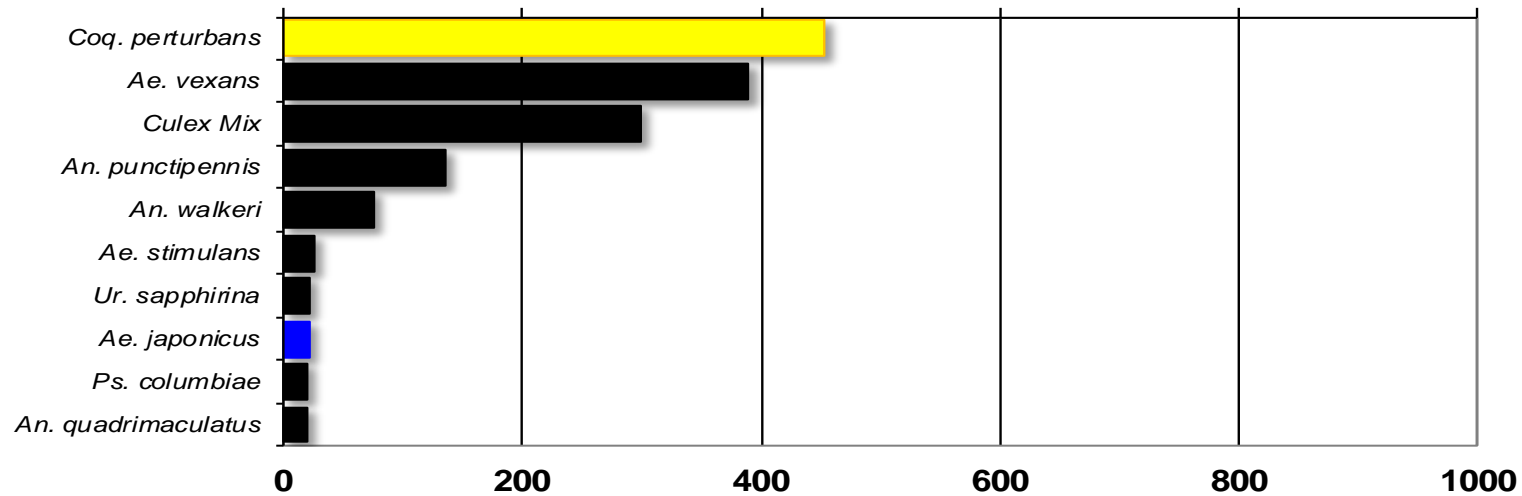
## New York Metropolitan

Total # mosquitoes



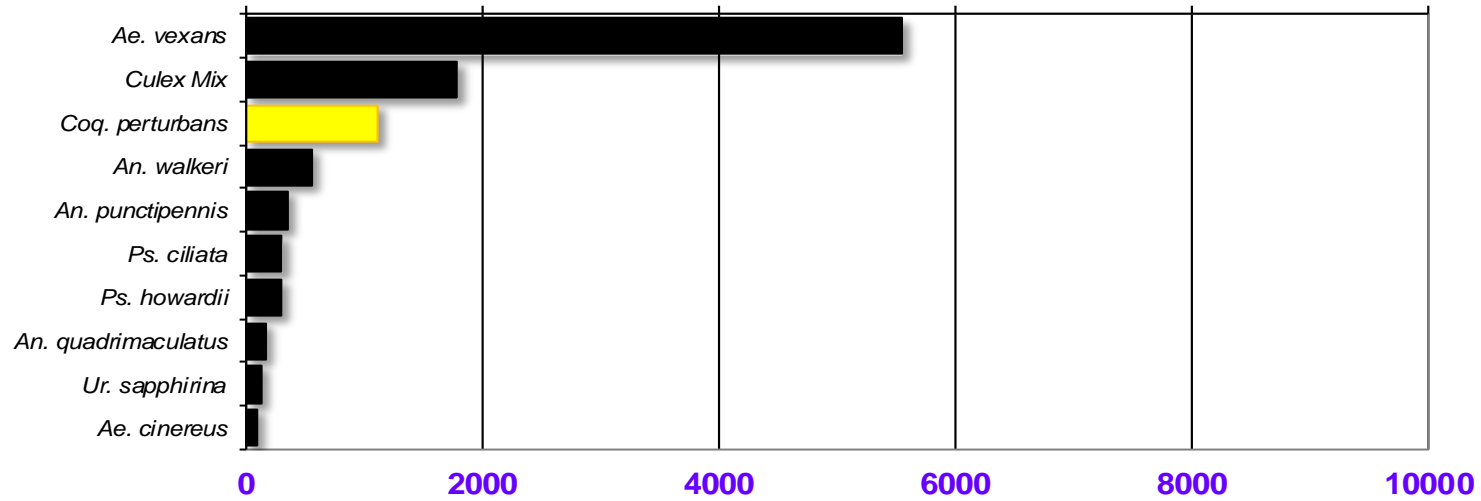
## North Central Rural

Total # mosquitoes



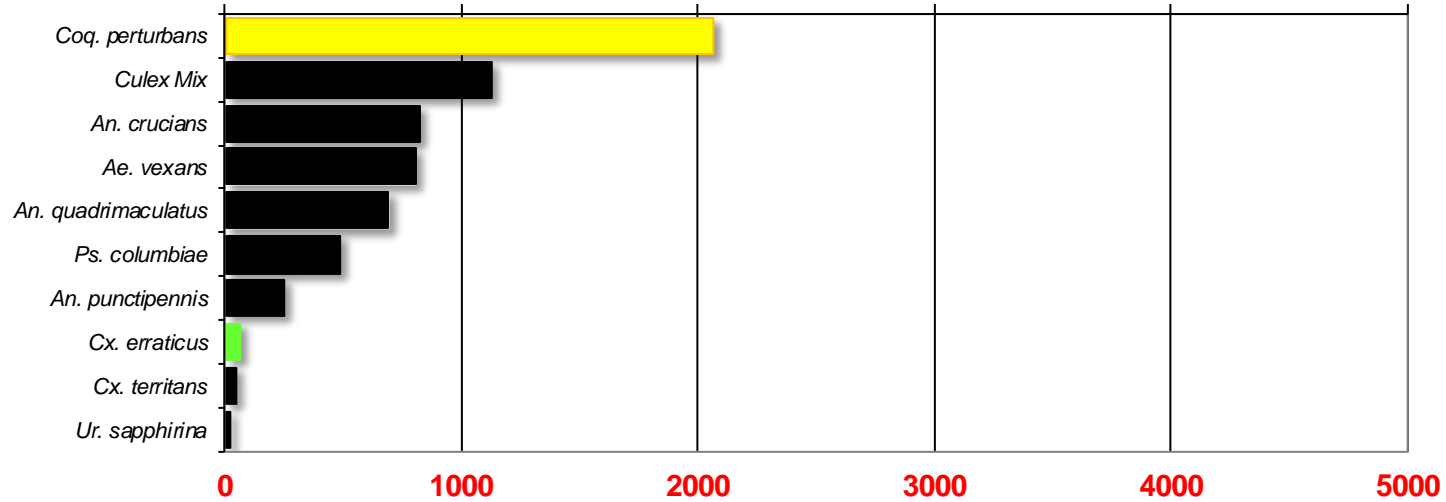
## Northwest Rural

Total # mosquitoes



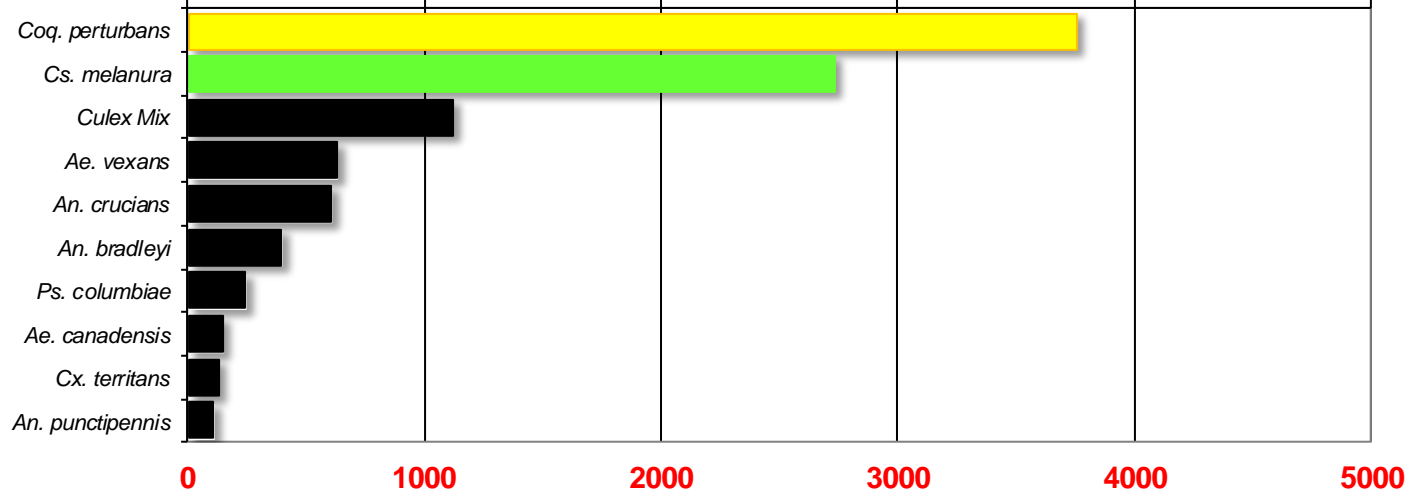
## Philadelphia Metropolitan

Total # mosquitoes



# Pinelands

Total # mosquitoes



# Suburban Corridor

Total # mosquitoes

