

NEW JERSEY ADULT MOSQUITO SURVEILLANCE Report

May 23 to May 29, CDC Week 21

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Center for Vector Biology



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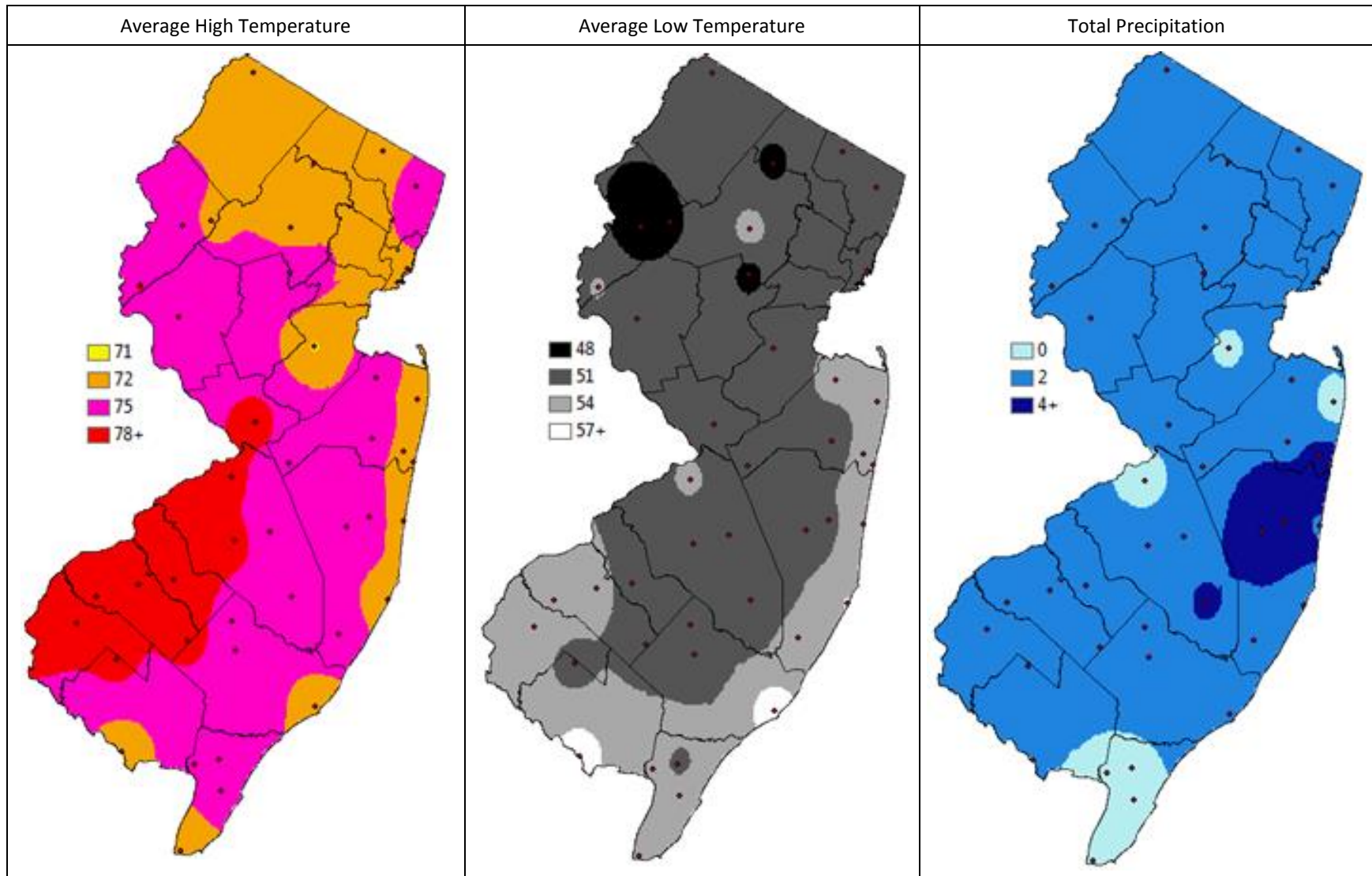
Summary Table – Week 21

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	0.14	1.88	0	0.60	5.90	0	0.00	0.06	0	0.00	0.24	0
Coastal	0.02	0.73	0	0.41	2.90	0	0.00	0.01	0	0.11	0.72	0
Delaware Bayshore	0.00	0.71	0	0.00	5.97	0	0.00	0.05	0	0.00	1.14	0
Delaware River Basin	4.93	3.50	1	1.36	9.40	0	0.57	0.07	4	0.00	0.01	0
New York Metro	0.01	0.35	0	0.70	1.69	0	0.00	0.00	0	0.00	0.03	0
North Central Rural	0.02	0.31	0	0.91	0.69	1	0.00	0.00	0	0.00	0.00	0
Northwest Rural	0.11	5.09	0	2.74	2.00	1	0.00	0.00	0	0.00	0.00	0
Philadelphia Metro	0.86	1.65	0	1.57	2.65	0	1.43	0.15	4	0.00	0.01	0
Pinelands	0.08	0.36	0	0.62	1.65	0	0.00	0.01	0	0.00	0.13	0
Suburban Corridor	0.01	0.44	0	0.78	0.63	1	0.00	0.00	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: *Note* This report re-examines Week 21 as it is the current week that is complete with 7 days. Currently, *Aedes vexans* populations in the Delaware River Basin are slightly higher than the running 5 year average. *Culex Mix* populations in the North Central Rural, Northwest Rural and the Suburban corridor also show similar elevations. *Coquillettidia perturbans* has emerged in significant numbers in the Delaware River Basin and the Philadelphia Metropolitan regions.

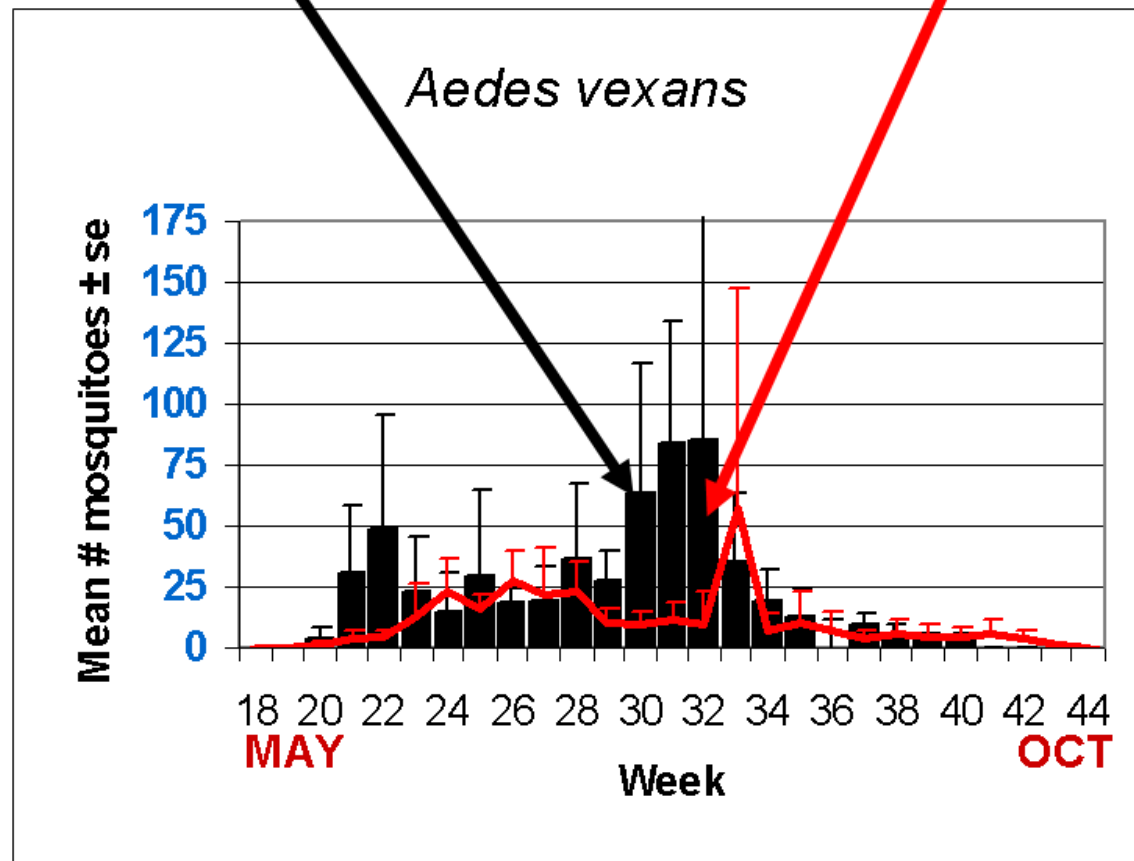
Climate Factors



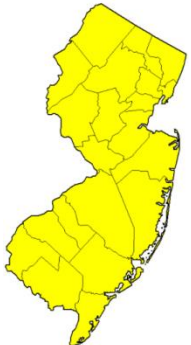
The three figures show the interpolation of average maximum (°F) and minimum temperature (°F) and total precipitation (inches) for 14 days prior to 31 May 2021 in New Jersey. Data points are from about 45 weather stations maintained through the New Jersey Weather & Climate Network and the State Climatologist. 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, Bergen, Burlington, Hudson, Hunterdon, Mercer, Middlesex, Morris, Salem, and Sussex counties. Data for the previous week are from Atlantic, Bergen, Burlington, Cumberland, Hudson, Hunterdon, Mercer, Middlesex, Morris, Ocean, Passaic, Salem, Sussex, and Warren counties.

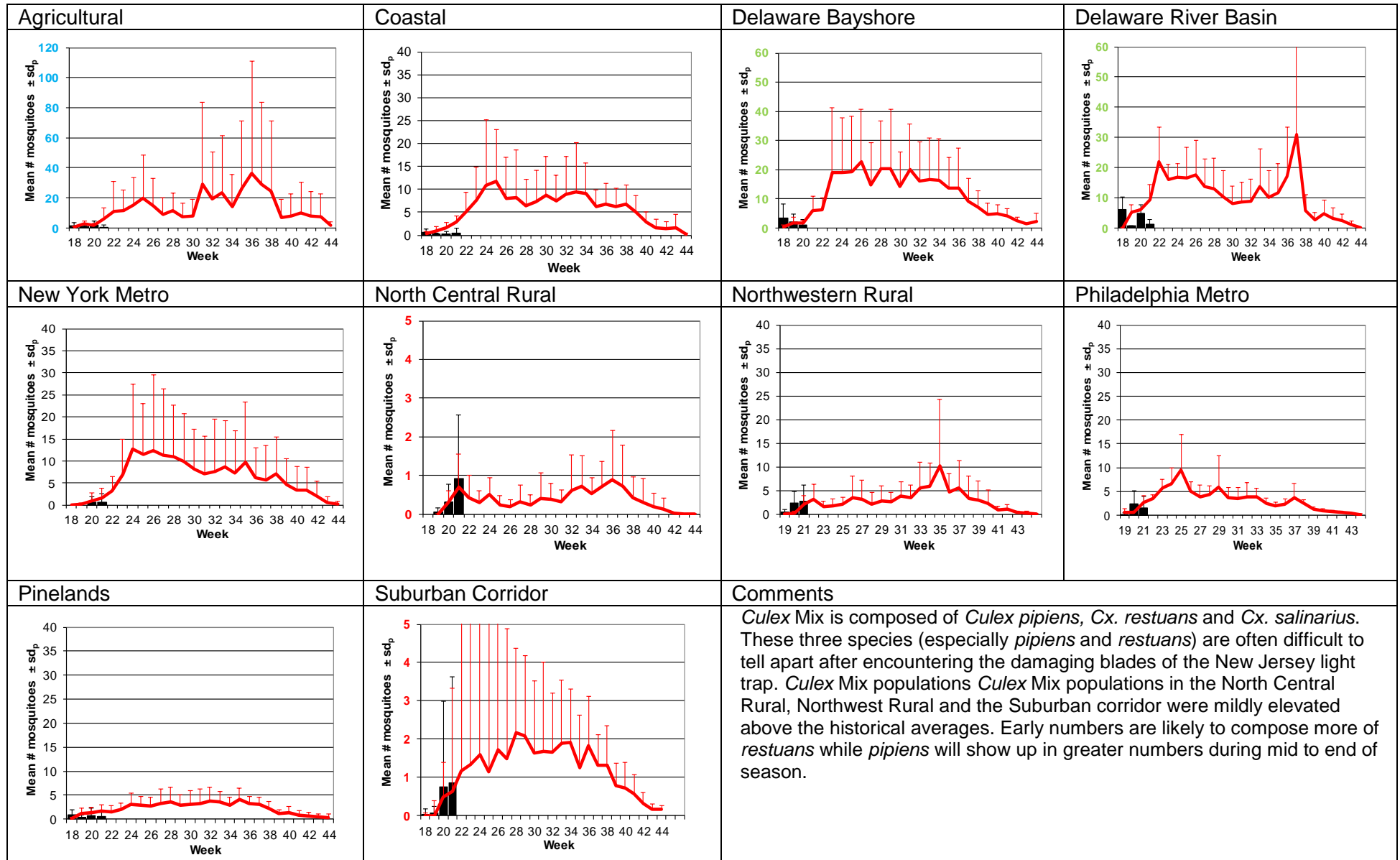
Weekly Means Against 5-year Average



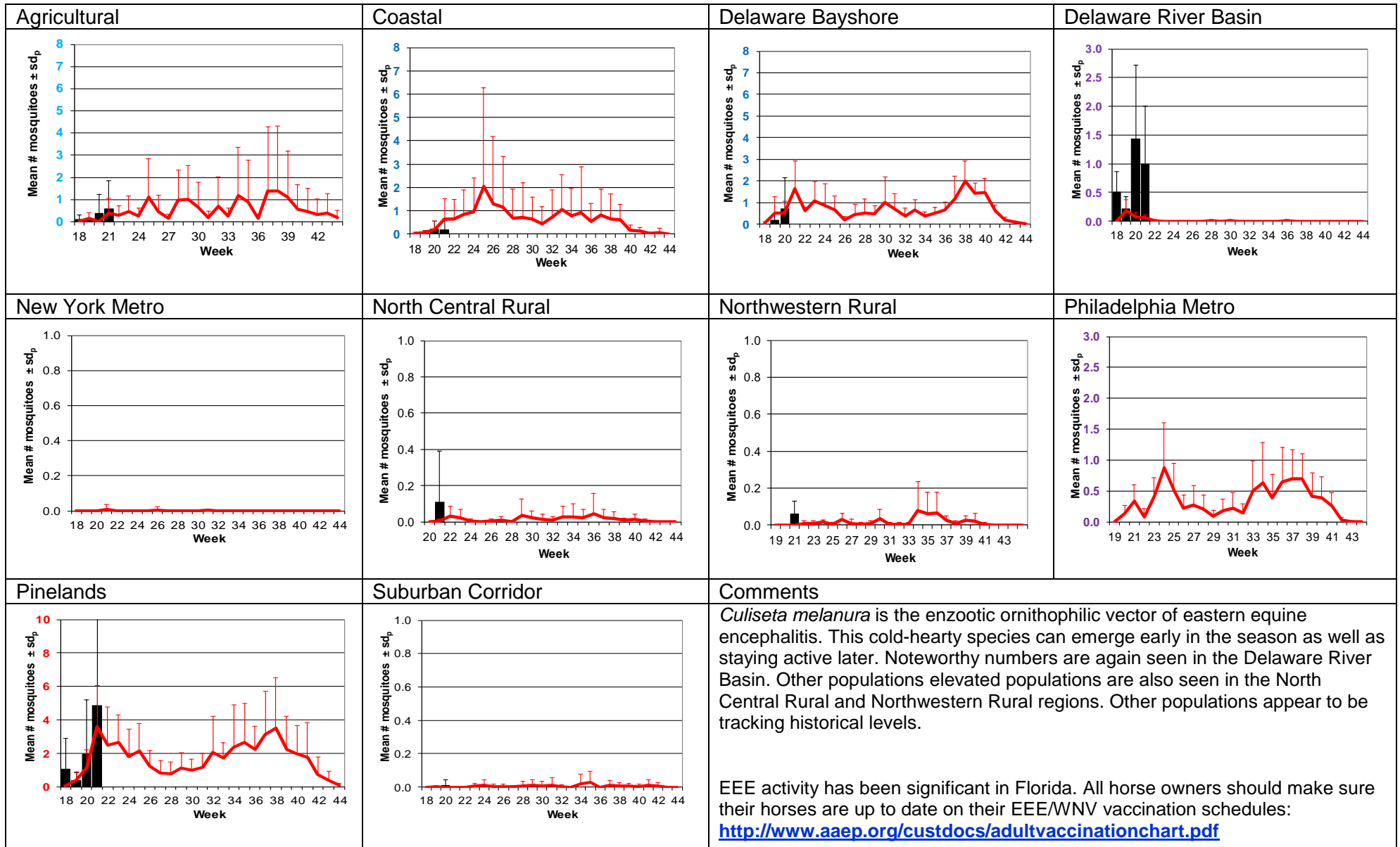
Aedes vexans - Fresh Floodwater Species Multivoltine Aedine (Ae. vexans Type)

<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. Currently, the Delaware River Basin is experiencing populations that are only slightly above the 5 year running mean. The Memorial Day weekend brought significant and sustained amounts of rain that will change the abnormally dry conditions last reported by the US Drought Monitor for the entire state. Significant emergences should occur for this flood water species.</p> <p>https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?NJ</p> 	

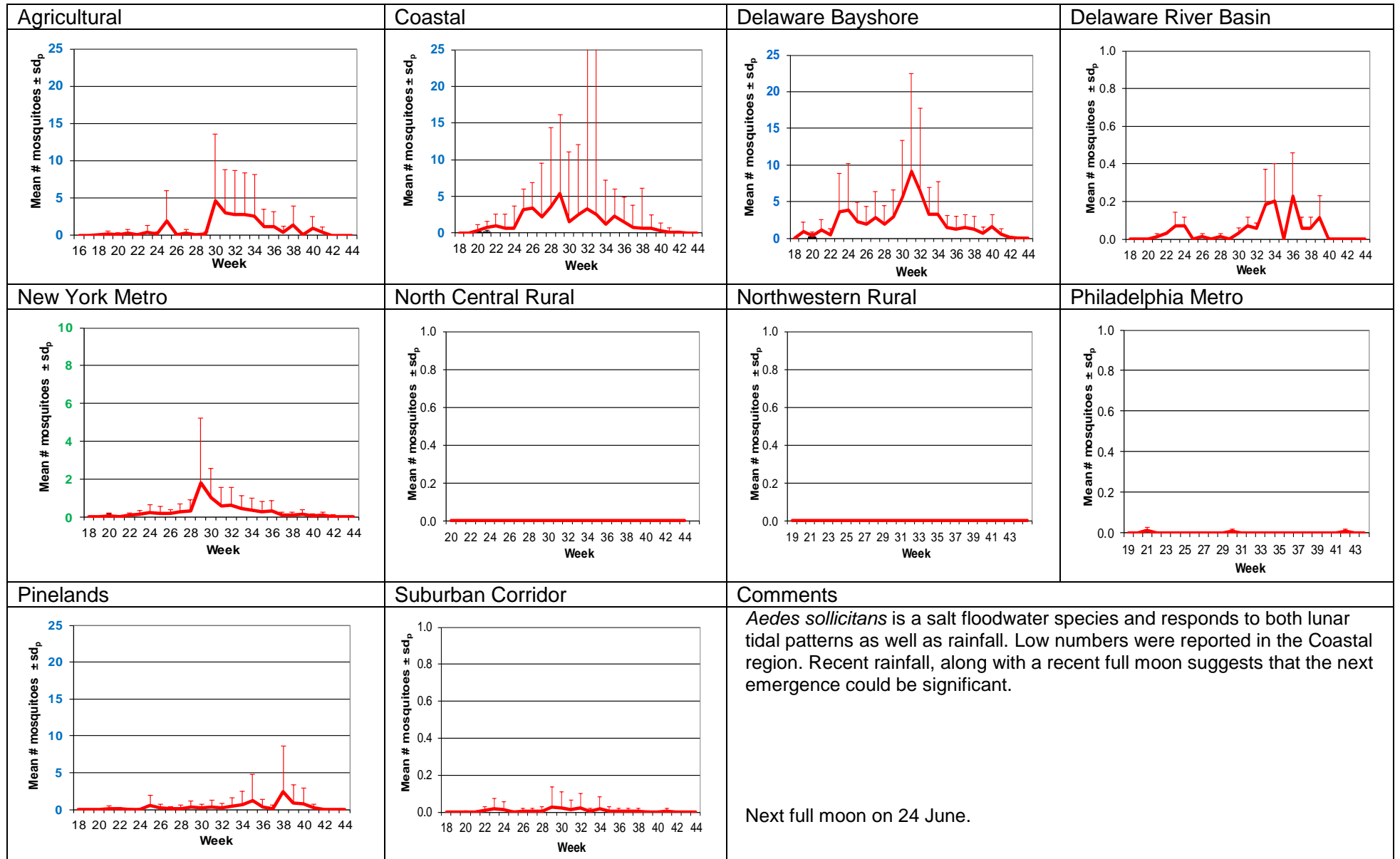
Culex Mix – Permanent Water Species Multivoltine *Culex/Anopheles* (*Cx. pipiens* Type)



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

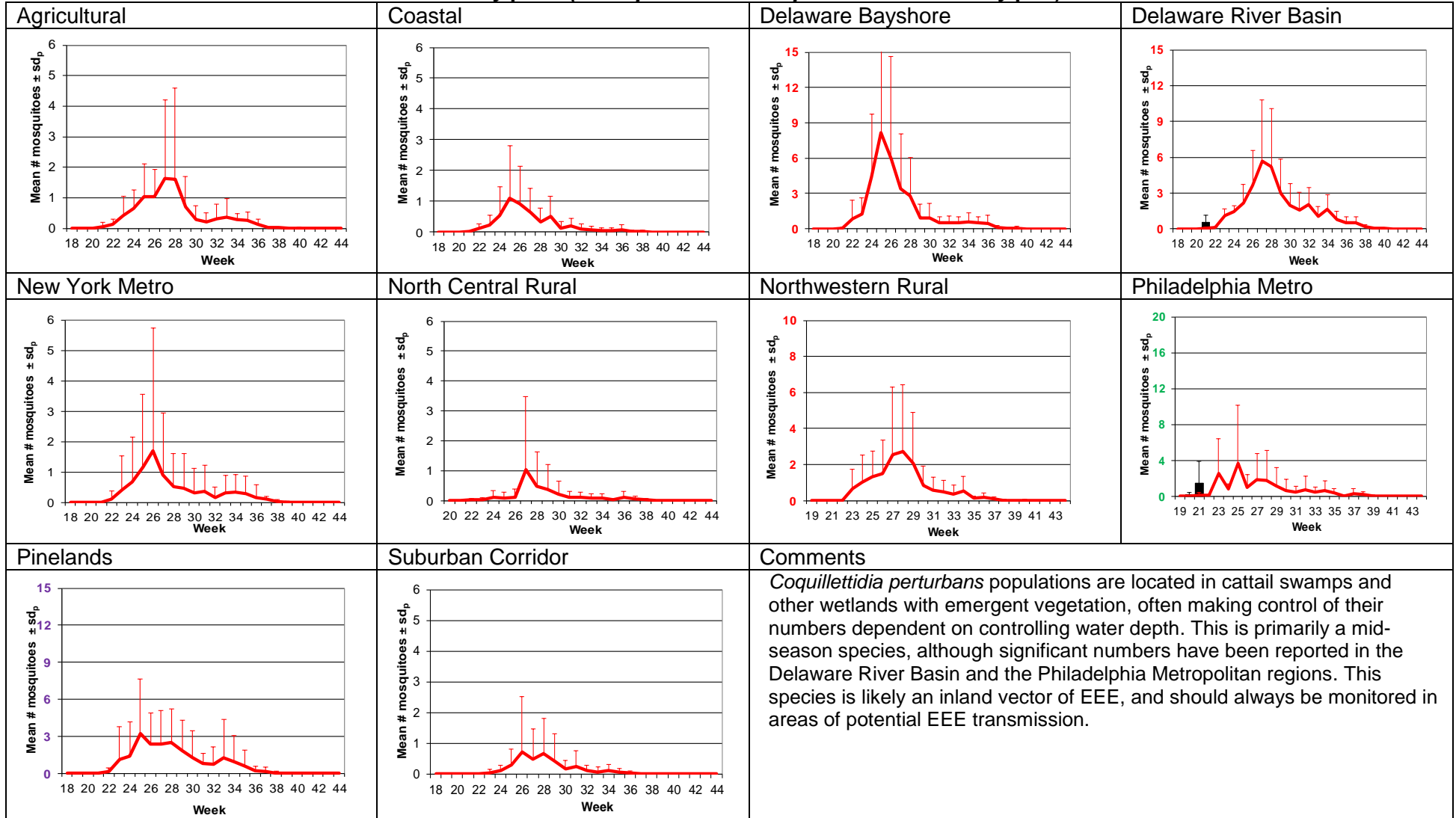


Aedes sollicitans - Salt Floodwater Species Multivoltine Aedine (Ae. sollicitans Type)



Coquillettidia perturbans

Monotypic (*Coquillettidia perturbans* Type)

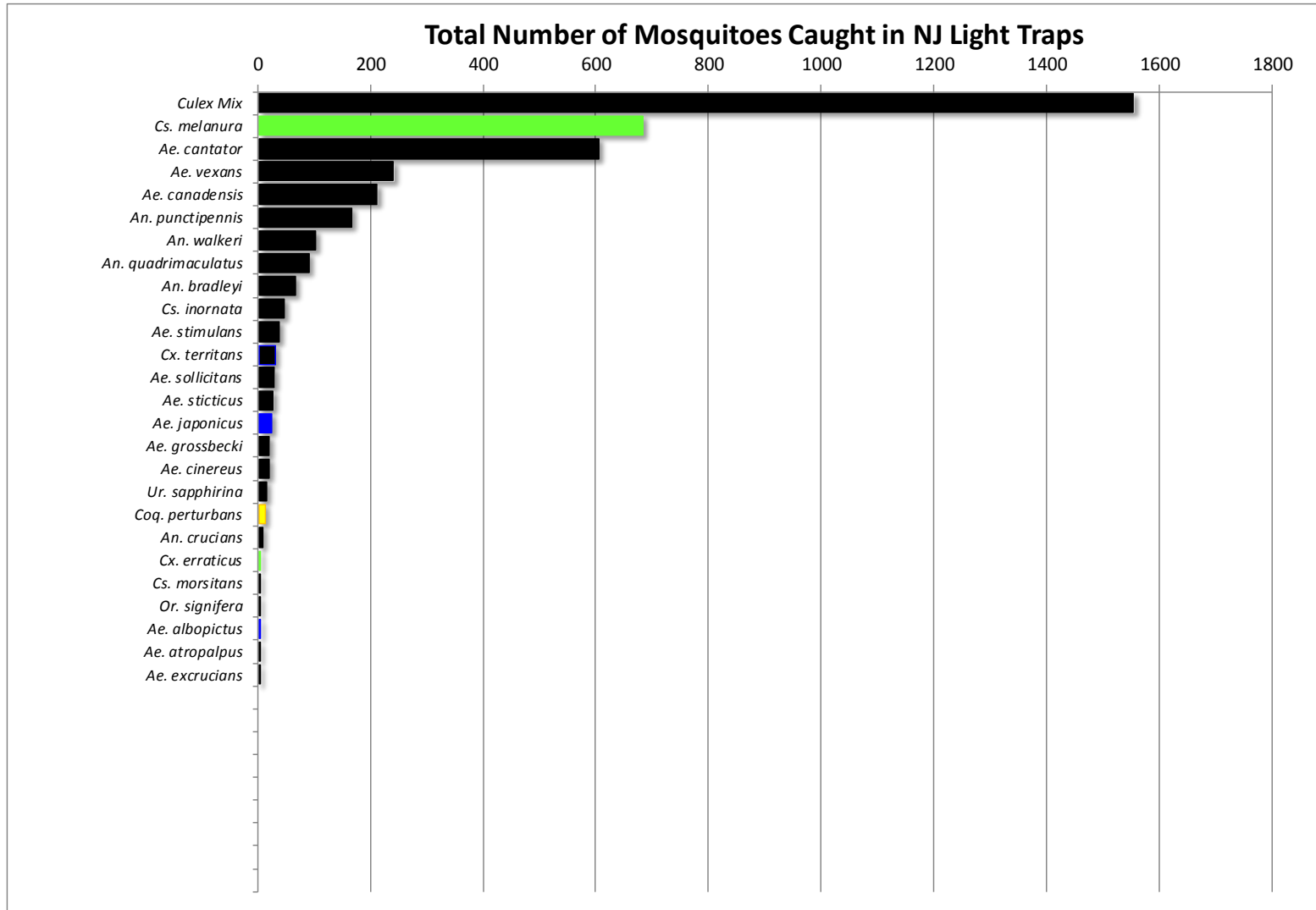


WNV

EEE

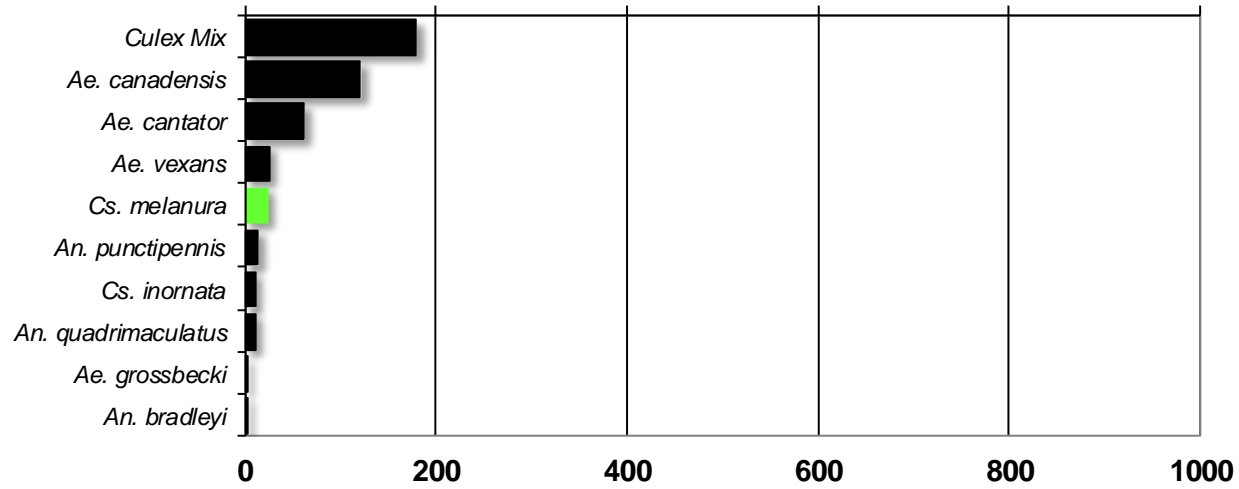
Top Ten Mosquito Species/Region - ■ *Ae. albopictus*, ■ *Ae. japonicus* (invasives); ■ *Cs. melanura* or *Cx. erraticus* ■ *Coq. perturbans*

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



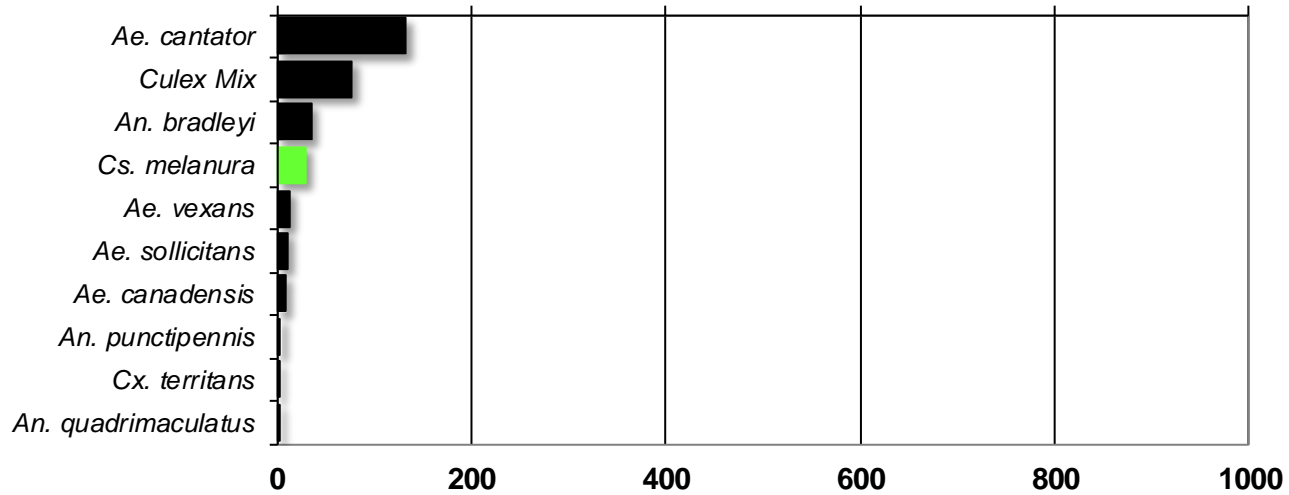
Agricultural

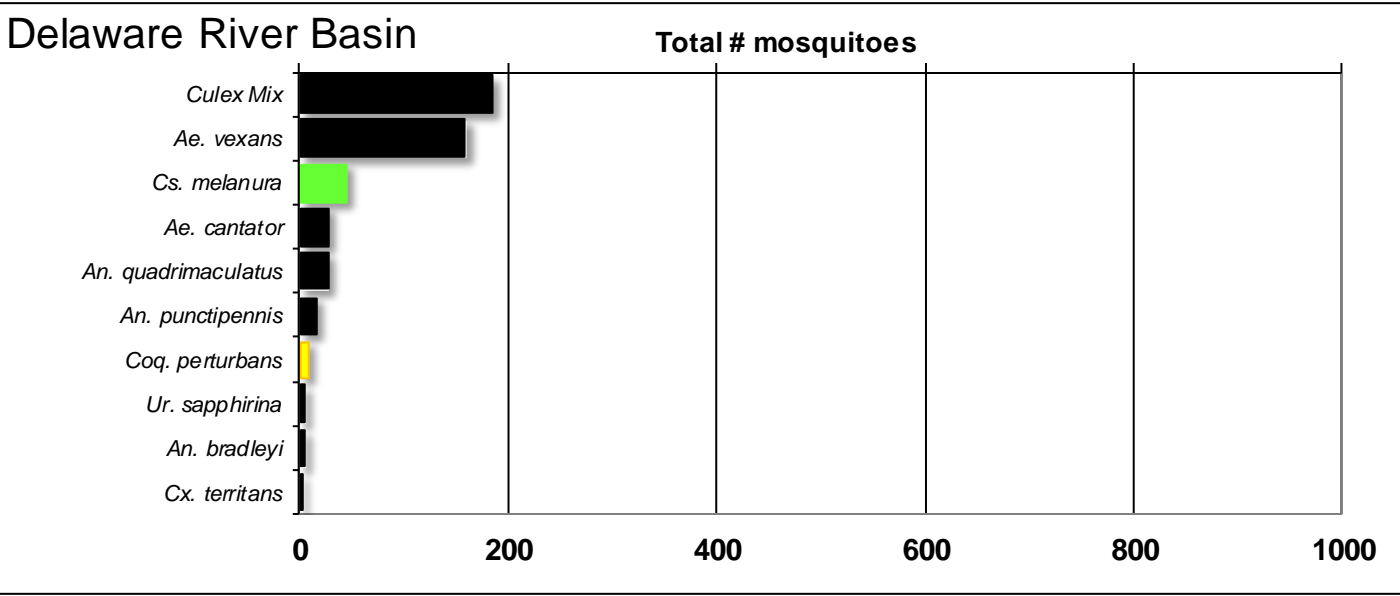
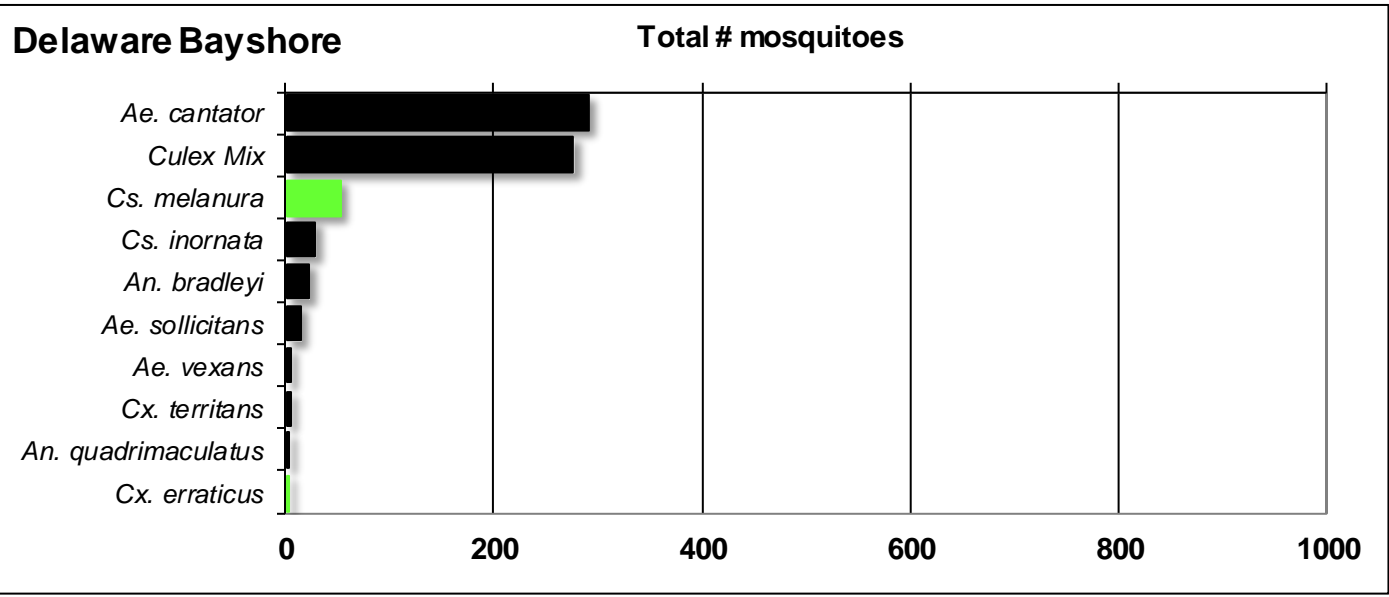
Total # mosquitoes

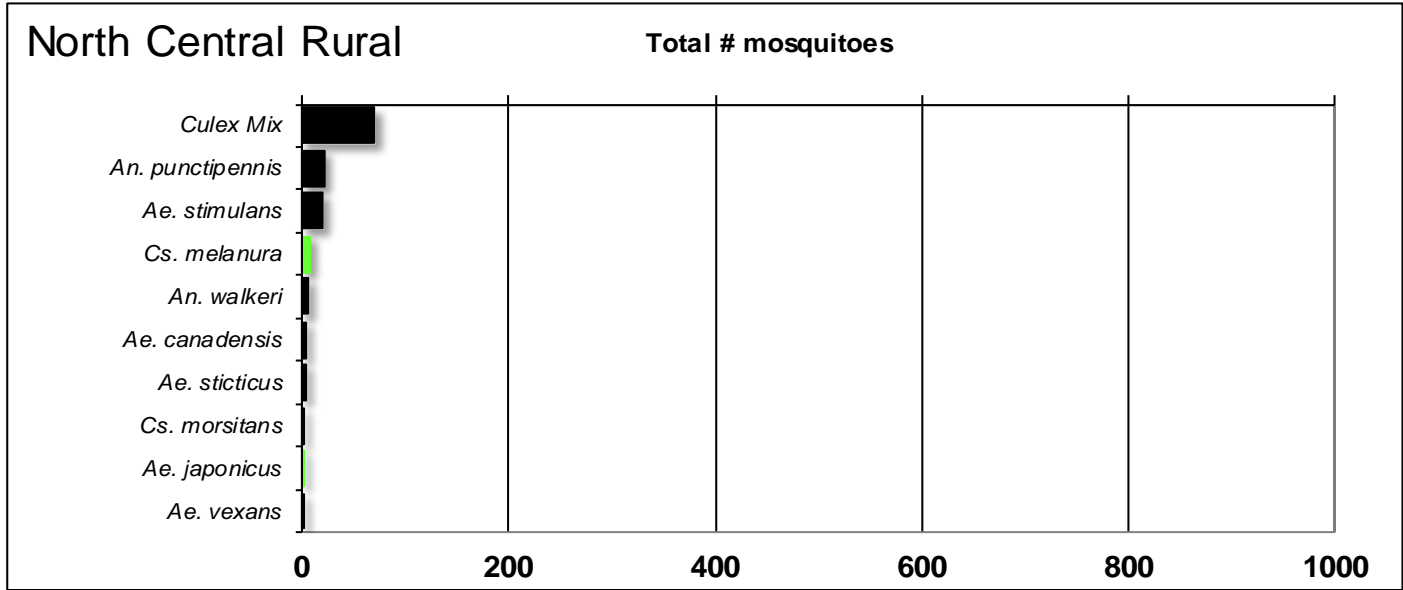
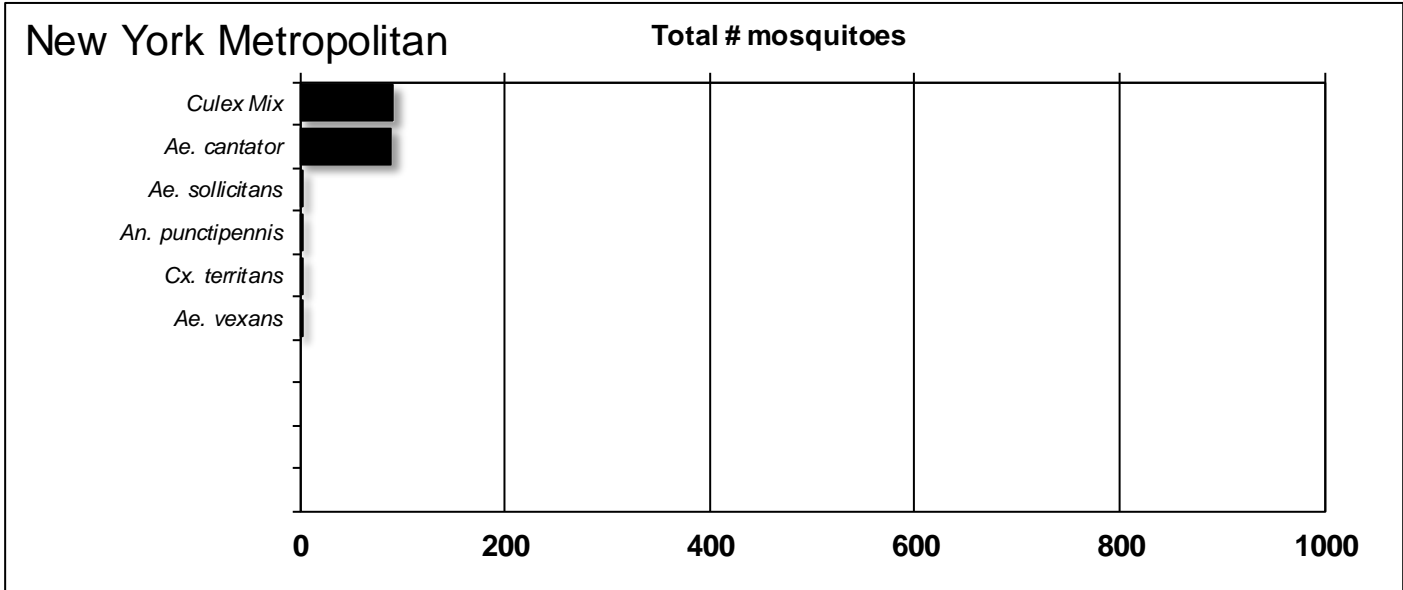


Coastal

Total # mosquitoes

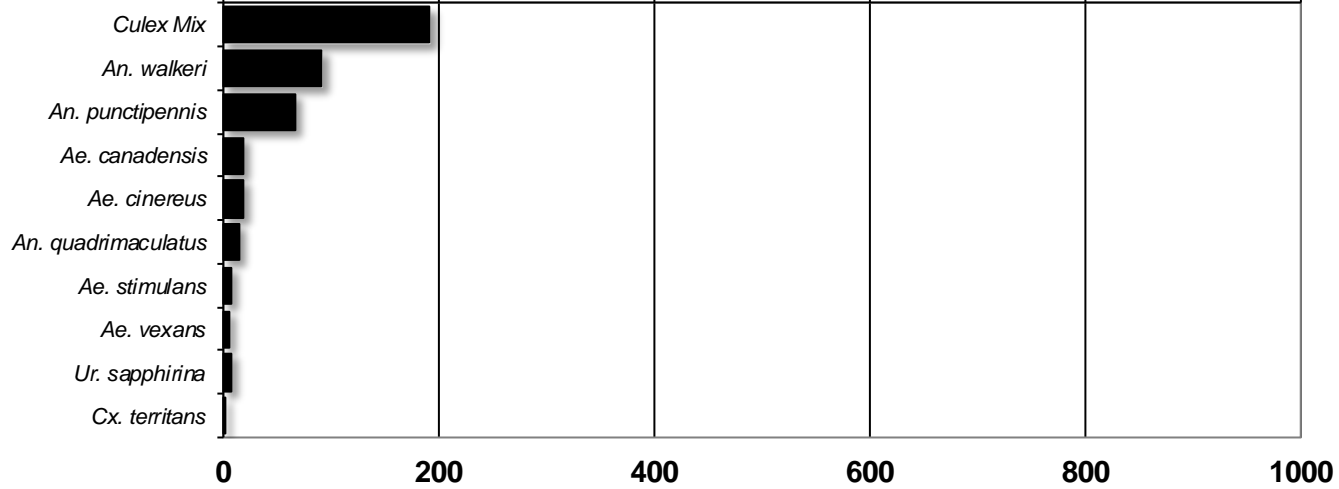






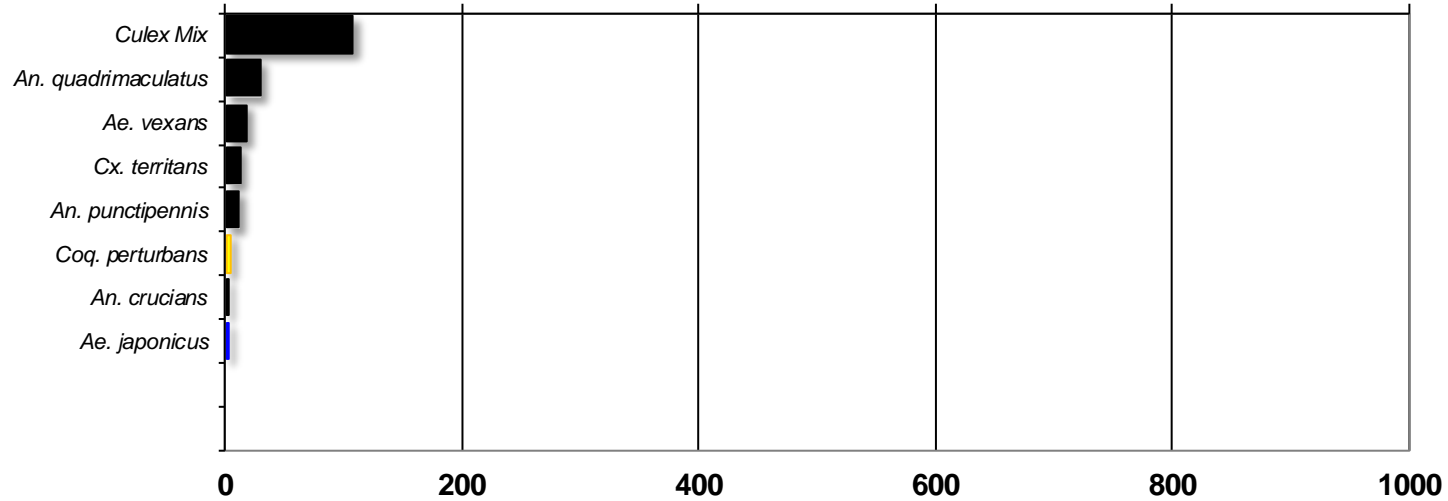
Northwest Rural

Total # mosquitoes



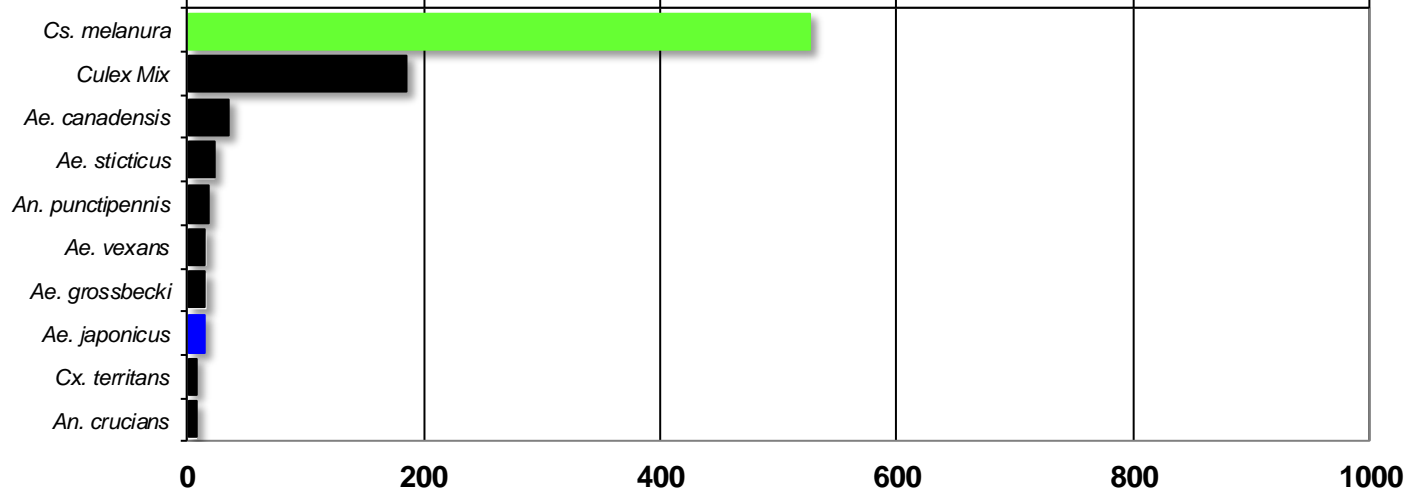
Philadelphia Metropolitan

Total # mosquitoes



Pinelands

Total # mosquitoes



Suburban Corridor

Total # mosquitoes

