

NEW JERSEY ADULT MOSQUITO SURVEILLANCE
Report for 6 September to 12 September 2009, CDC Weeks 36
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This New Jersey Agricultural Experiment Station report is supported by Rutgers University, Hatch funds, funding from the NJ State Mosquito Control Commission and with the participation of the 21 county mosquito control agencies of New Jersey.

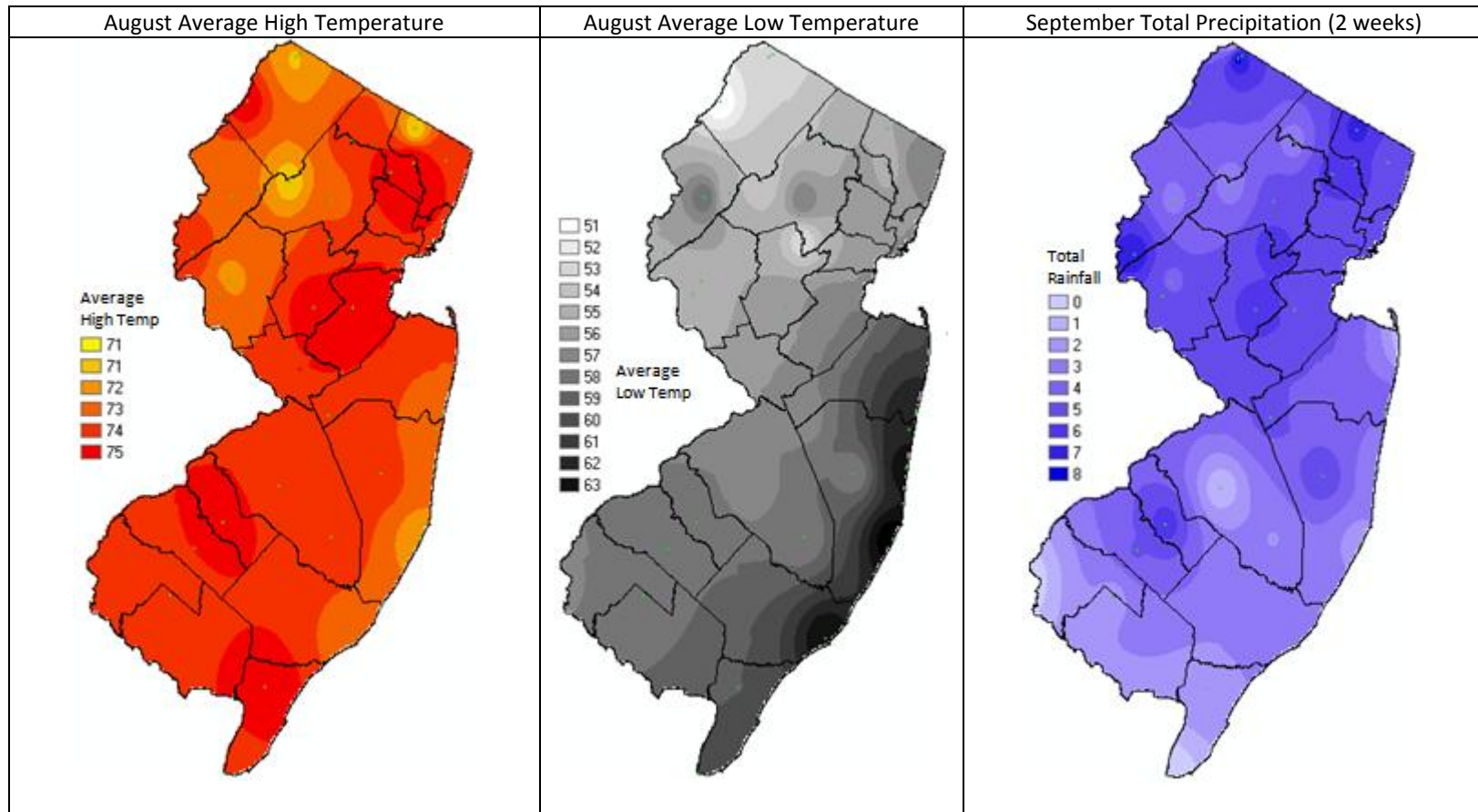
Summary table – Week 36

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	1.54	0	0.90	3.81	0	0.00	0.04	0	0.02	2.57	0
Coastal	0.76	2.27	0	1.14	3.26	0	0.00	0.82	0	1.67	9.48	0
Delaware Bayshore	0.00	0.90	0	0.00	13.06	0	0.00	0.28	0	0.00	7.28	0
Delaware River Basin	1.29	4.70	0	1.14	8.24	0	0.00	0.19	0	0.00	0.00	0
New York Metro	2.23	1.96	1	4.97	7.69	0	0.09	0.15	0	0.19	0.74	0
North Central Rural	0.00	0.38	0	0.00	0.58	0	0.00	0.01	0	0.00	0.00	0
Northwest Rural	3.37	3.26	1	3.06	3.04	0	0.00	0.04	0	0.00	0.00	0
Philadelphia Metro	3.26	9.19	0	0.79	3.33	0	0.00	0.19	0	0.00	0.00	0
Pinelands	0.44	1.37	0	0.49	1.45	0	0.05	0.14	0	0.01	0.10	0
Suburban Corridor	0.44	2.11	0	0.39	2.31	0	0.01	0.26	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.

State Summary: *Aedes vexans* showed increased activity over historical trends in the New York Metropolitan and Northwest Rural regions. This is the first week where *Culex* species were not in greater abundance than historical data. *Coquillettidia perturbans* has declined significantly throughout much of New Jersey and *Aedes sollicitans* is also in significant decline.

Climate Factors

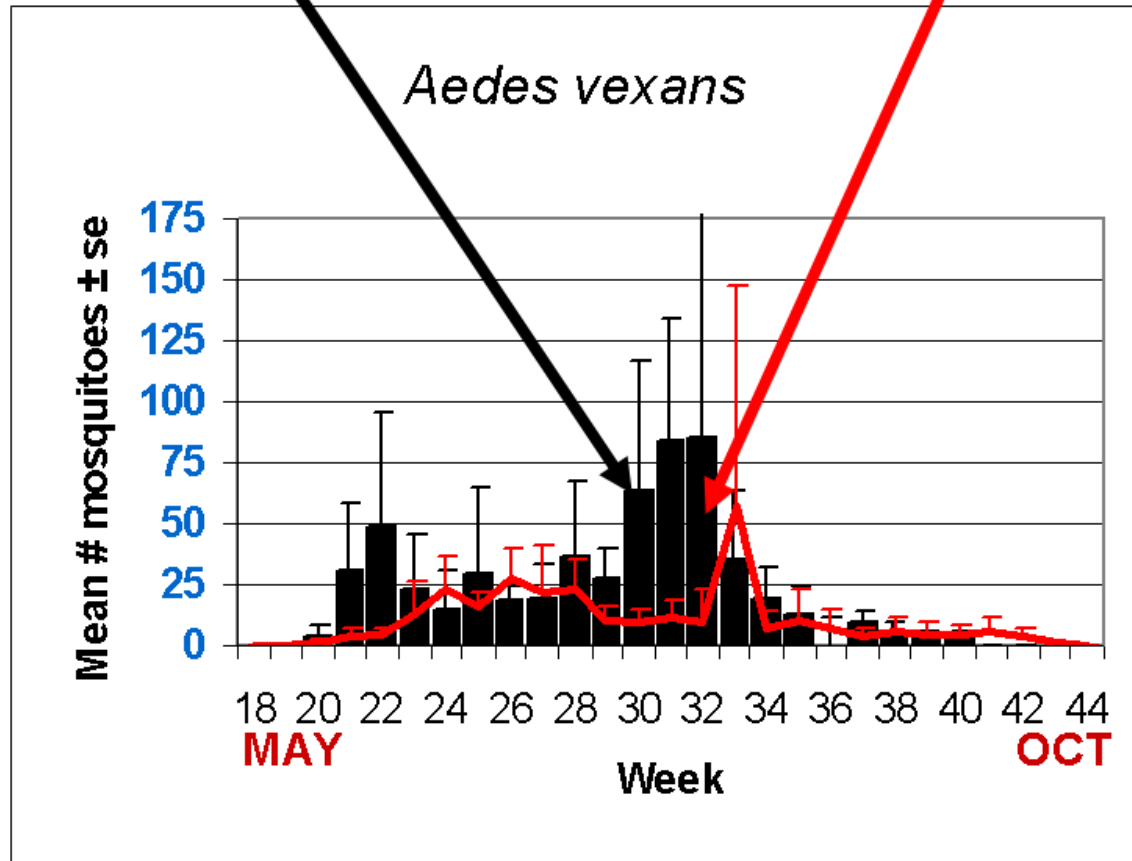


The three figures show the interpolation of average maximum and minimum temperature and total precipitation for the first two weeks of September in New Jersey. Data points are from 35 weather stations maintained through the New Jersey Weather & Climate Network and the State Climatologist. Interpolation between points was performed using ArcMap 9.2.

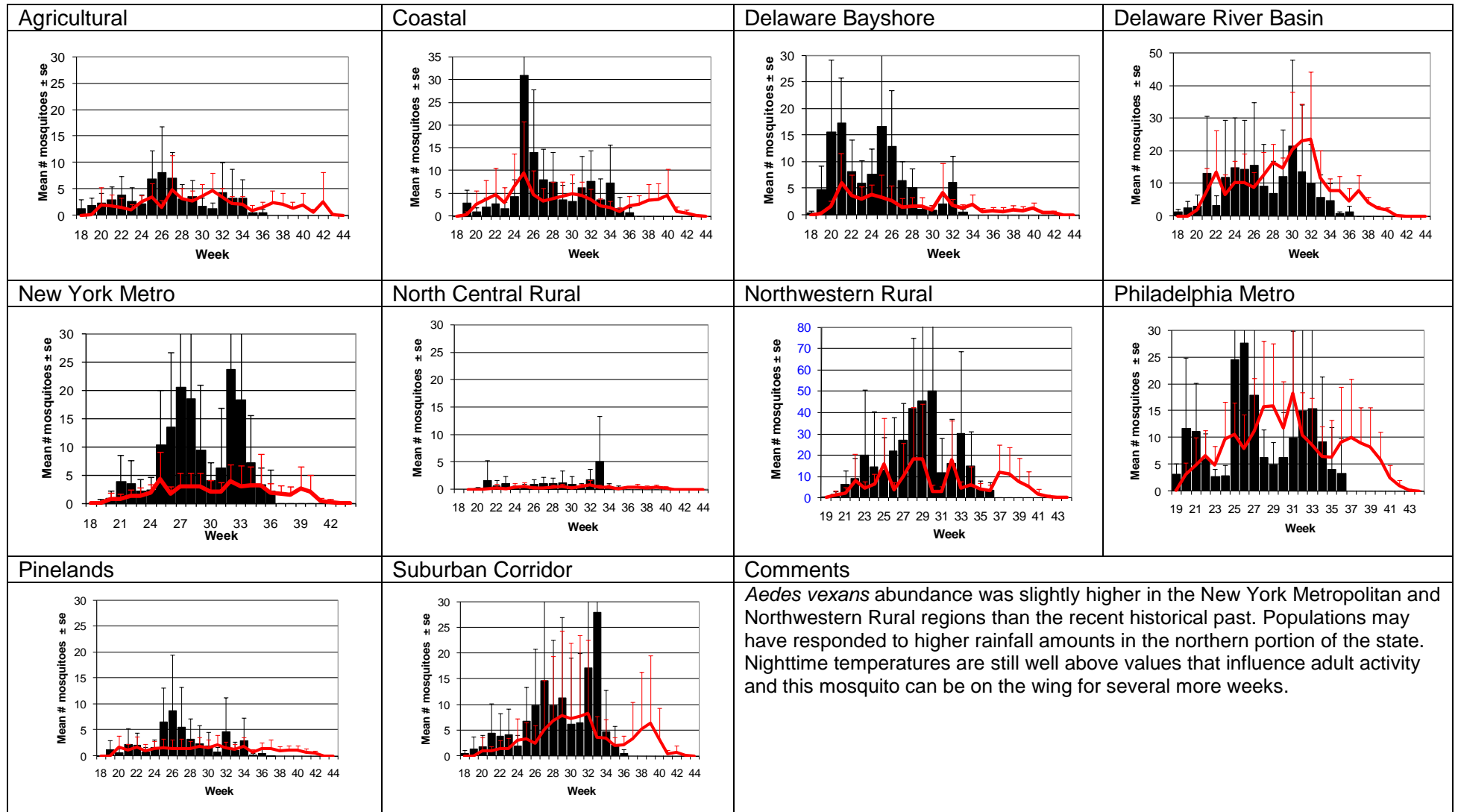
For the first two weeks in September, average high temperatures were highest through the suburban corridor and parts of Camden, Gloucester and Cape May counties. Average low temperatures were again highest along the coastal region. The northern portion of New Jersey experienced higher rainfall. In general, it was warmest in the suburbs during the day, warmer along the coast at night and wetter in the north.

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, Camden, Monmouth, Ocean, Salem, Somerset, Sussex, Union and Warren counties. Note: County data is sent in at a variety of times during the week.

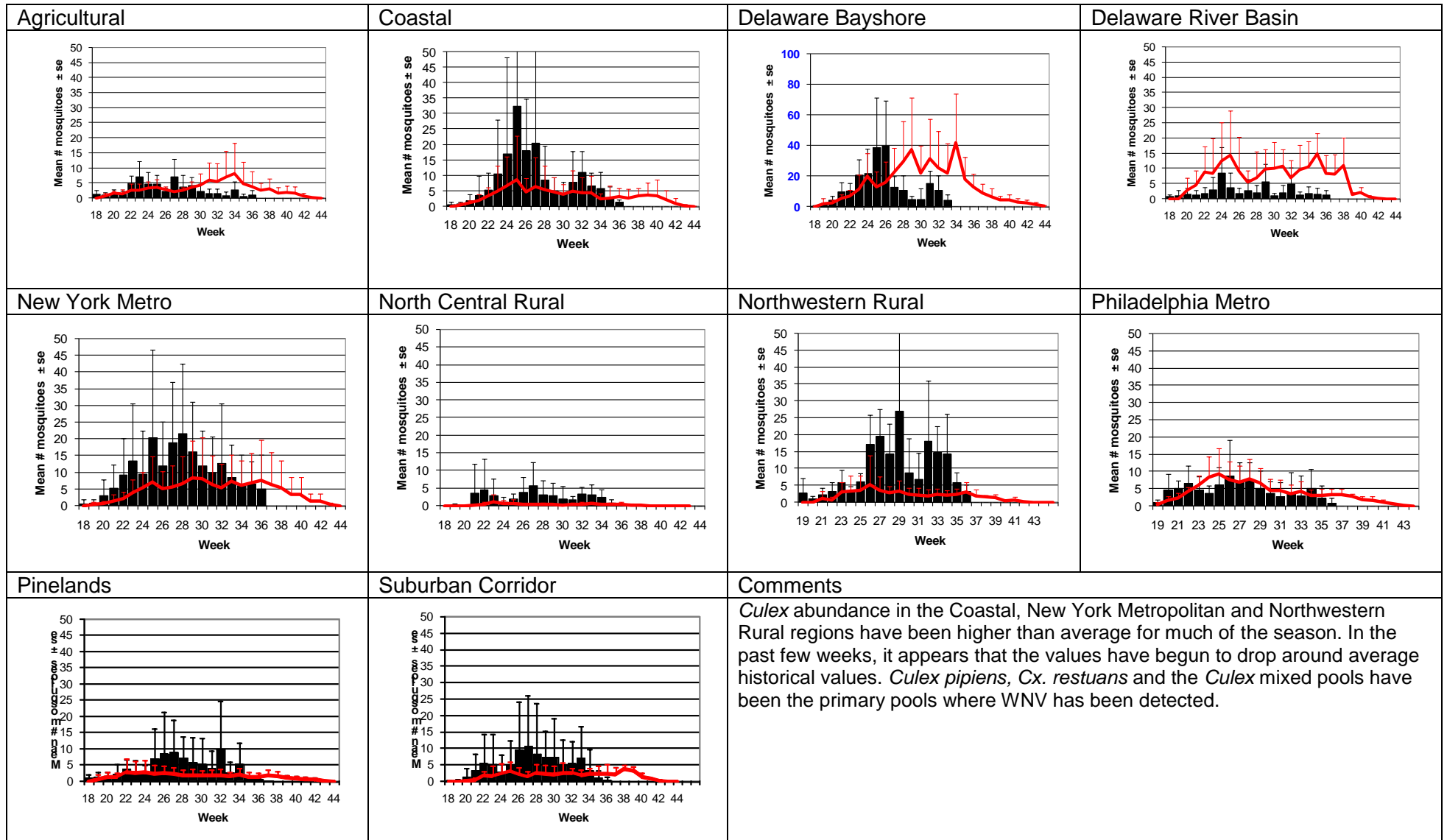
Weekly Means Against 5-year Average



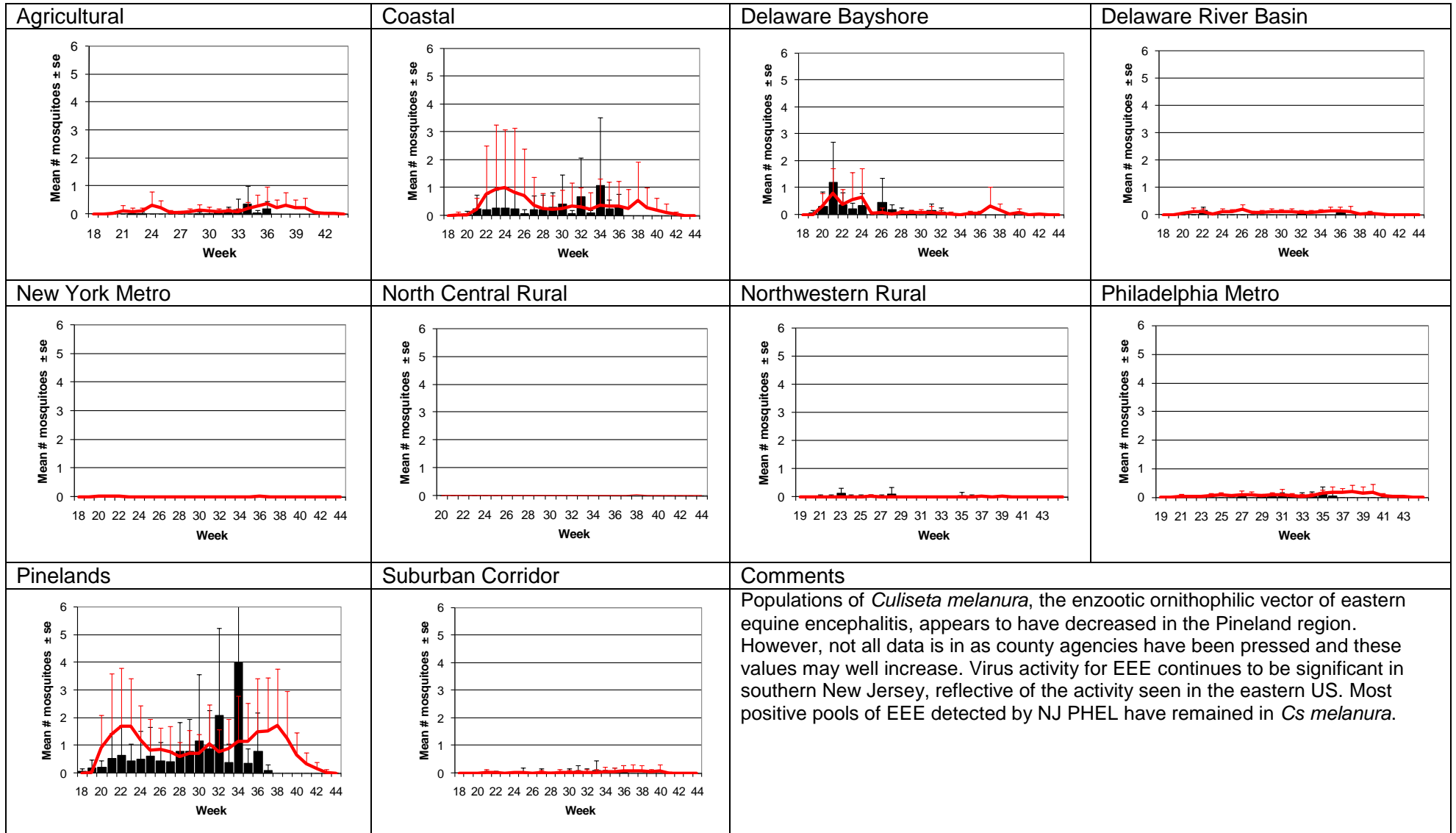
Aedes vexans - Fresh Floodwater Species Multivoltine Aedine (Ae. vexans Type)



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



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



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

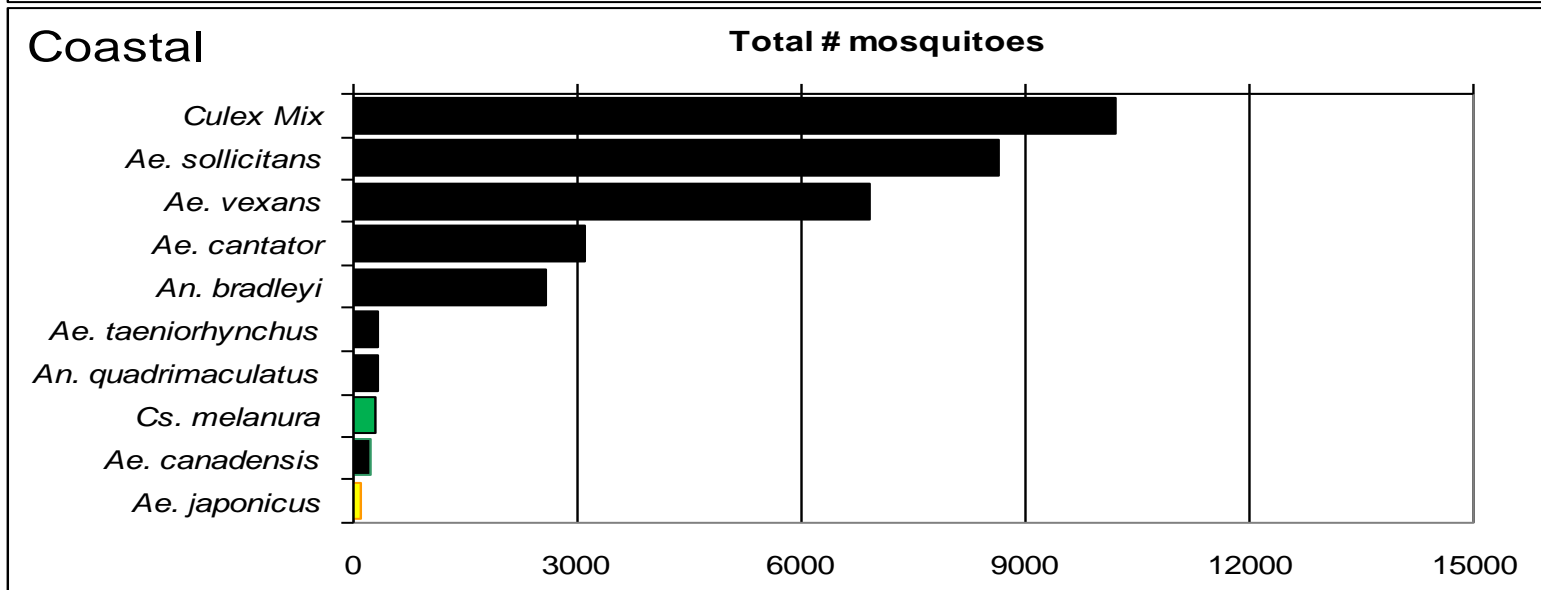
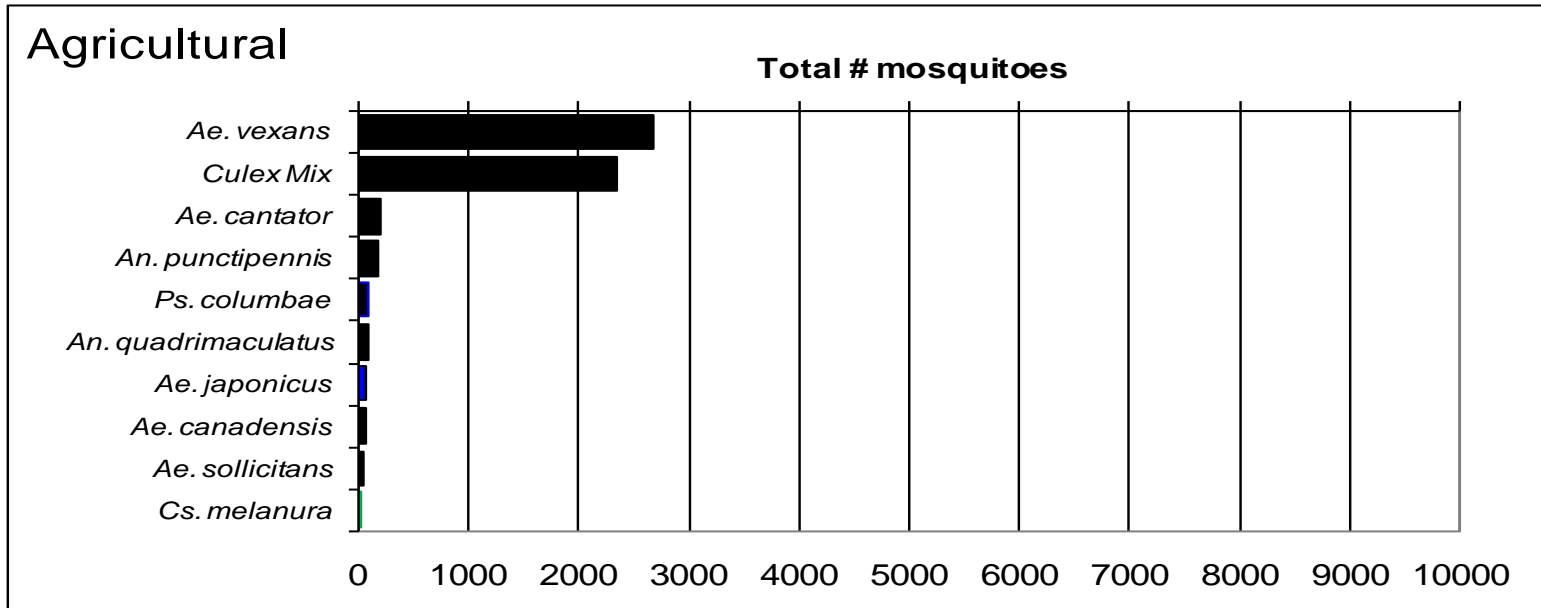
<p>Agricultural</p>	<p>Coastal</p>	<p>Delaware Bayshore</p>	<p>Delaware River Basin</p>
<p>New York Metro</p>	<p>North Central Rural</p>	<p>Northwestern Rural</p>	<p>Philadelphia Metro</p>
<p>Pinelands</p>	<p>Suburban Corridor</p>	<p>Comments</p> <p><i>Aedes sollicitans</i> populations continue to wane. In the Delaware River Basin, <i>Ae. sollicitans</i> can be active, although this species is in number a magnitude smaller than along the coast or in the Delaware Bayshore region. While this species apparently shows a wide range of acceptable saline habitat, these habitats may be marginal in comparison to flying an extended distance for better habitat.</p> <p>Next Full Moon: 4 October.</p>	

WNV

EEE

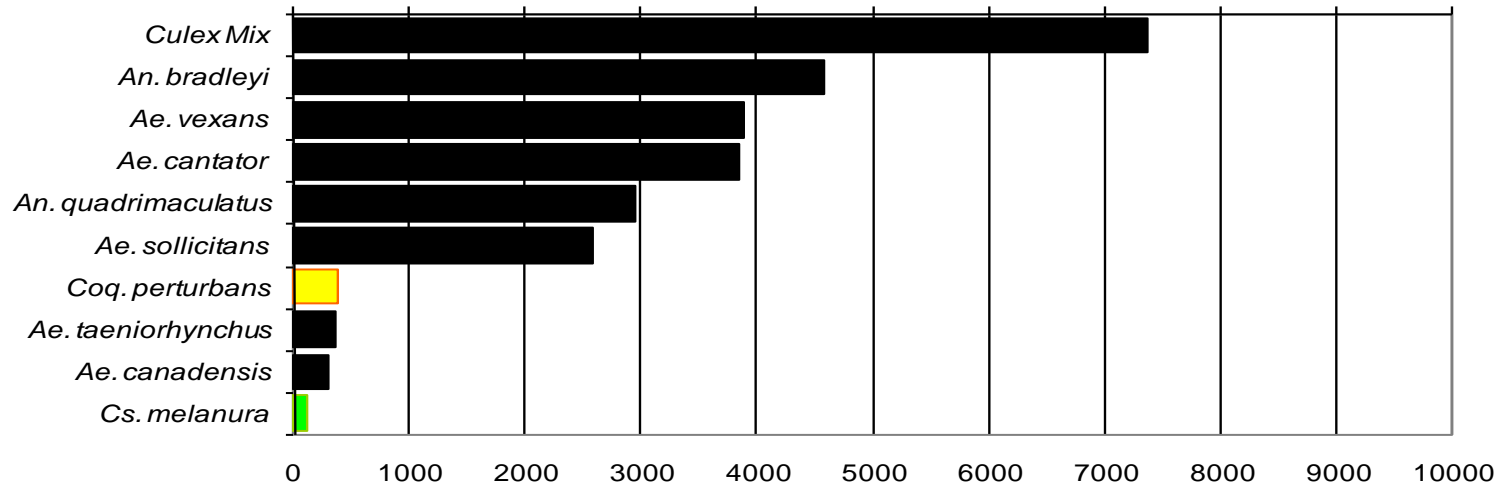
Top Ten Mosquito Species/Region - ■ *Ae. albopictus*, ■ *Ae. japonicus* (invasives); ■ *Cs. melanura* or *Cx. erraticus* ■ *Coq. perturbans*

Note: In early season when fewer species are caught, graphs may show less than ten species listed.



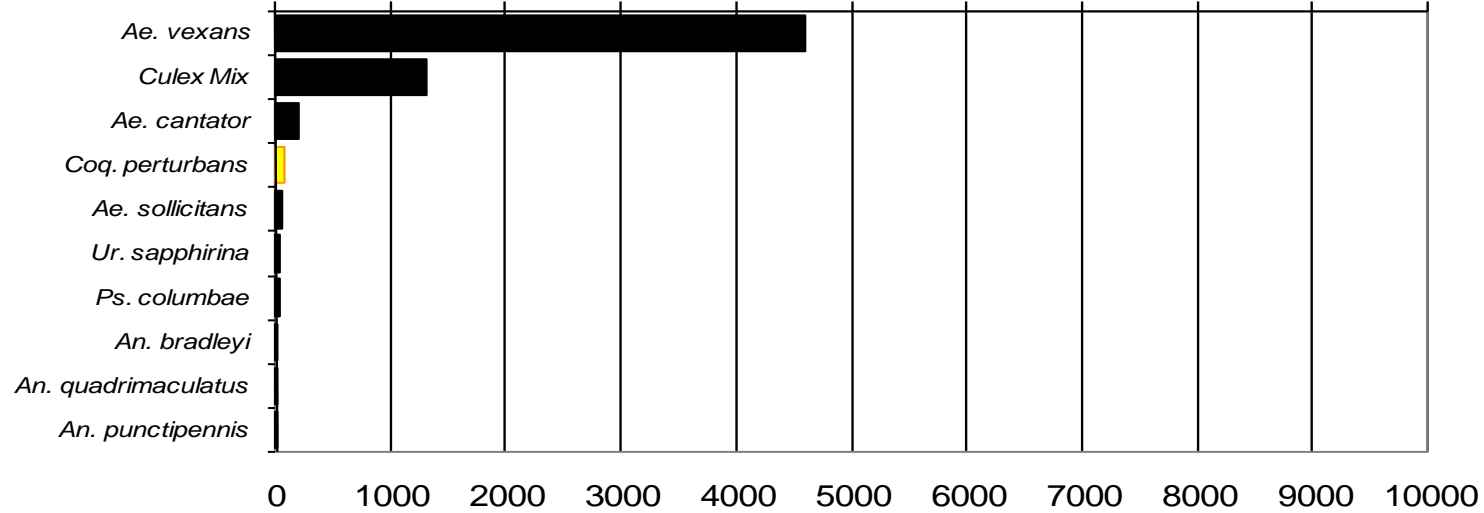
Delaware Bayshore

Total # mosquitoes



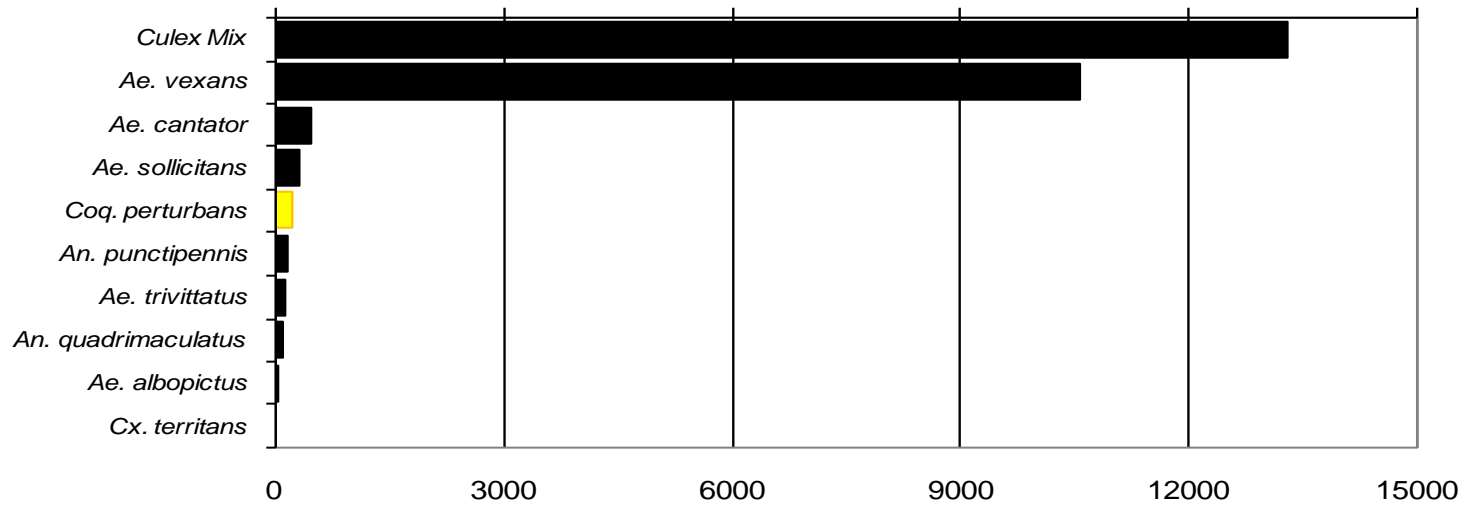
Delaware River Basin

Total # mosquitoes



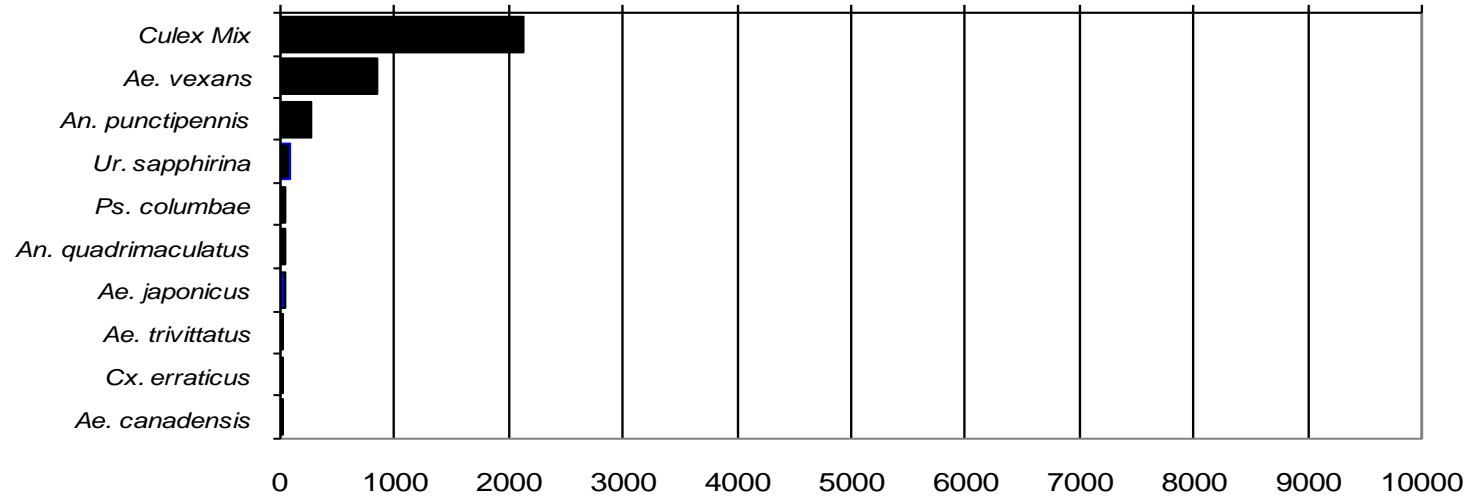
New York Metropolitan

Total # mosquitoes



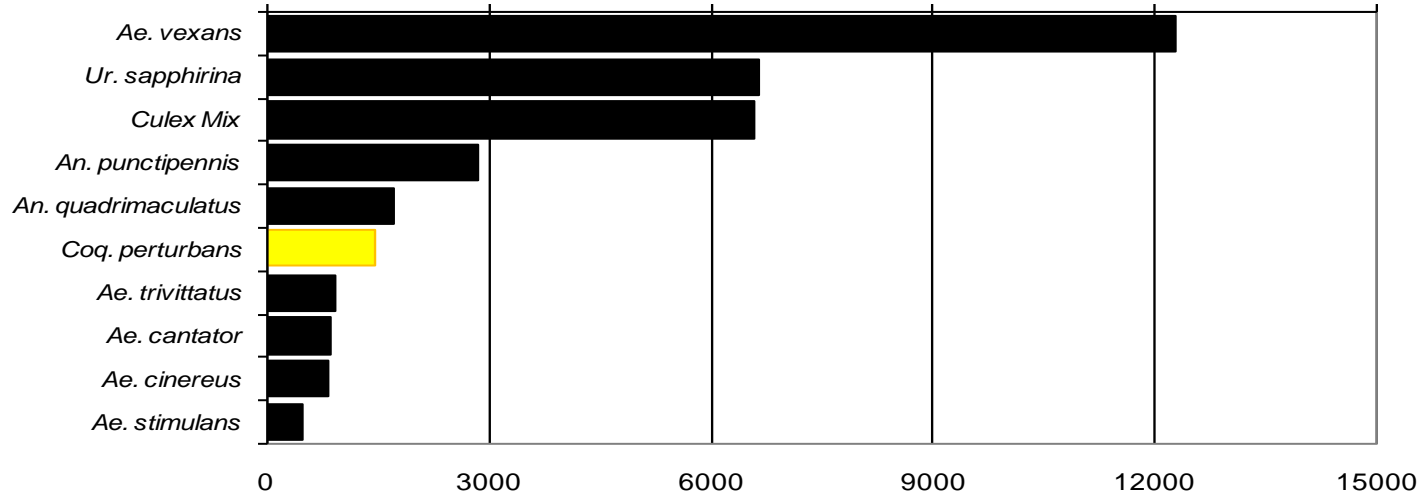
North Central Rural

Total # mosquitoes



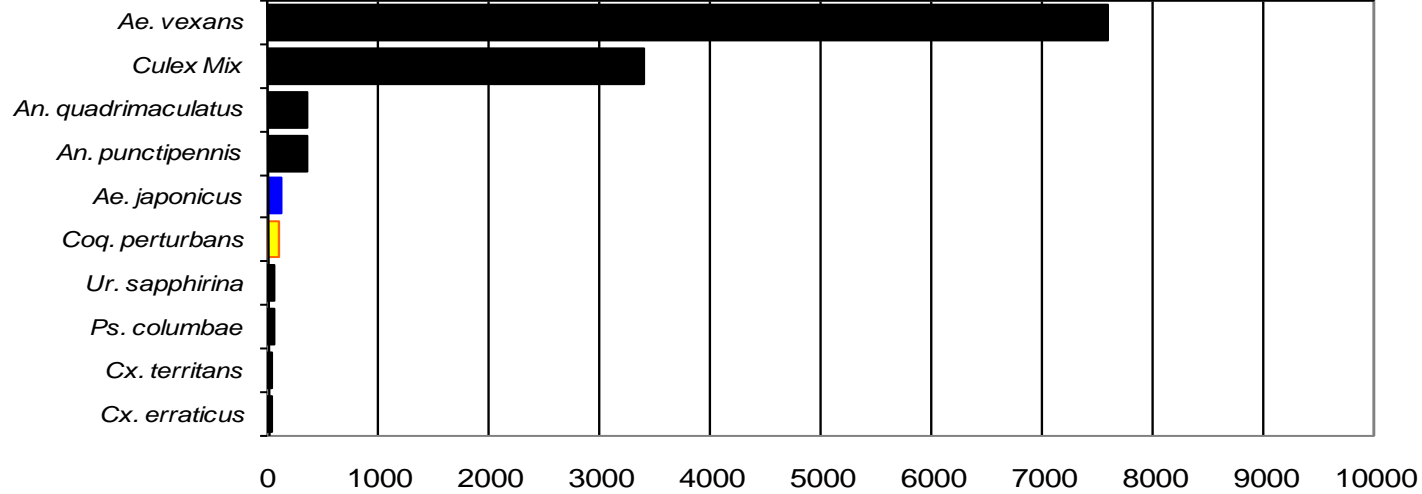
Northwest Rural

Total # mosquitoes



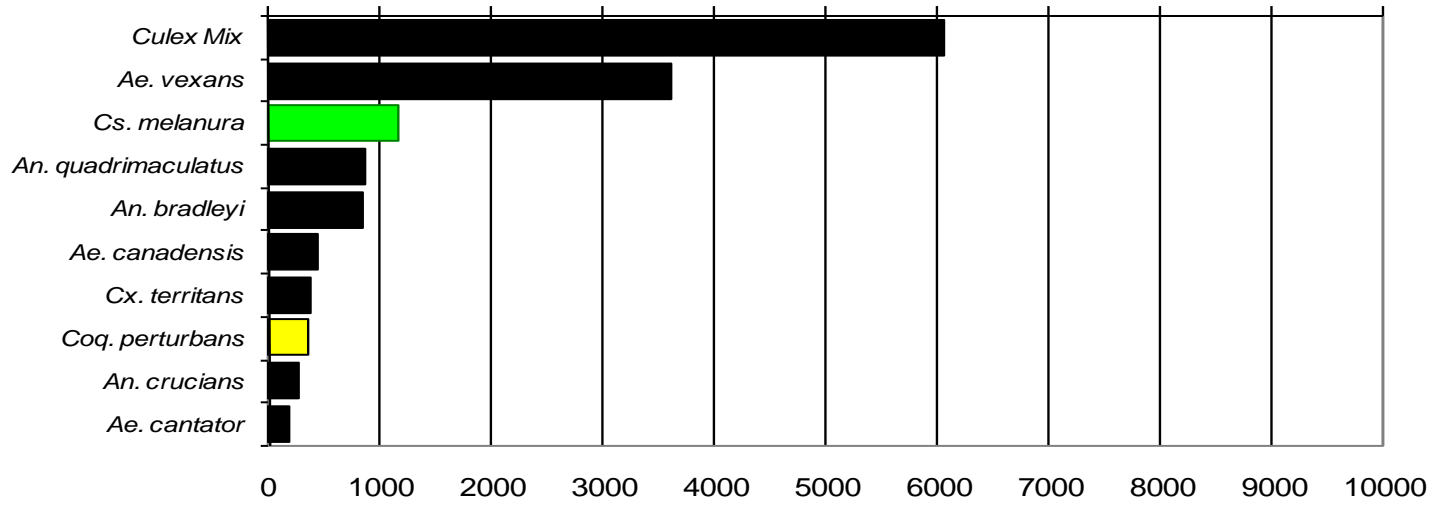
Philadelphia Metropolitan

Total # mosquitoes



Pinelands

Total # mosquitoes



Suburban Corridor

Total # mosquitoes

