

NEW JERSEY ADULT MOSQUITO SURVEILLANCE

Report for 12 July to 18 July 2009, CDC Weeks 28
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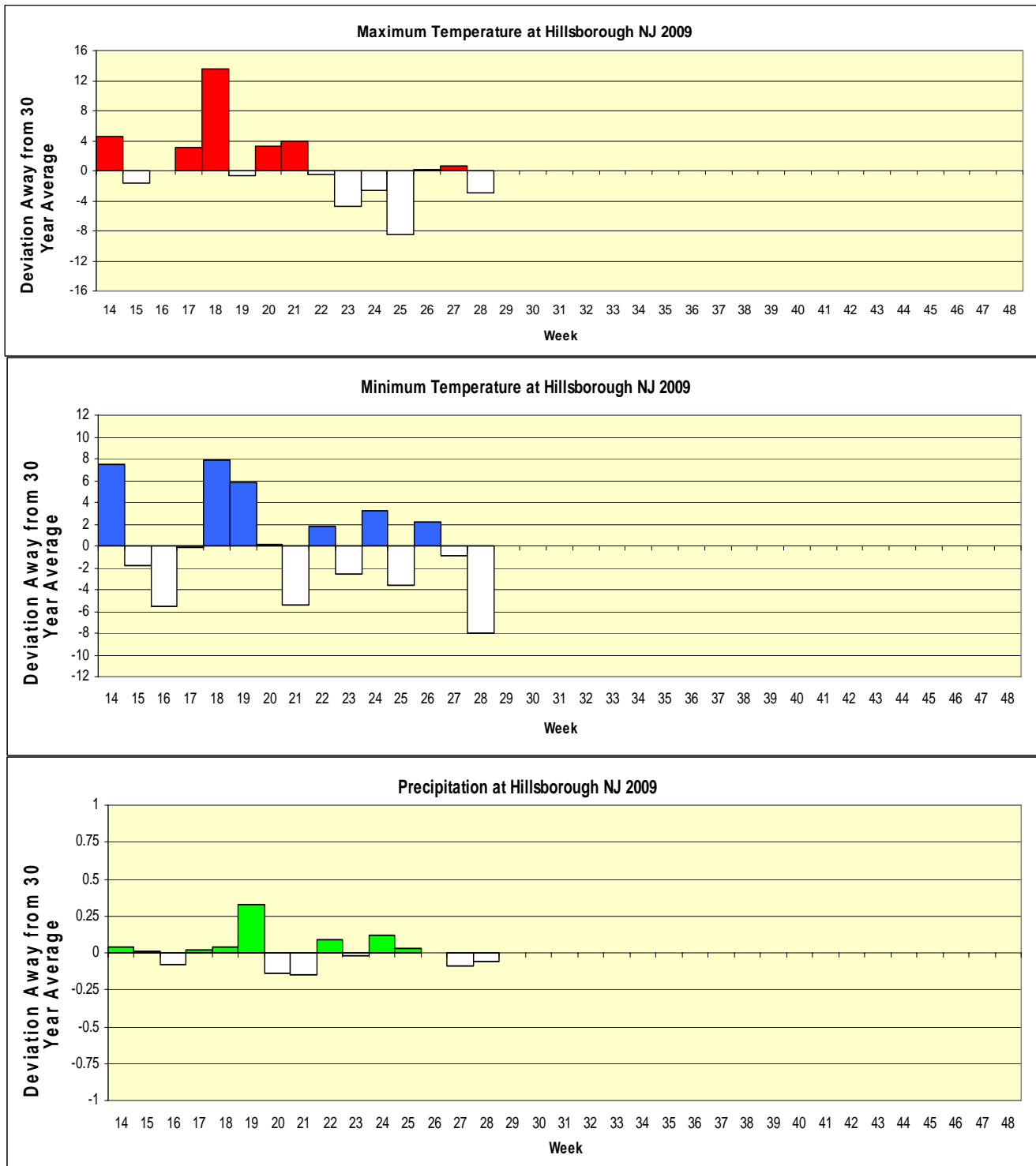
Summary table – Week 28

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	1.38	3.21	0	1.38	2.77	0	0.02	0.85	0	0.00	0.15	0
Coastal	5.06	3.80	1	4.38	5.58	0	0.00	1.83	0	4.52	10.77	0
Delaware Bayshore	0.26	1.78	0	1.26	29.58	0	0.10	4.06	0	0.00	28.47	0
Delaware River Basin	0.00	16.44	0	0.00	6.81	0	0.00	0.47	0	0.00	0.03	0
New York Metro	2.21	3.06	0	6.47	6.50	0	0.03	0.26	0	0.10	0.38	0
North Central Rural	0.31	0.48	0	2.14	0.55	4	0.00	0.07	0	0.00	0.00	0
Northwest Rural	32.51	18.21	2	13.17	2.94	4	4.20	0.68	4	0.00	0.00	0
Philadelphia Metro	2.33	15.91	0	2.64	7.92	0	0.00	1.02	0	0.00	0.00	0
Pinelands	1.71	1.45	1	2.61	1.81	1	0.18	2.39	0	0.04	0.11	0
Suburban Corridor	1.85	6.86	0	1.81	2.69	0	0.22	1.35	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: This week appears that *Aedes vexans* and *Culex* species populations have decreased. However, the number of counties reporting data (10) for the current week is low and the previous week may be a better indicator of mosquito populations. Data delays produce paradoxical results in that while numbers appear low, counties are busy with high populations. Population graphs from both *Aedes vexans* and *Culex* species (below) suggest that mosquito populations for both species are higher than average in numerous regions.

Climate Deviations

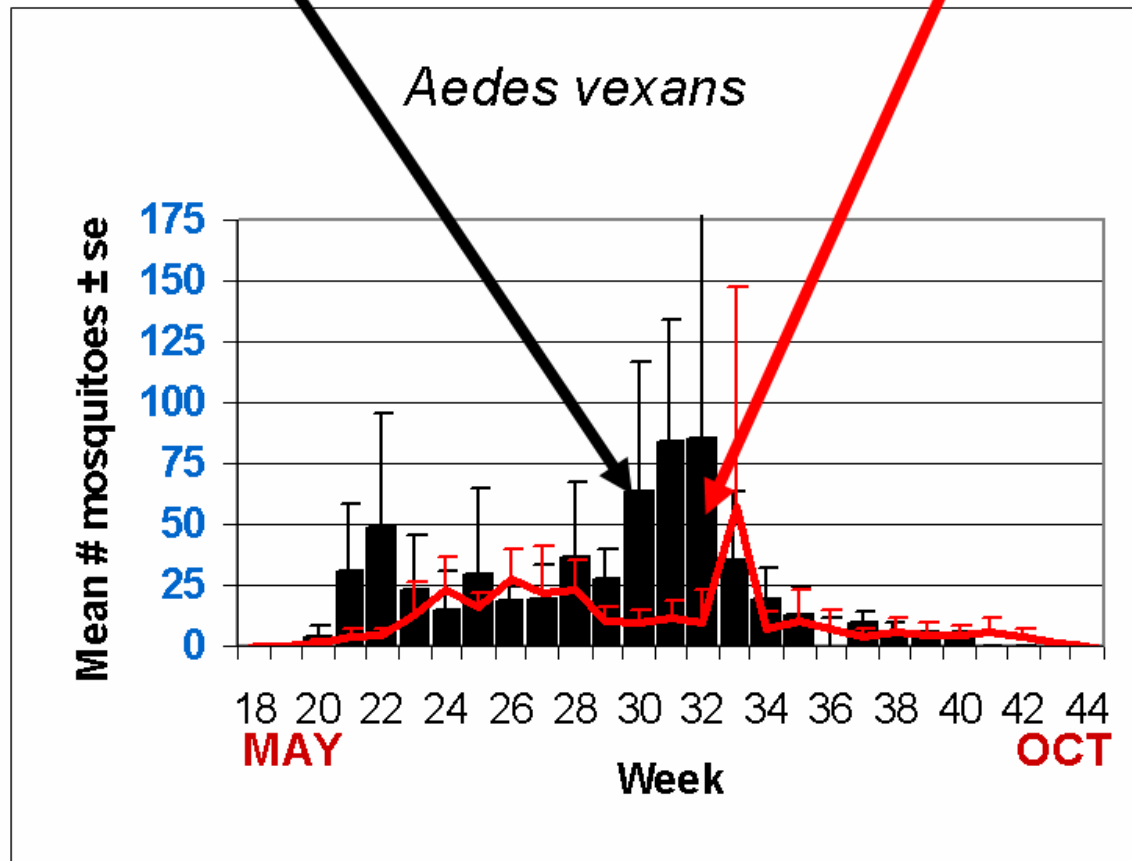


The figures show the average maximum temperature, minimum temperature and precipitation deviations from 30 year averages. Current data are from the Hillsborough NJ weather station (a station close to central NJ which recorded all three parameters and was available online at the NJ state climatologist) while historical data was from the New Brunswick weather station. Color bars above the zero line indicate warmer maximum or minimum temperatures and wetter conditions while white bars indicate cooler temperatures and dryer conditions.

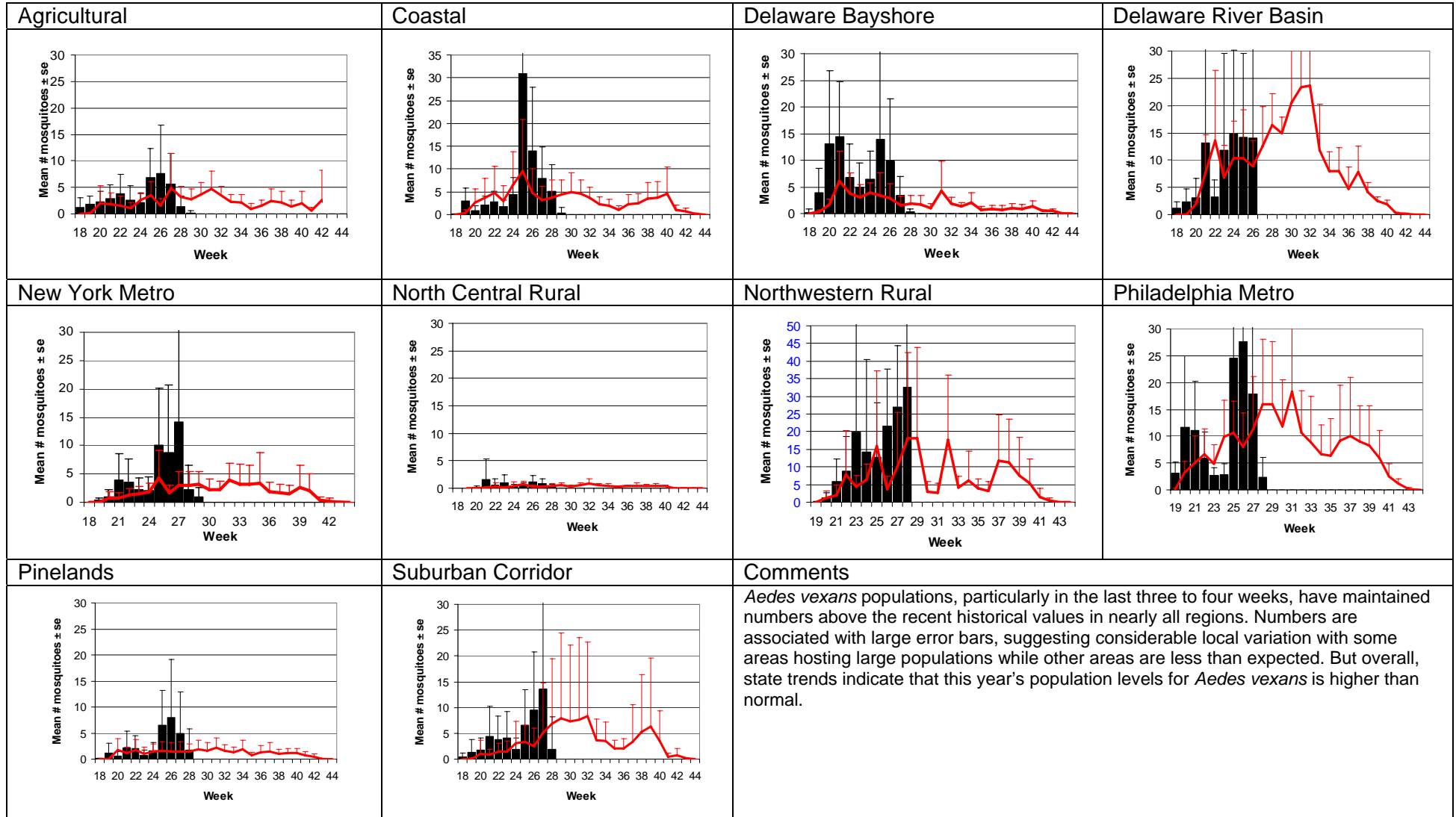
Data from: <http://climate.rutgers.edu/njwxnet/index.php>

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, Camden, Cape May, Hudson, Hunterdon, Monmouth, Morris, Ocean, Somerset, Sussex and Warren counties. Note: County data is sent in at a variety of times during the week.

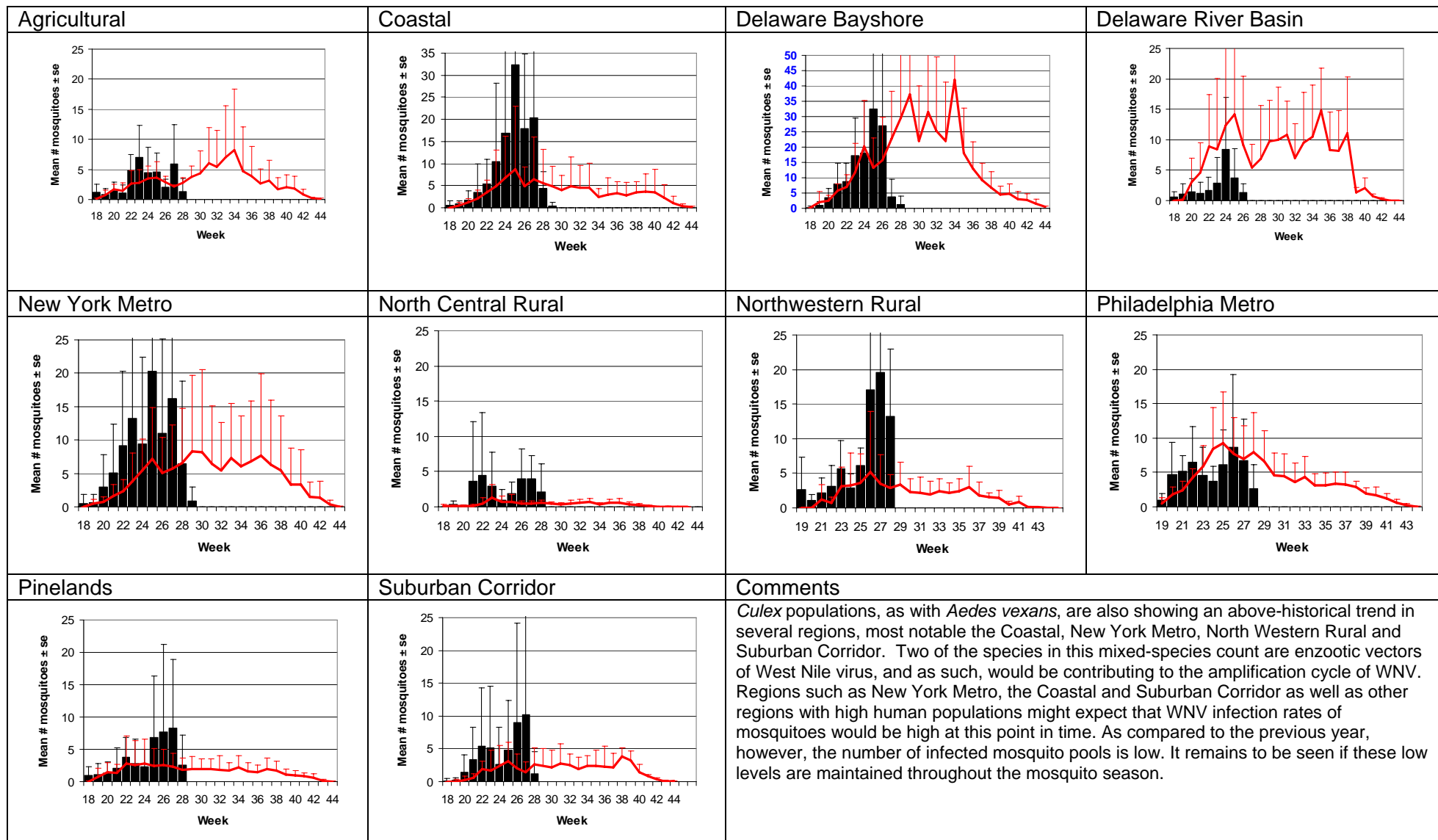
Weekly Means Against 5-year Average



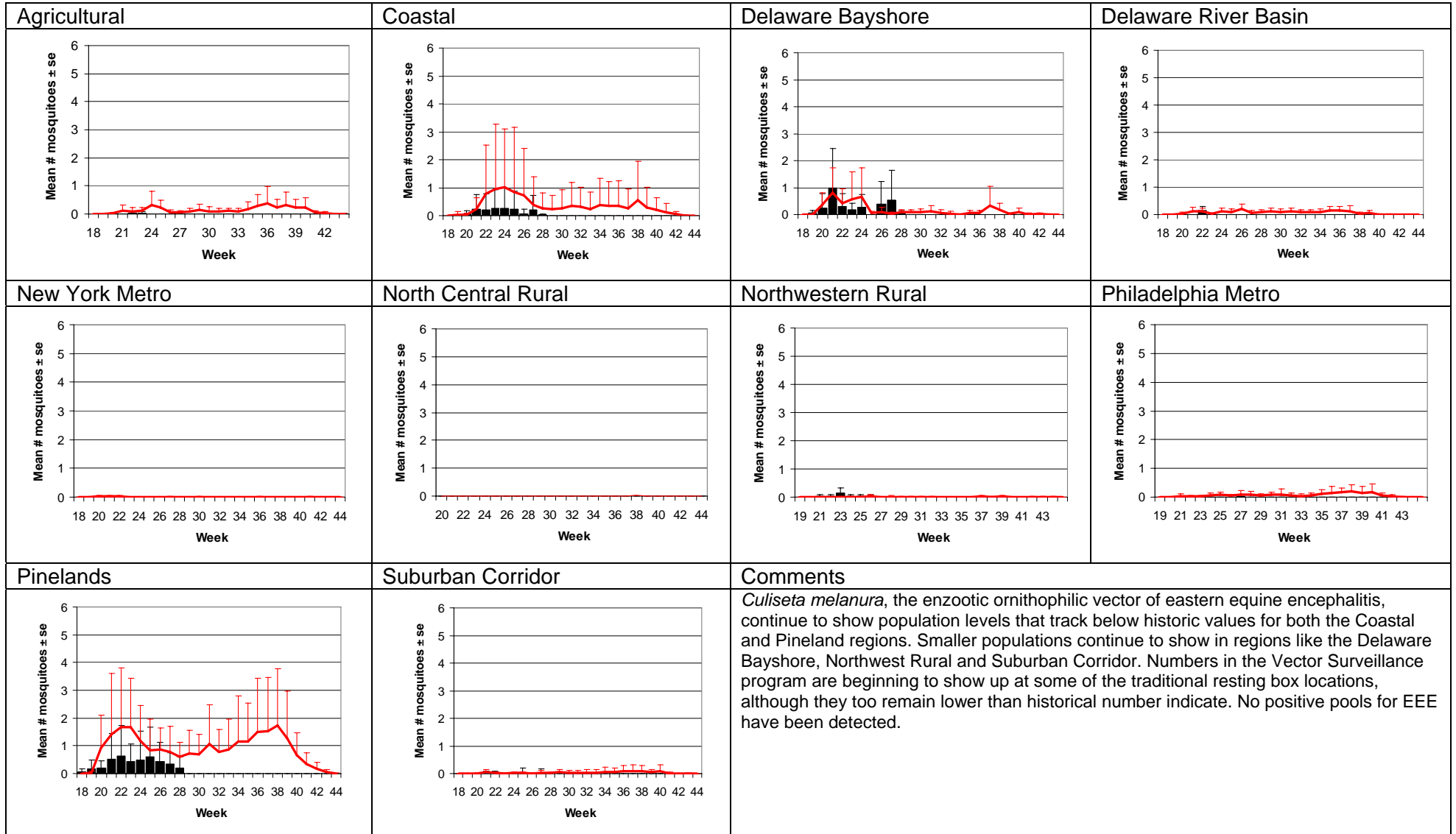
Aedes vexans - Fresh Floodwater Species Multivoltine Aedine (*Ae. vexans* Type)



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)

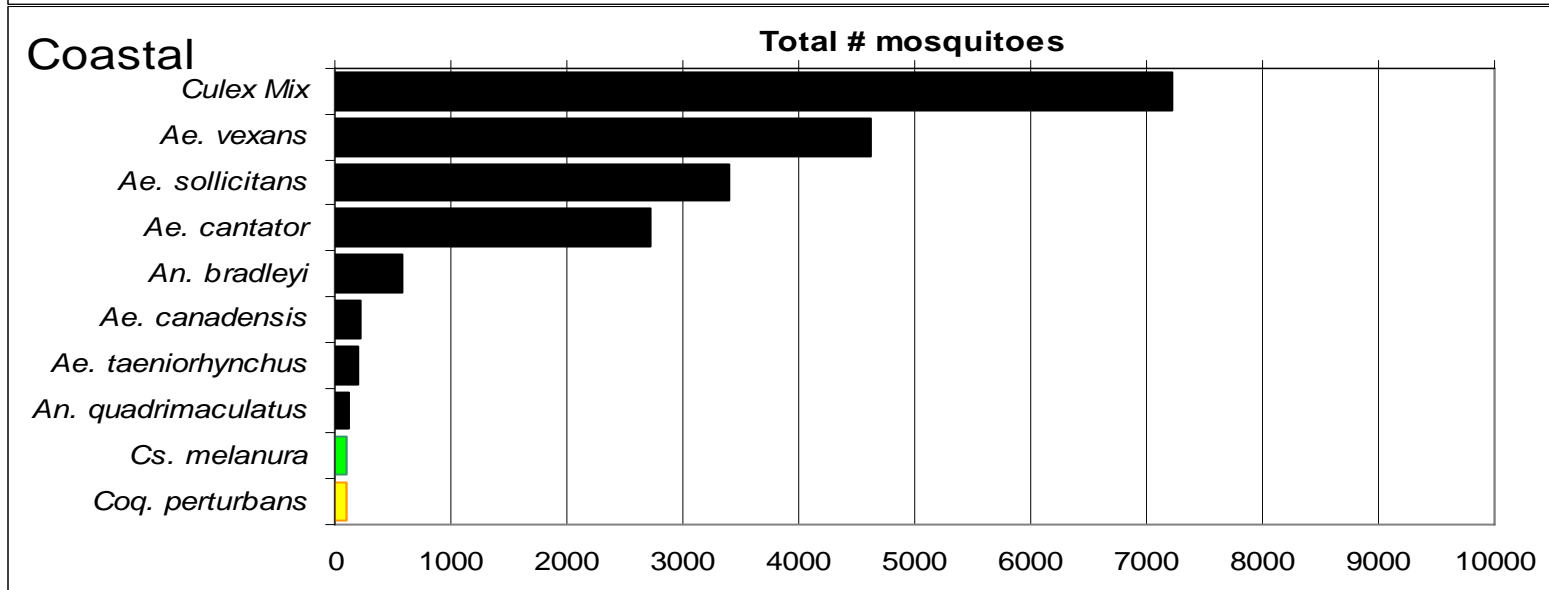
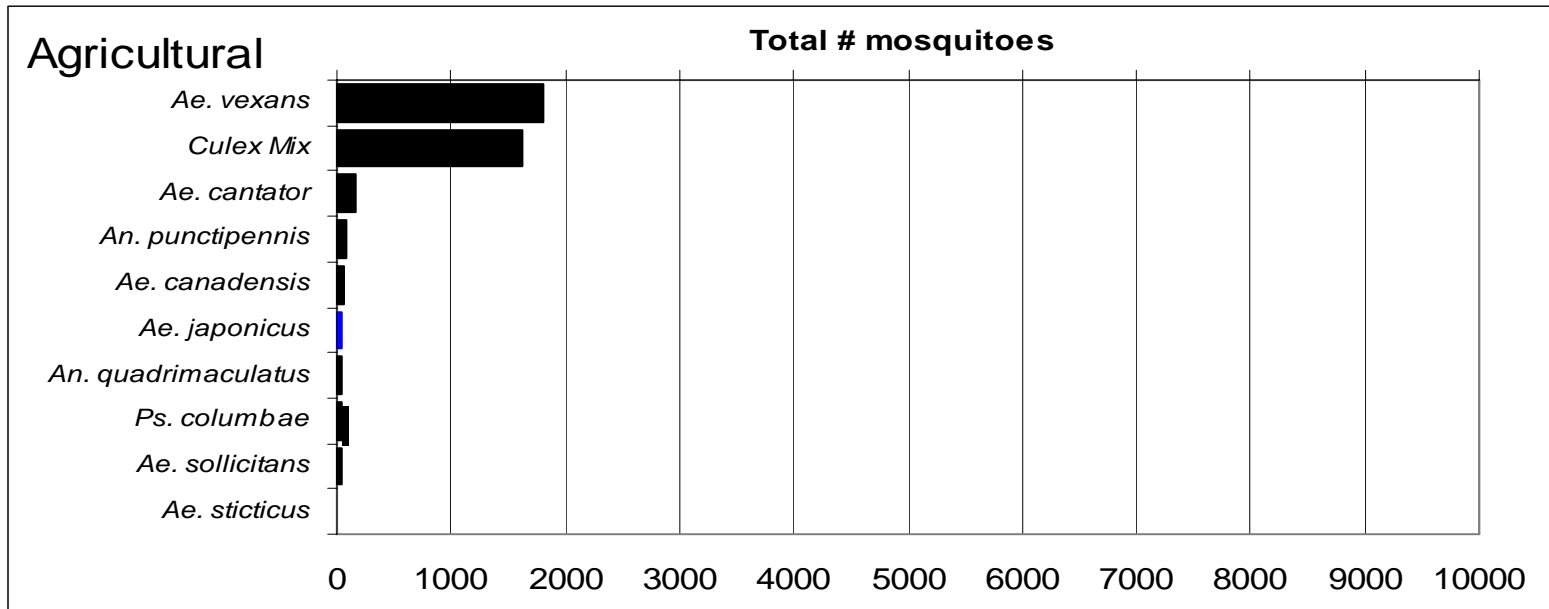
<p>Agricultural</p>	<p>Coastal</p>	<p>Delaware Bayshore</p>	<p>Delaware River Basin</p>
<p>New York Metro</p>	<p>North Central Rural</p>	<p>Northwestern Rural</p>	<p>Philadelphia Metro</p>
<p>Pinelands</p>	<p>Suburban Corridor</p>	<p>Comments</p> <p><i>Aedes sollicitans</i> continue to show abundances near historical levels in the Coastal region up to but not including the current week. The Delaware River Basin has shown increased activity for <i>Ae. sollicitans</i> in earlier weeks this year, a indication, one might presume, of the salt line moving up the Delaware River. In reality, the salt line is closer toward the Atlantic Ocean than normally found: http://www.state.nj.us/drbc/data.htm</p> <p>Next Full Moon: 6 August</p>	

WNV

EEE

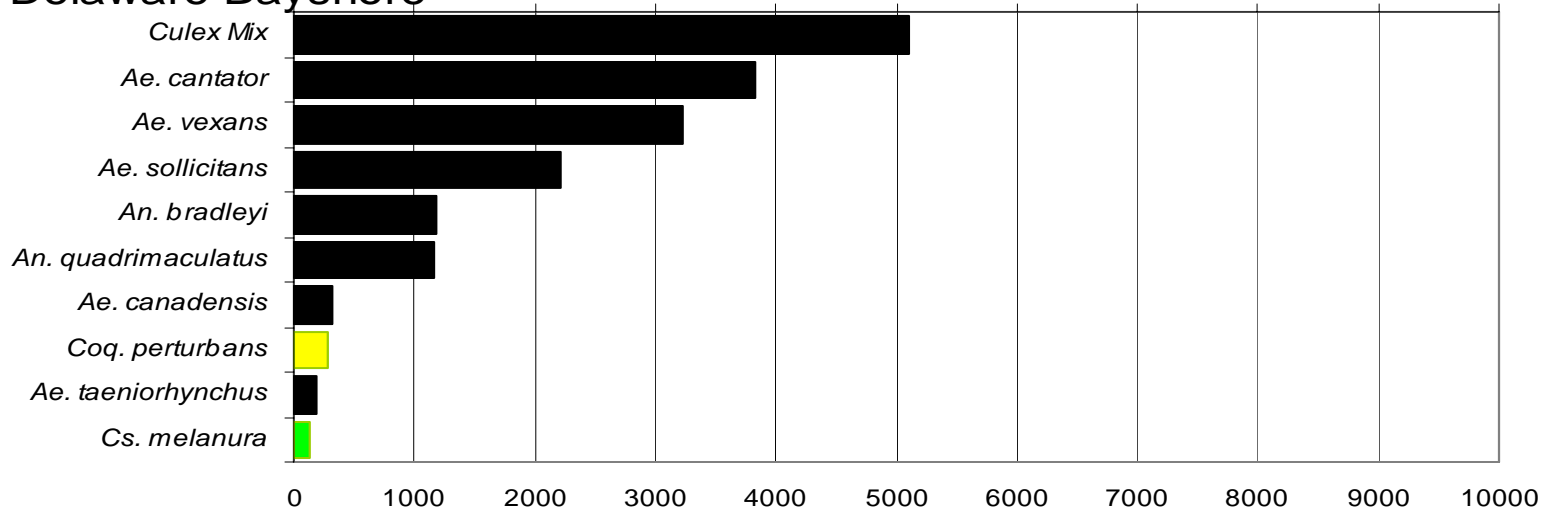
Top Ten Mosquito Species/Region - ■ *Ae. albopictus*, ■ *Ae. japonicus* (invasives); ■ *Cs. melanura* or *Cx. erraticus* ■ *Coq. perturbans*

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



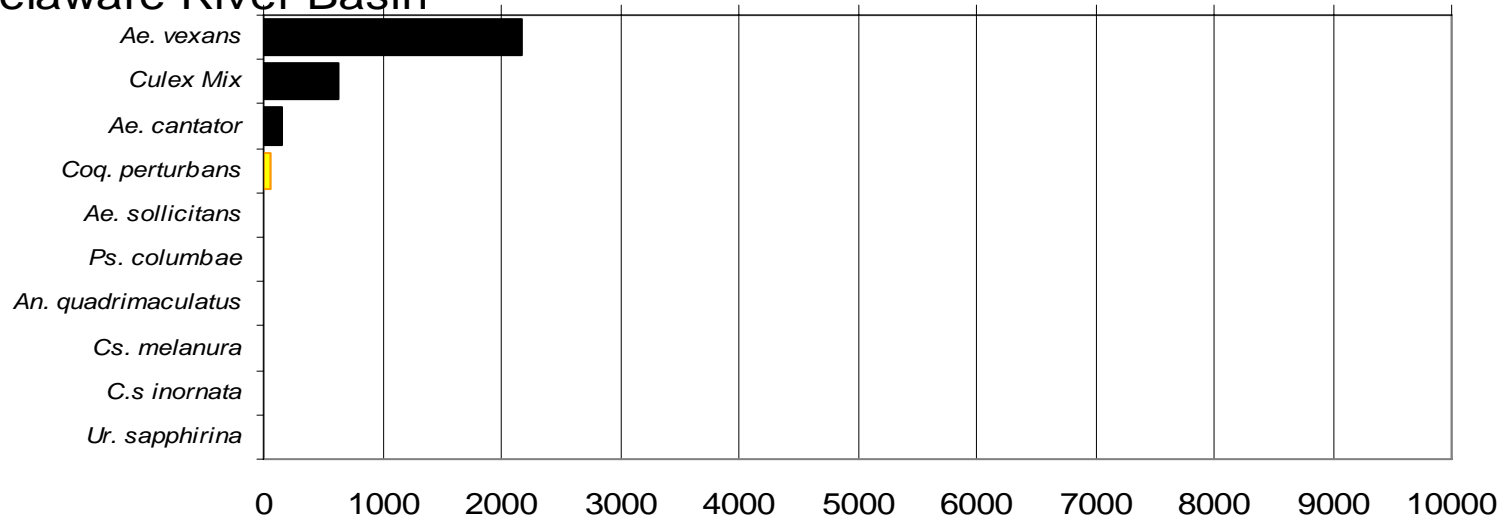
Delaware Bayshore

Total # mosquitoes



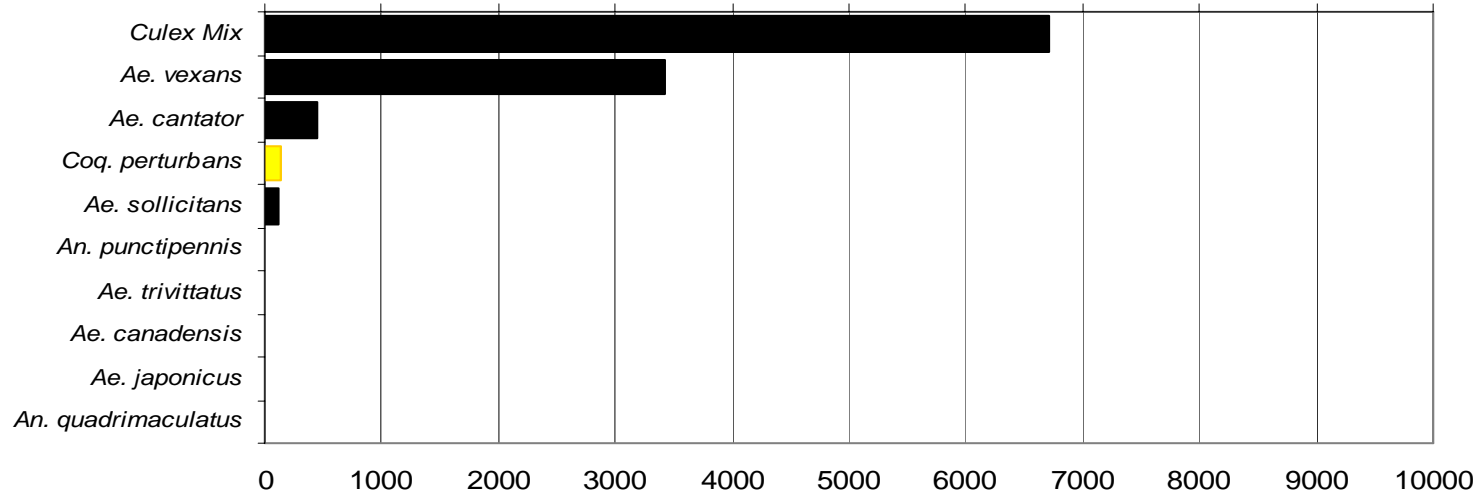
Delaware River Basin

Total # mosquitoes



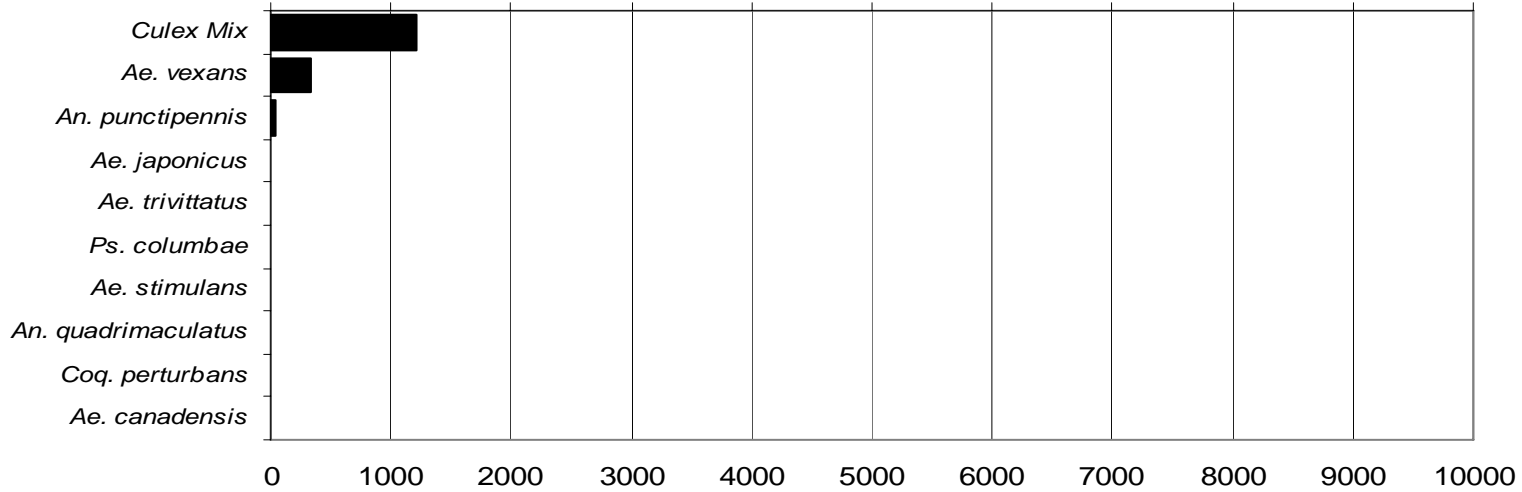
New York Metropolitan

Total # mosquitoes



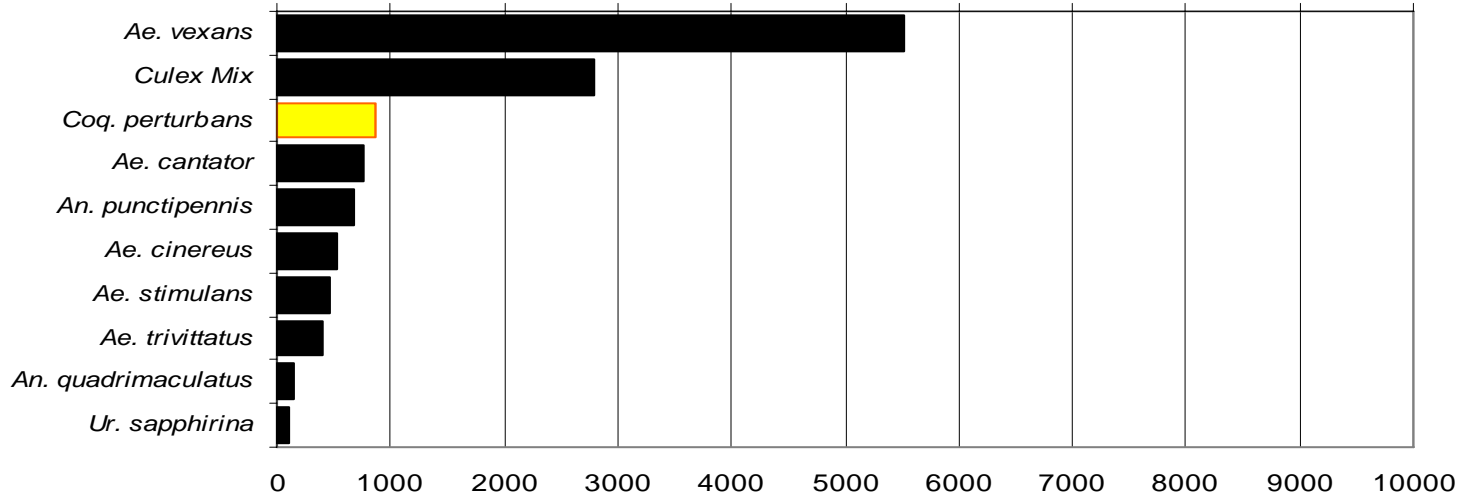
North Central Rural

Total # mosquitoes



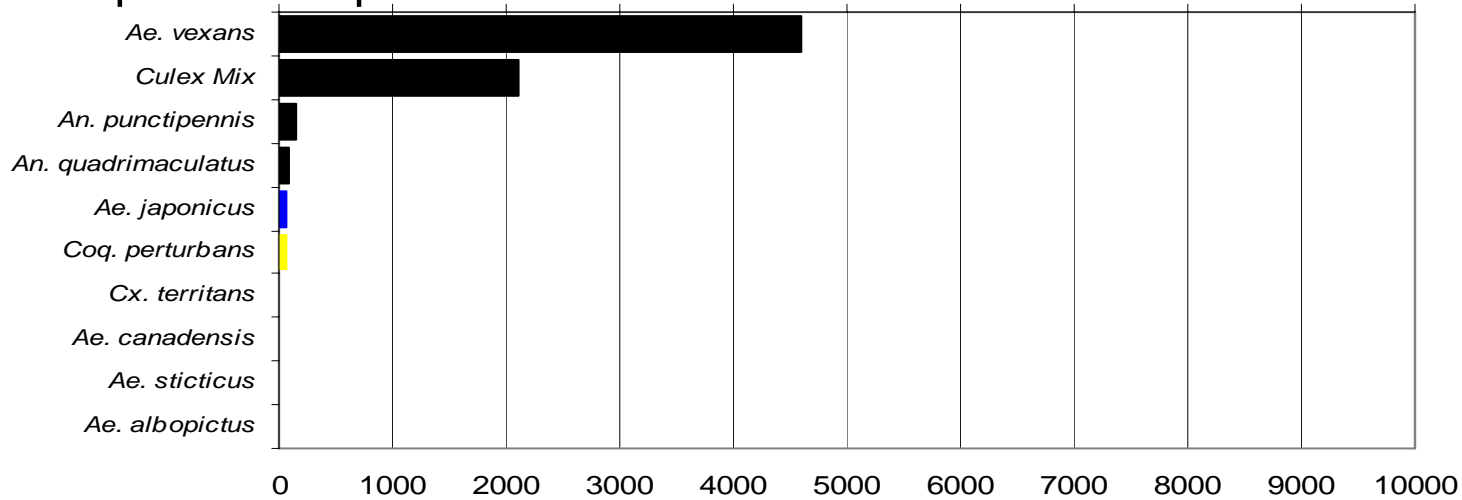
Northwest Rural

Total # mosquitoes



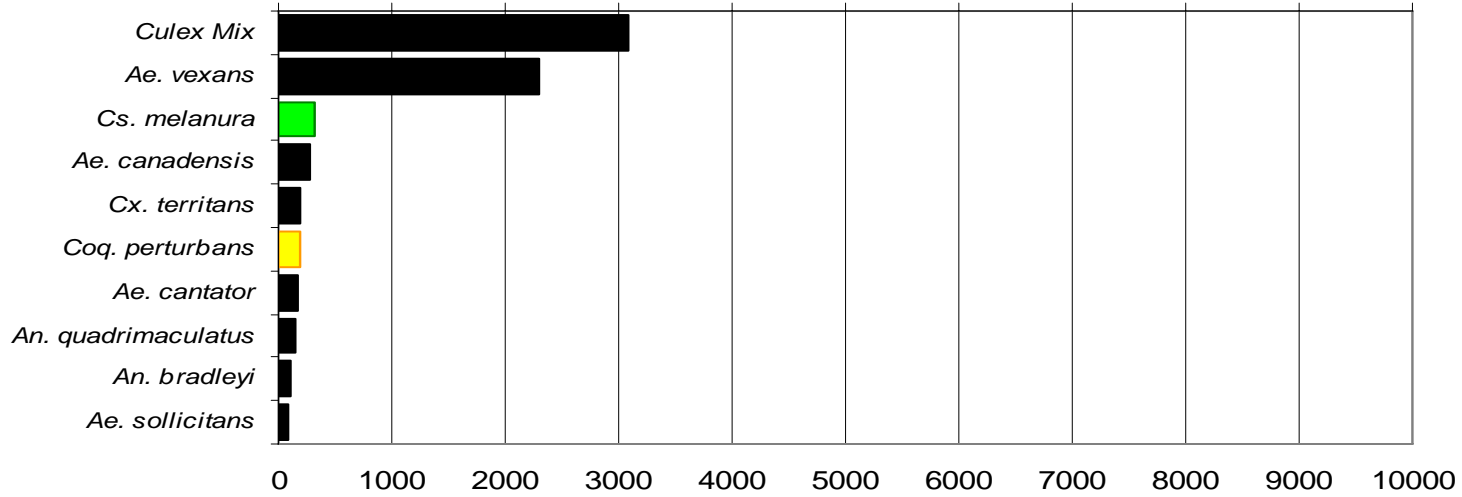
Philadelphia Metropolitan

Total # mosquitoes



Pinelands

Total # mosquitoes



Suburban Corridor

Total # mosquitoes

