

**NEW JERSEY ADULT MOSQUITO SURVEILLANCE**  
Report for 19 July to 25 July 2009, CDC Weeks 29  
Prepared by Lisa M. Reed, Scott Crans, Dina Fonseca and Randy Gaugler  
Center for Vector Biology

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.

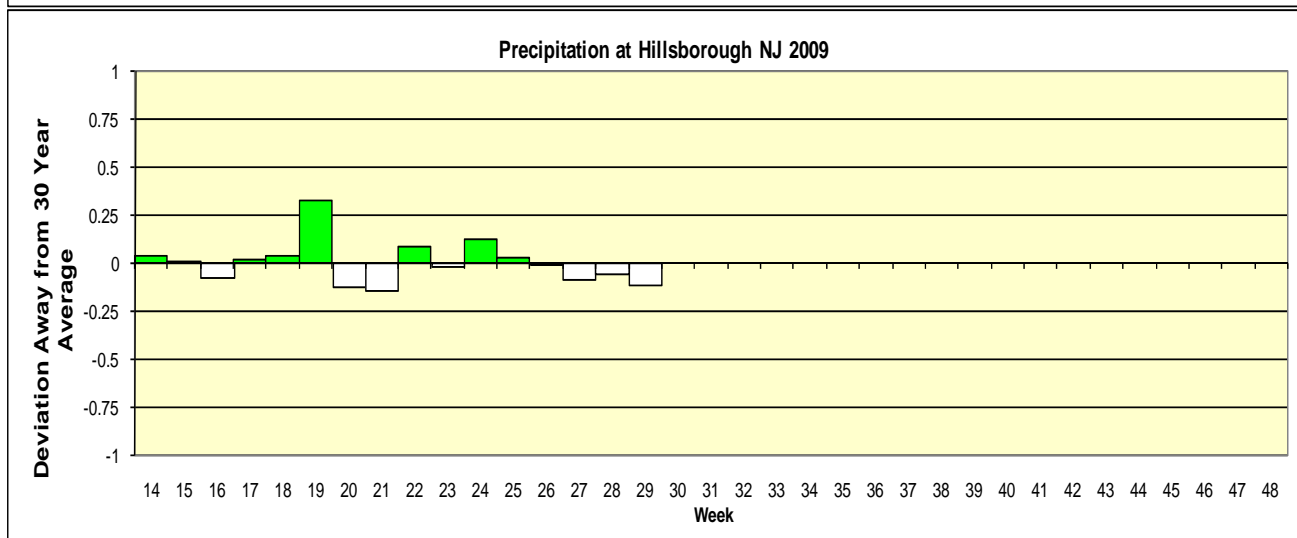
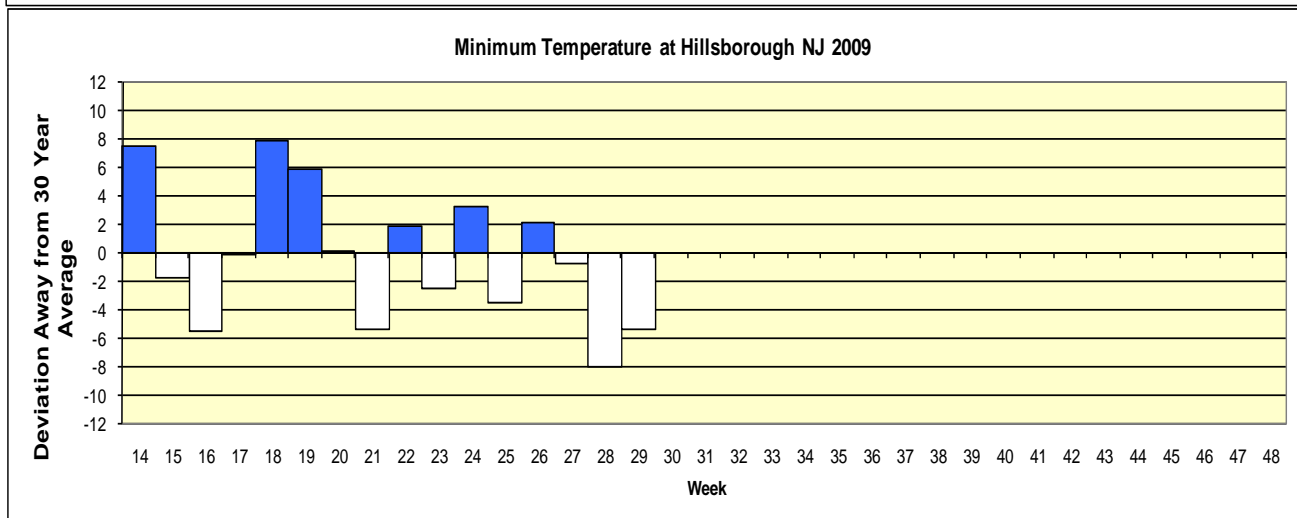
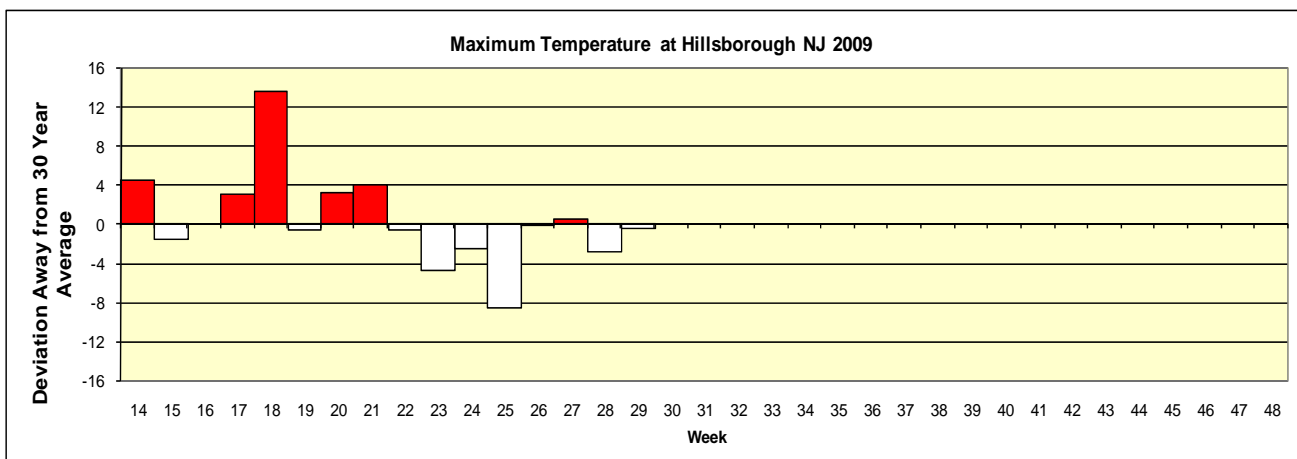
**Summary table – Week 29**

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	1.19	4.53	0	1.52	7.32	0	0.02	0.79	0	0.02	0.19	0
Coastal	2.49	6.65	0	4.14	9.28	0	0.02	1.59	0	3.32	29.73	0
Delaware Bayshore	0.60	2.29	0	3.02	51.66	0	0.10	6.40	0	0.10	26.32	0
Delaware River Basin	0.00	18.66	0	0.00	16.83	0	0.00	0.26	0	0.00	0.18	0
New York Metro	4.53	3.69	1	6.14	8.67	0	0.04	0.21	0	0.04	0.72	0
North Central Rural	0.29	0.75	0	1.04	2.06	0	0.00	0.04	0	0.00	0.00	0
Northwest Rural	41.34	23.92	2	27.00	12.56	3	3.97	0.61	4	0.00	0.00	0
Philadelphia Metro	1.17	15.99	0	2.67	7.39	0	0.00	0.61	0	0.00	0.00	0
Pinelands	1.26	2.47	0	3.43	5.08	0	0.30	1.92	0	0.03	0.19	0
Suburban Corridor	1.60	7.81	0	1.35	3.64	0	0.04	1.02	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:** Only two regions are reporting higher than historical levels for any of the tabled pestiferous species. This is the fresh floodwater species *Aedes vexans*, in abundance in the New York Metropolitan and the Northwestern Rural regions. The Northwestern Rural also shows an increase in *Culex* mixed species and *Coquillettidia perturbans*.

# Climate Deviations

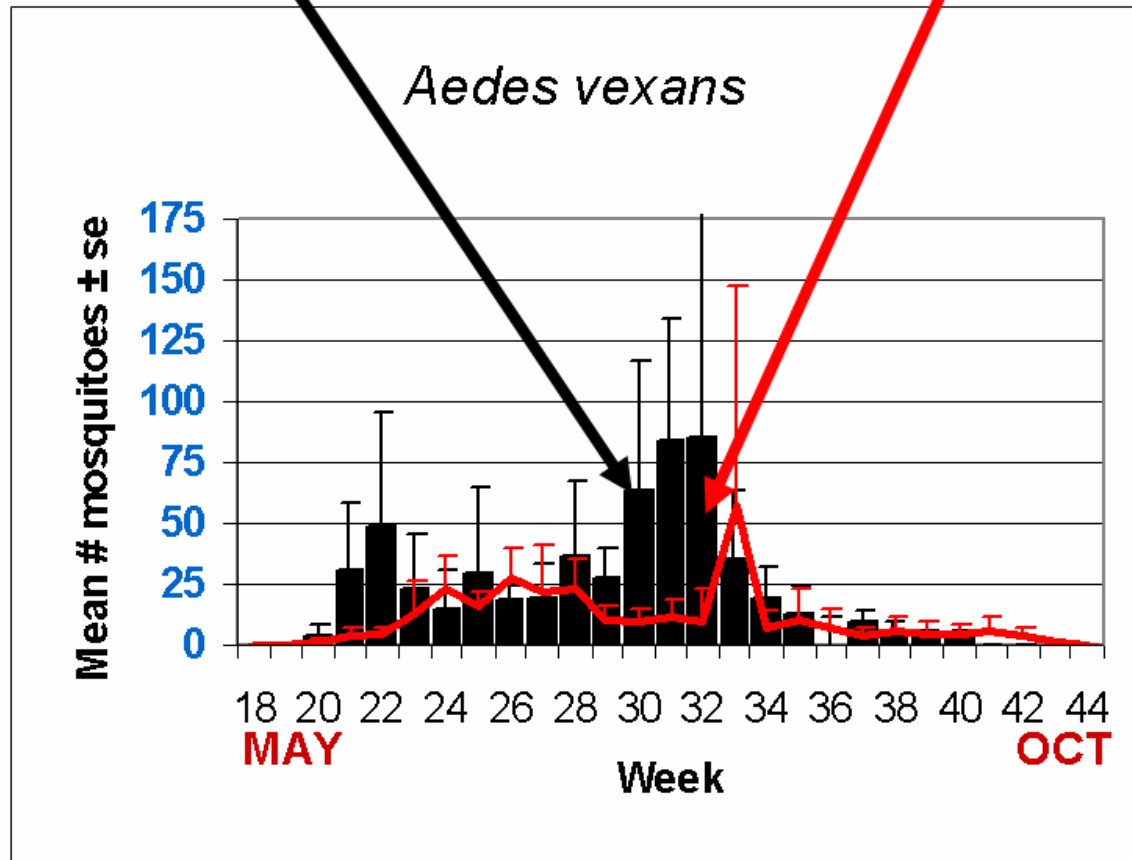


The figures show the average maximum temperature, minimum temperature and precipitation deviations from 30 year averages. Current data are from the Hillsborough NJ weather station (a station close to central NJ which recorded all three parameters and was available online at the NJ state climatologist) 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.

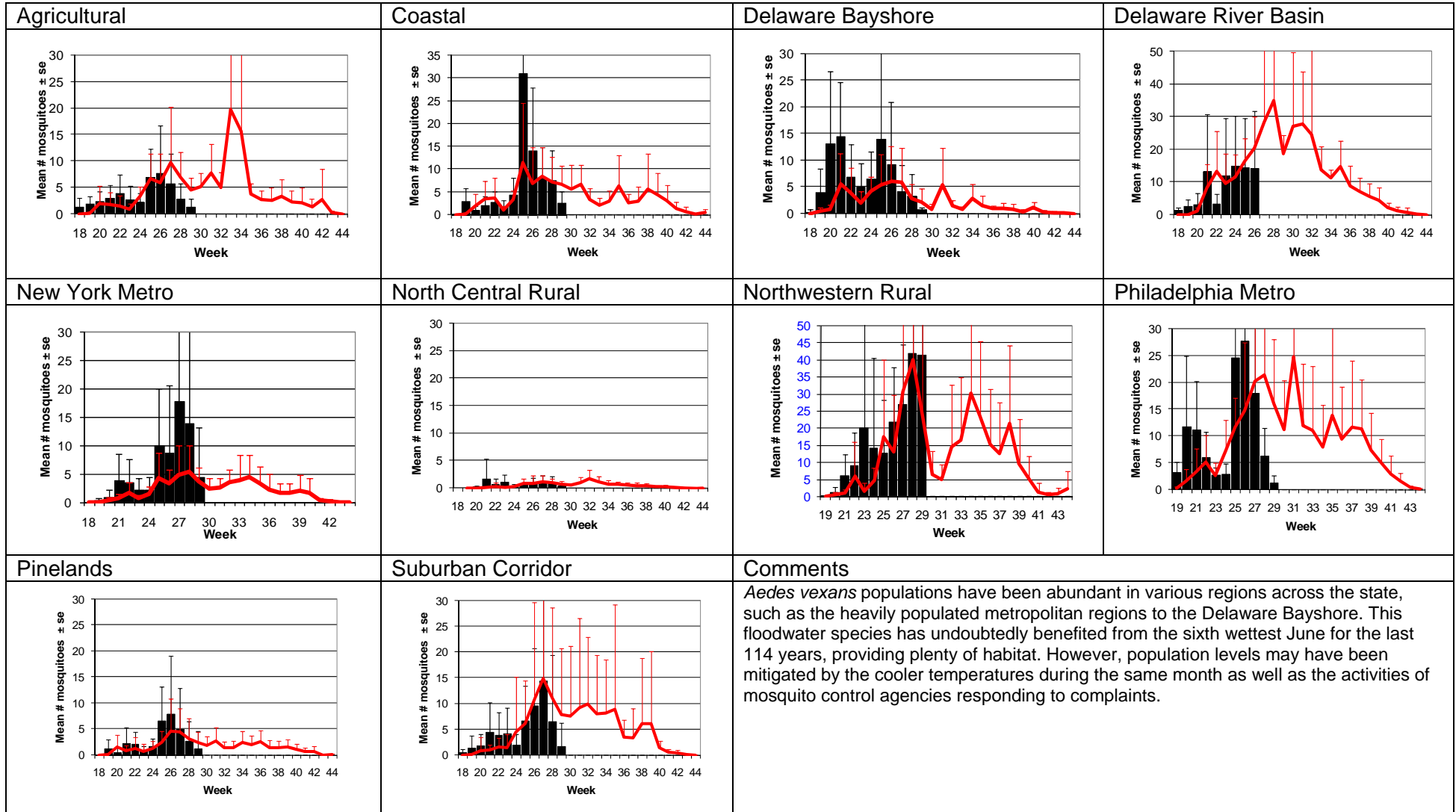
Data from: <http://climate.rutgers.edu/njwxnet/index.php>

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

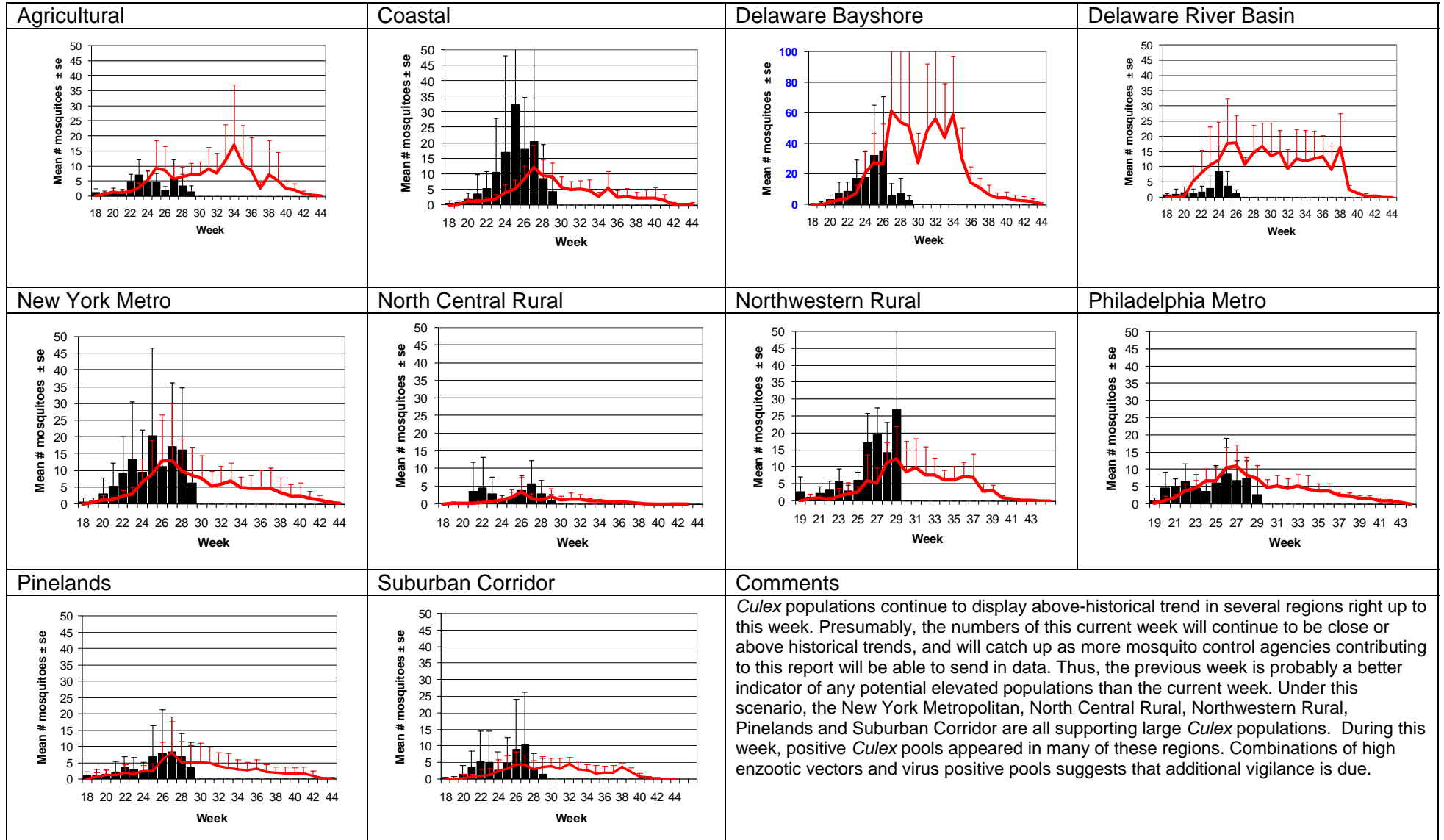
## Weekly Means Against 5-year Average



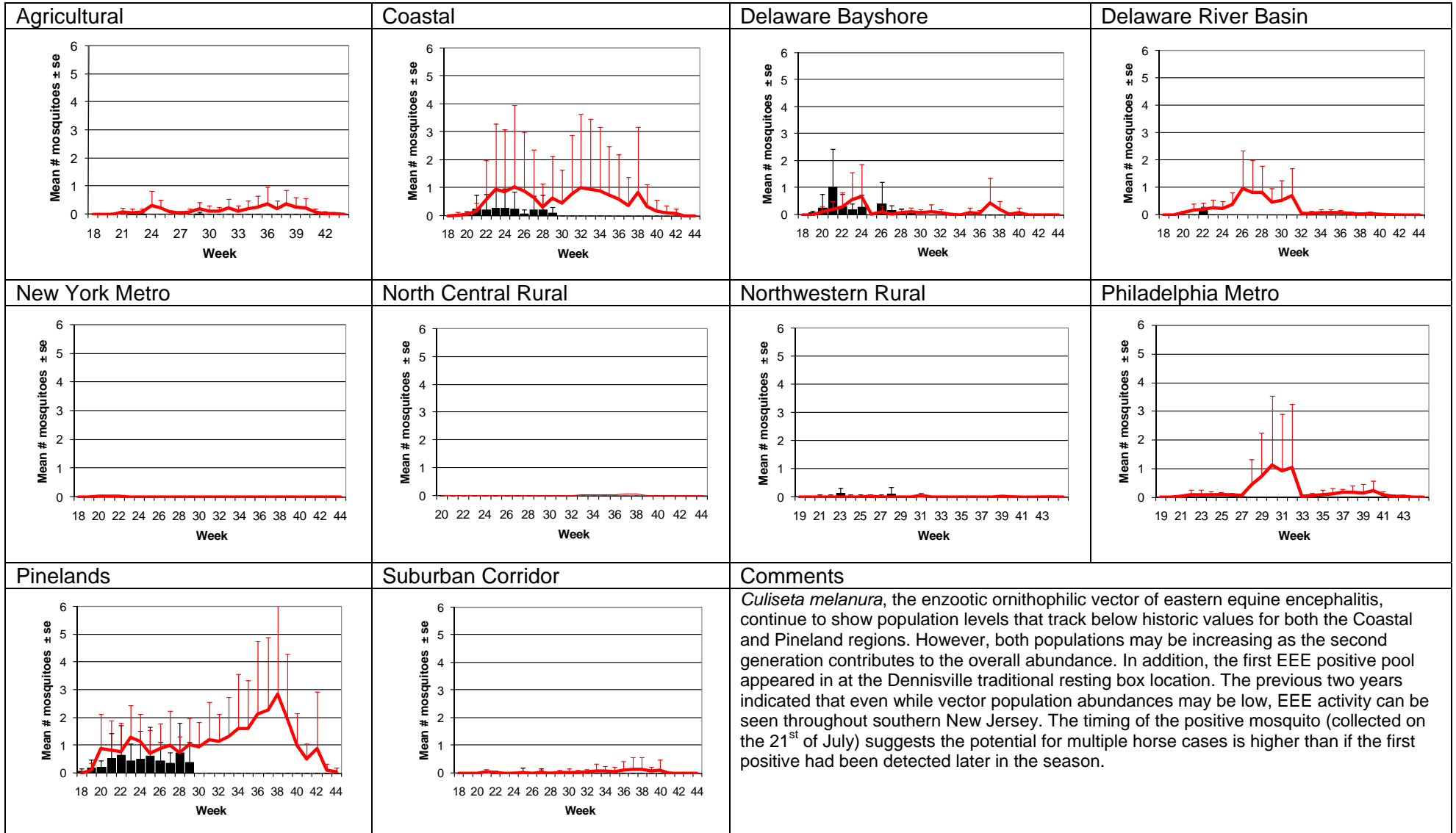
# *Aedes vexans* - Fresh Floodwater Species Multivoltine Aedine (*Ae. vexans* Type)



# 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)

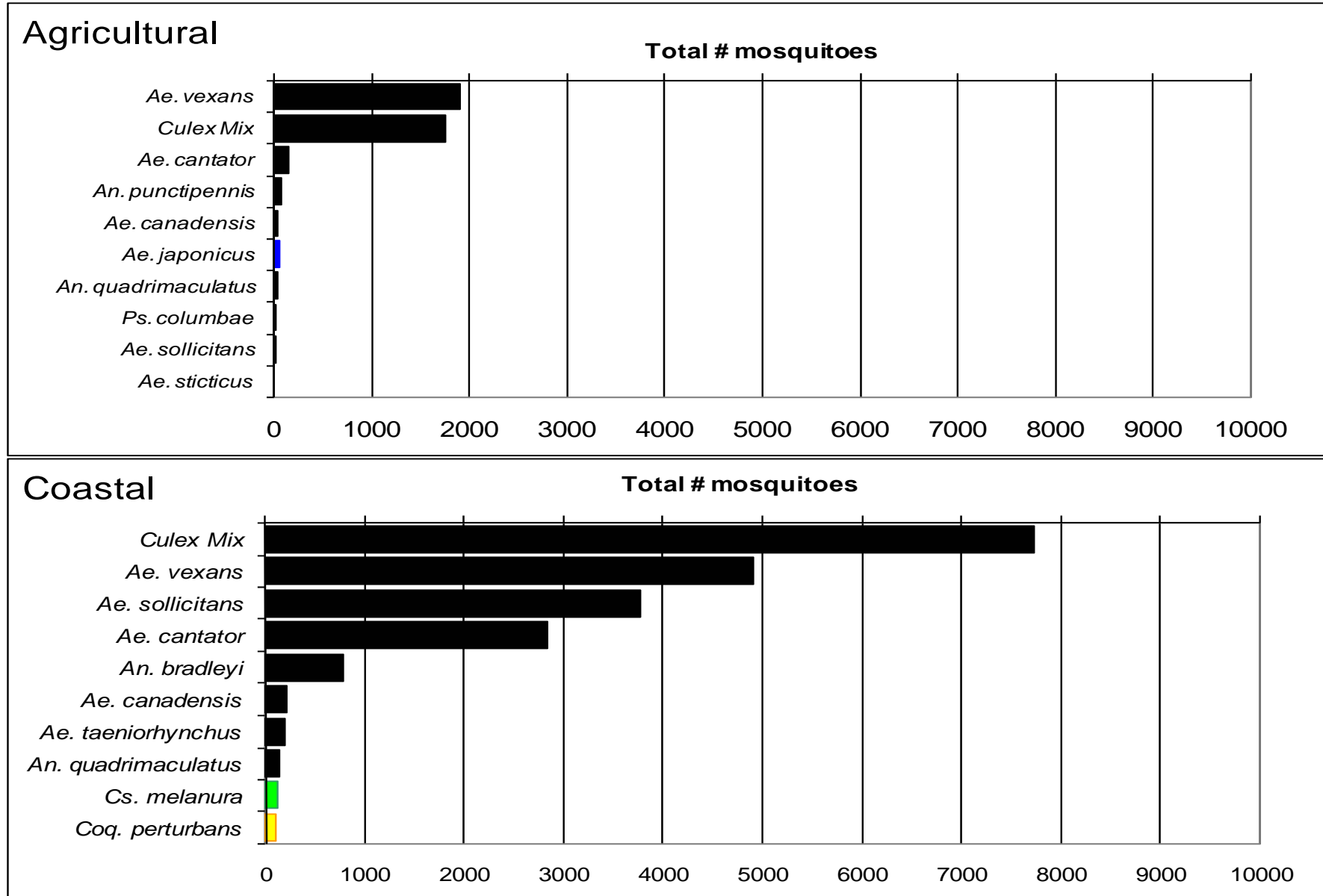
Agricultural	Coastal	Delaware Bayshore	Delaware River Basin
New York Metro	North Central Rural	Northwestern Rural	Philadelphia Metro
Pinelands	Suburban Corridor	Comments	
		<p><i>Aedes sollicitans</i> populations should be increasing as cohorts emerge from the last tidal flooding.</p> <p>Next Full Moon: 6 August</p>	

WNV

EEE

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

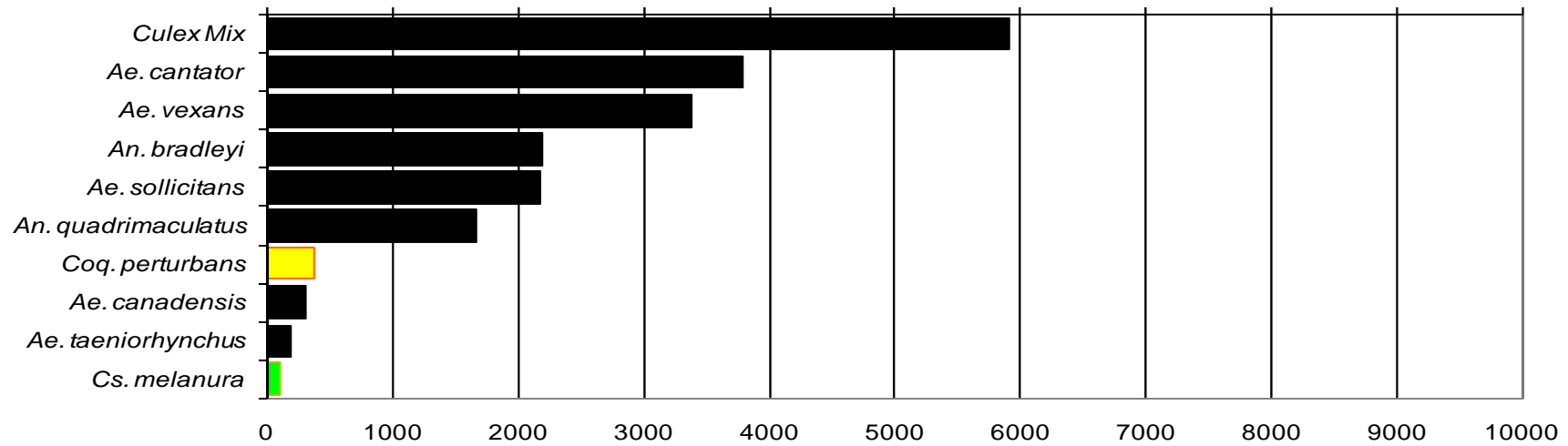
Note: In early season when fewer species are caught, graphs may show less than ten species listed.





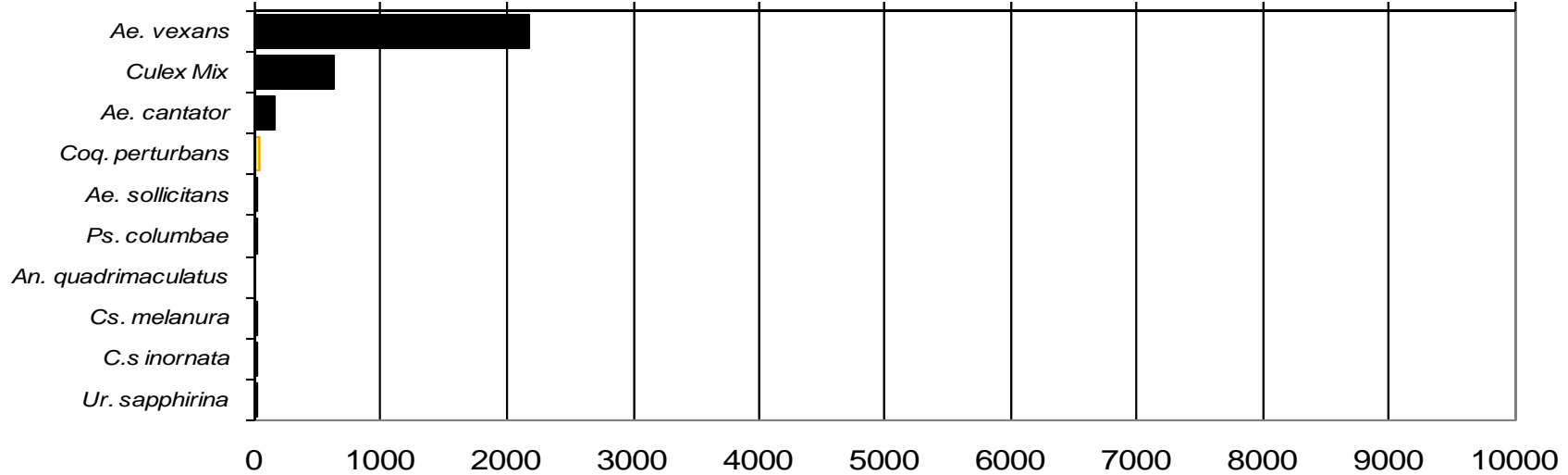
## Delaware Bayshore

Total # mosquitoes



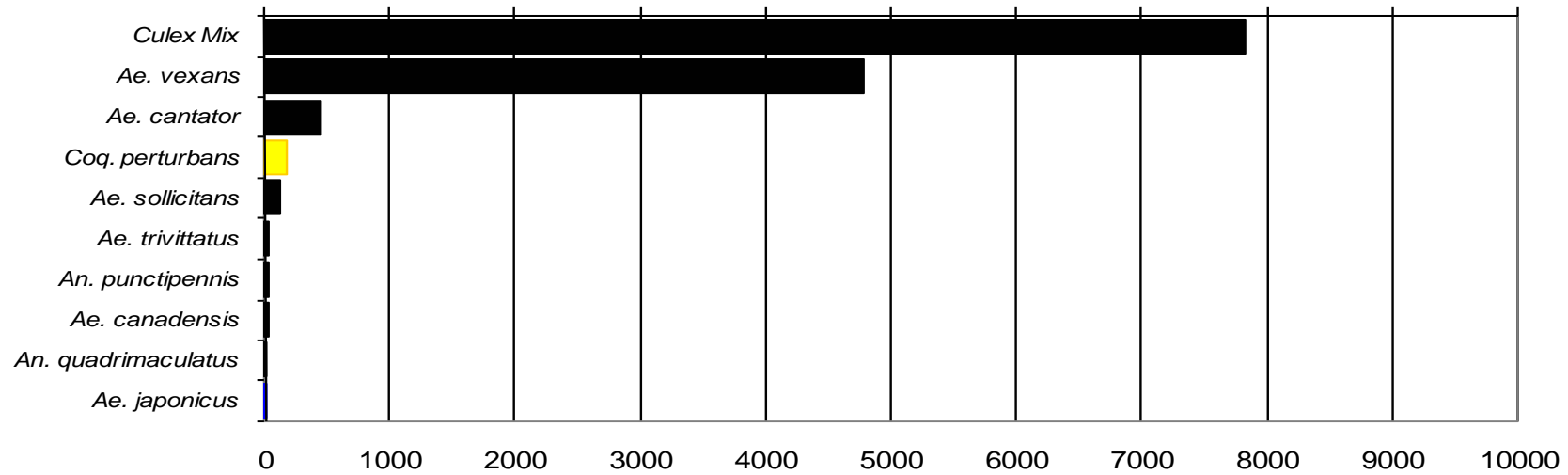
## Delaware River Basin

Total # mosquitoes



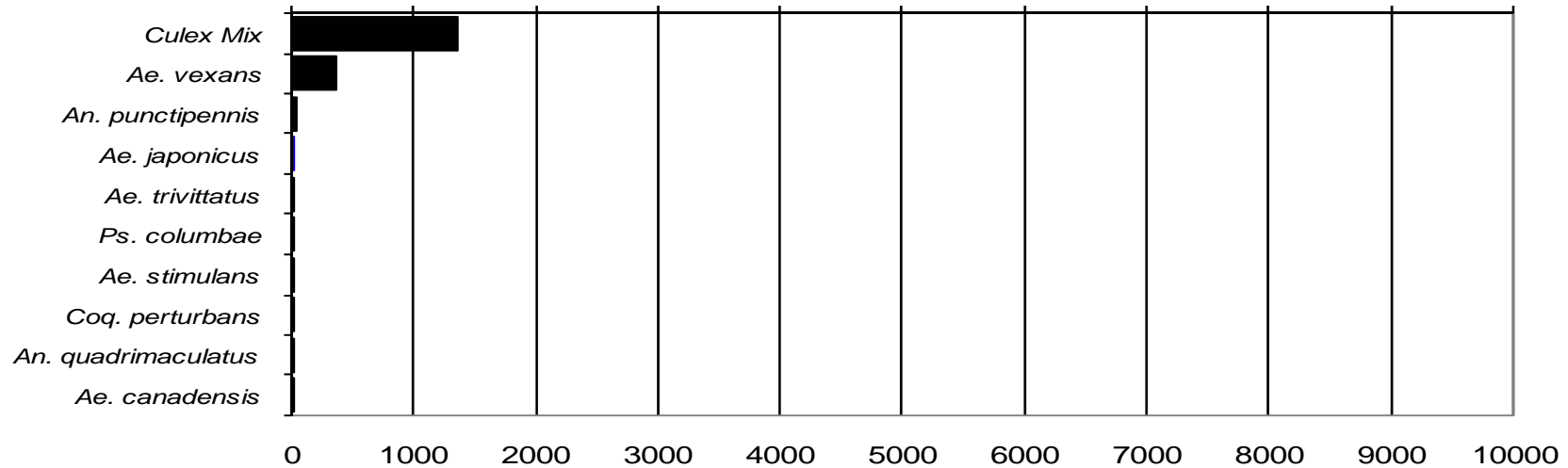
## New York Metropolitan

### Total # mosquitoes



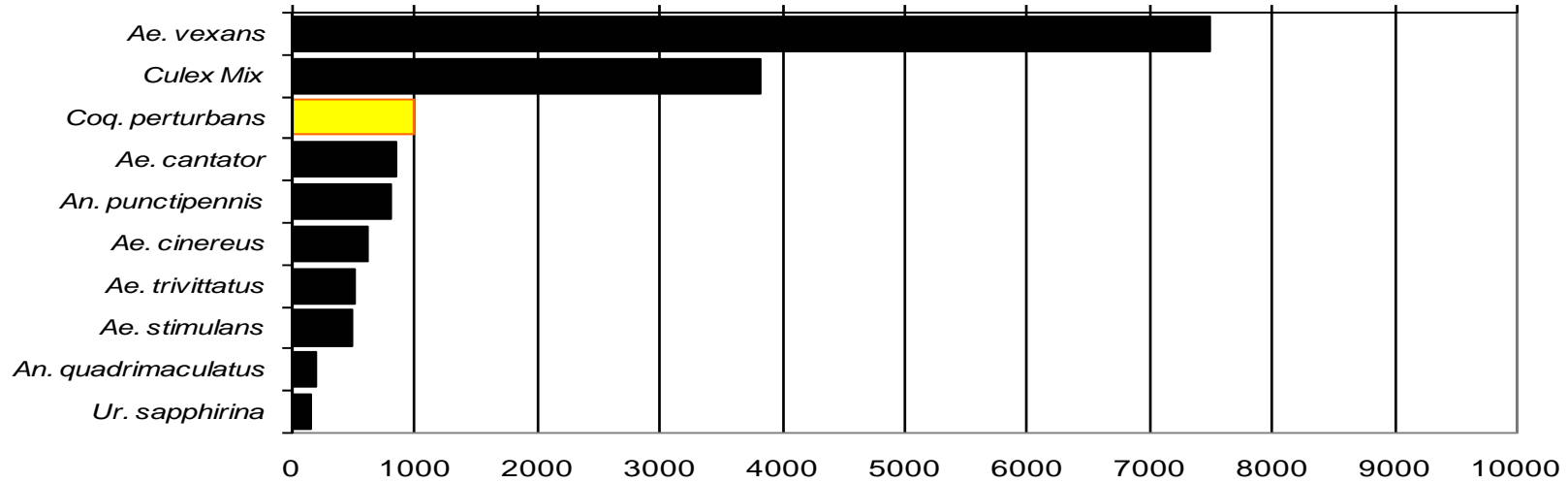
## North Central Rural

### Total # mosquitoes



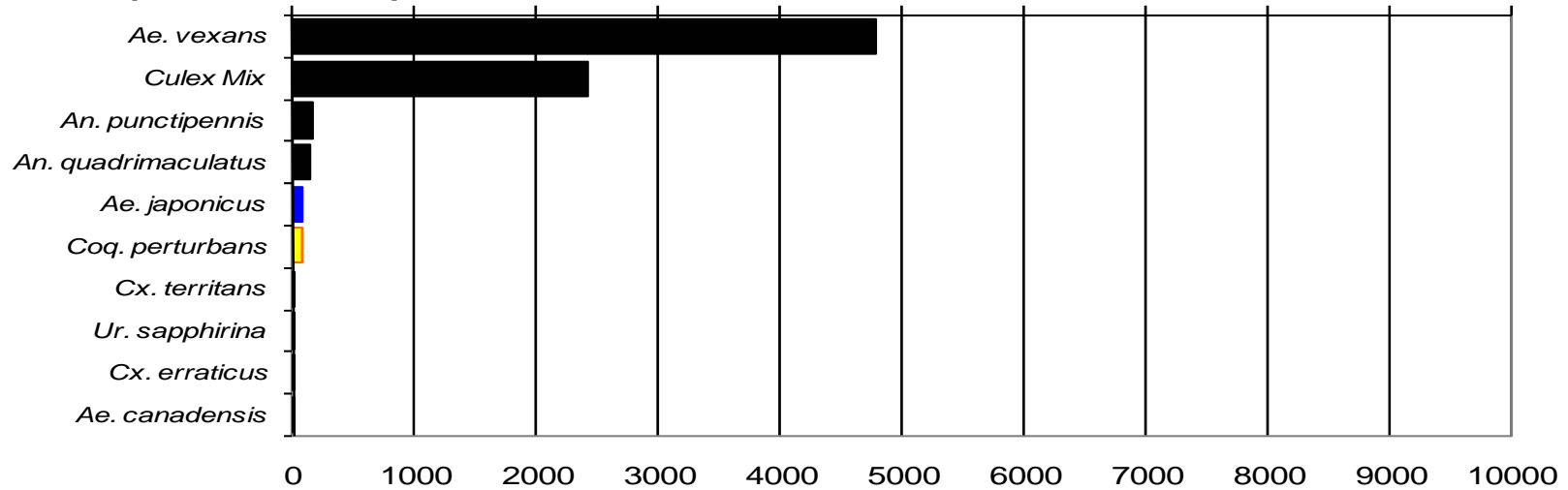
## Northwest Rural

Total # mosquitoes



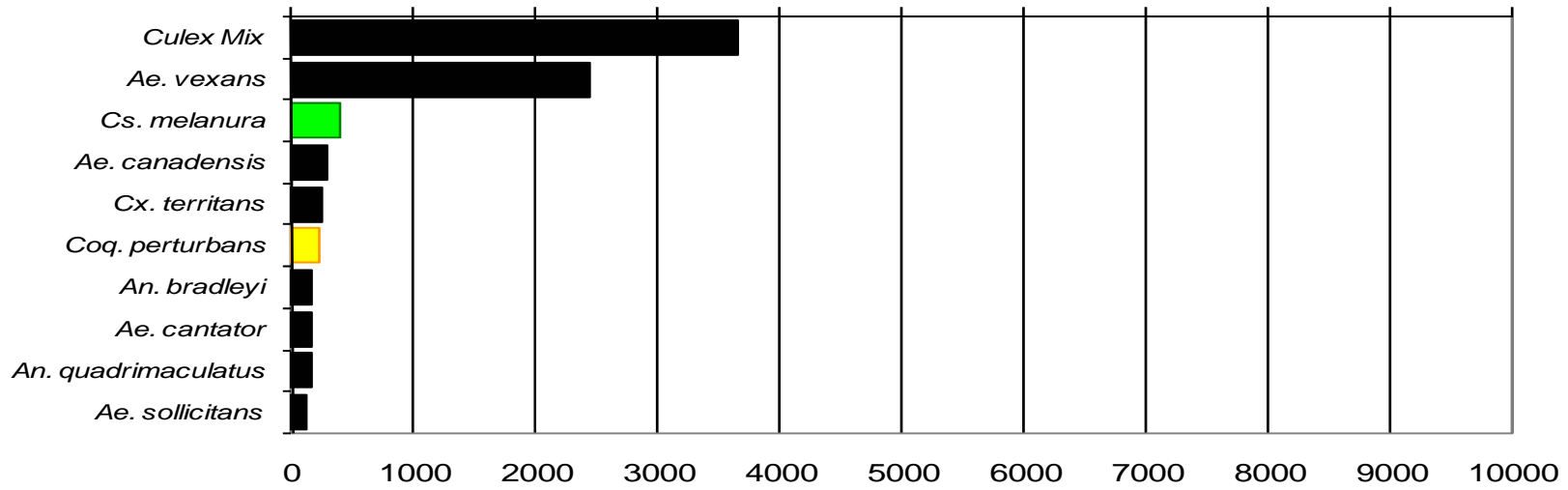
## Philadelphia Metropolitan

Total # mosquitoes



## Pinelands

Total # mosquitoes



## Suburban Corridor

Total # mosquitoes

