

**NEW JERSEY ADULT MOSQUITO SURVEILLANCE**  
Report for 18 October to 24 October 2009, CDC Weeks 42  
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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.

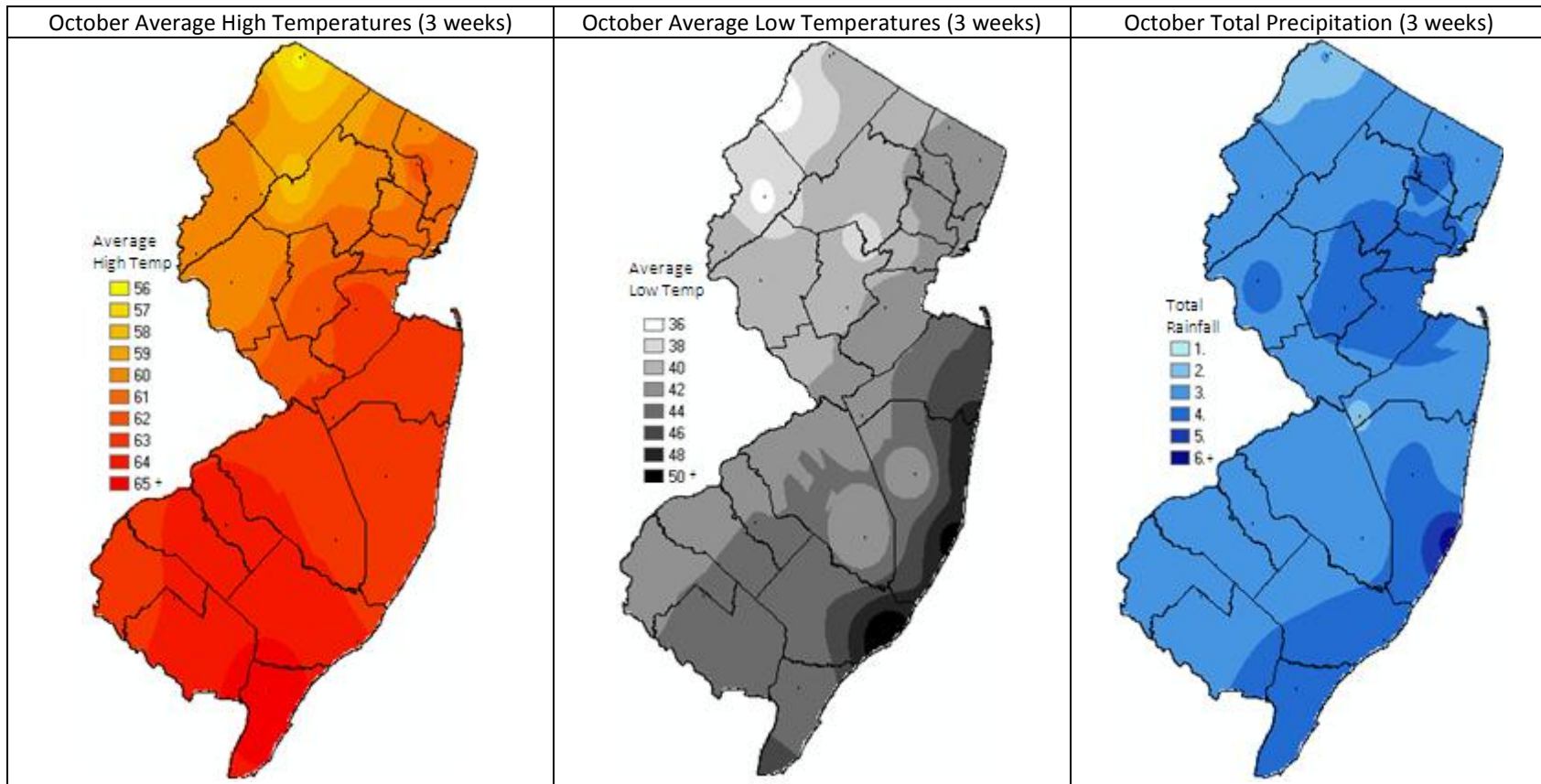
**Summary table – Week 42**

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	0.00	2.00	0	0.17	0.87	0	0.00	0.00	0	0.00	<0.01	0
Coastal	0.16	0.75	0	0.70	1.09	0	0.00	0.00	0	0.00	0.33	0
Delaware Bayshore	0.77	0.54	1	0.49	2.65	0	0.00	0.00	0	0.03	1.01	0
Delaware River Basin	0.00	0.09	0	0.00	0.24	0	0.00	0.00	0	0.00	<0.01	0
New York Metro	0.01	0.27	0	0.04	1.39	0	0.00	0.00	0	0.00	0.01	0
North Central Rural	0.00	0.04	0	0.00	<0.01	0	0.00	0.00	0	0.00	0.00	0
Northwest Rural	0.00	0.52	0	0.00	0.14	0	0.00	0.00	0	0.00	0.00	0
Philadelphia Metro	0.00	1.11	0	0.00	0.65	0	0.00	0.00	0	0.00	0.00	0
Pinelands	0.03	0.51	0	0.03	0.65	0	0.00	0.00	0	0.00	0.00	0
Suburban Corridor	0.00	0.50	0	0.01	0.34	0	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.

**State Summary:** Activity continues to drop for the pestiferous species above. *Aedes vexans* population levels in the Delaware Bayshore were higher than historical trends, but far lower than is seen during the height of the season. Warmer weather in the southern portion of the state should retain minor mosquito activity while the northern half becomes quiescent. Unless an unusual amount of activity should occur, this report will end after the last week in October.

## Climate Factors

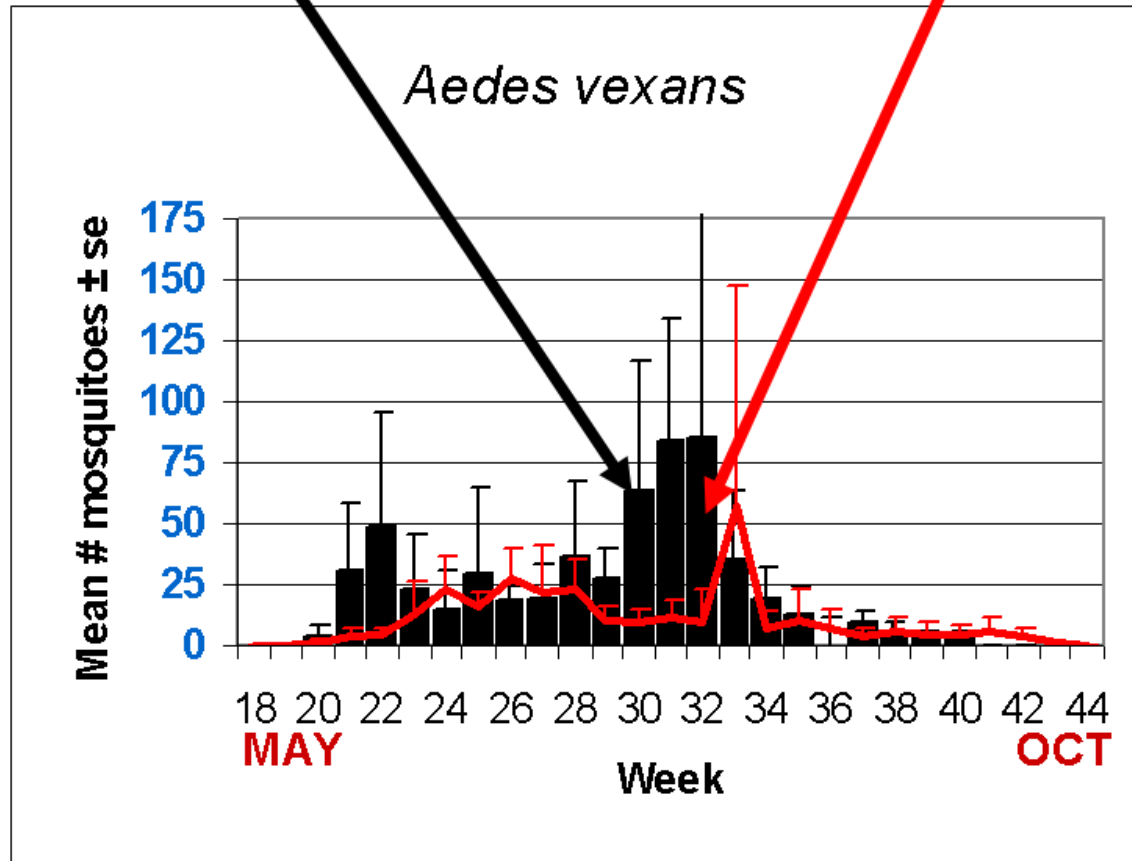


The three figures show the interpolation of average maximum and minimum temperature and total precipitation for the first two weeks of September in New Jersey. Data points are from 35 weather stations maintained through the New Jersey Weather & Climate Network and the State Climatologist. Interpolation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

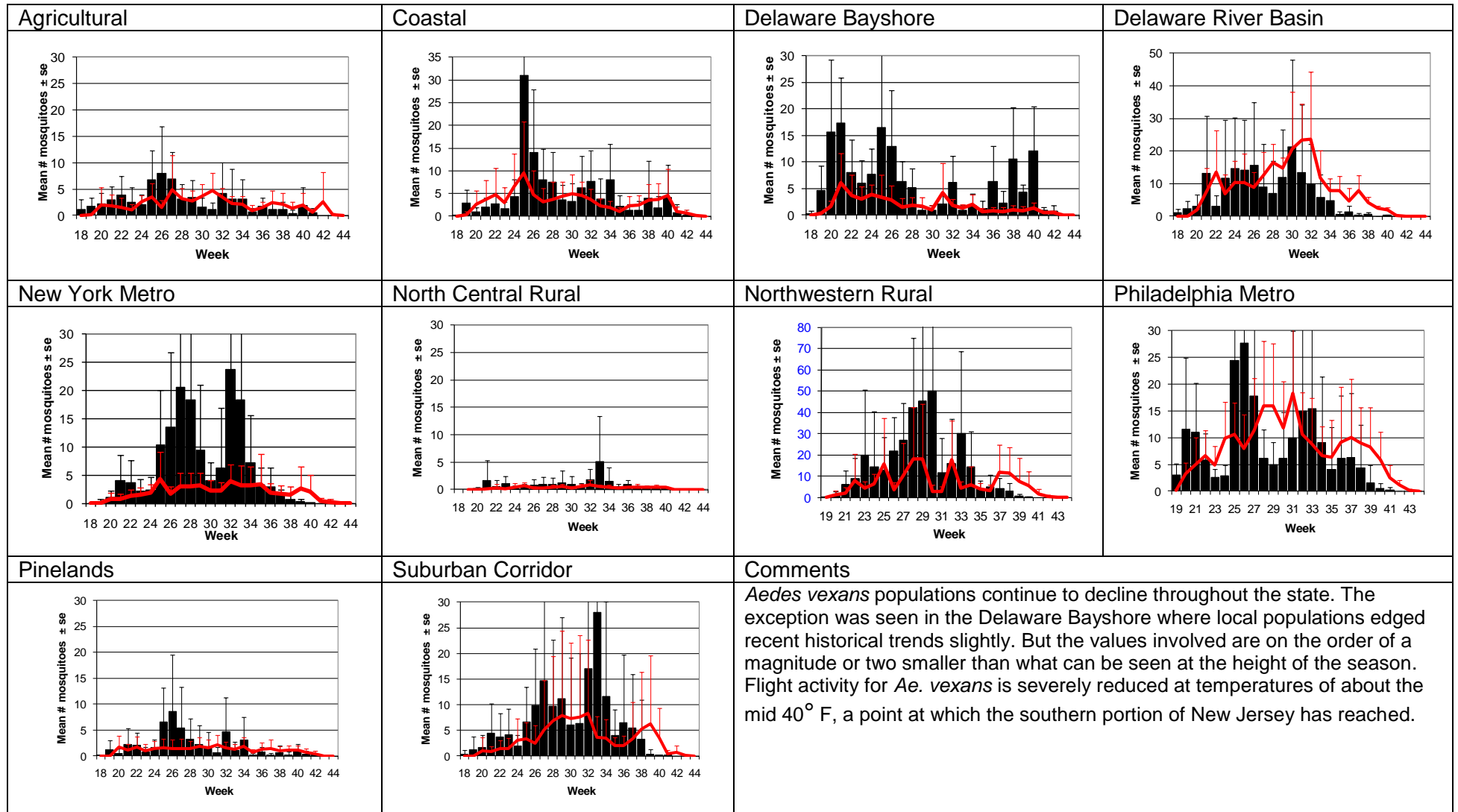
In the first three weeks of October, average high temperatures were highest in Cape May County. Average low temperatures were again highest along the coastal region and coolest in the northwestern portion of the state, with frost nights. Rainfall increased considerably, with the most concentrated along the coast. In general, it was warmest in the Cape during the day, warmer along the coast at night and wettest Ocean County.

**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, Cumberland, Essex, Monmouth, Morris (ended), Sussex (ended) and Warren (ended) counties. Note: County data is sent in at a variety of times during the week.

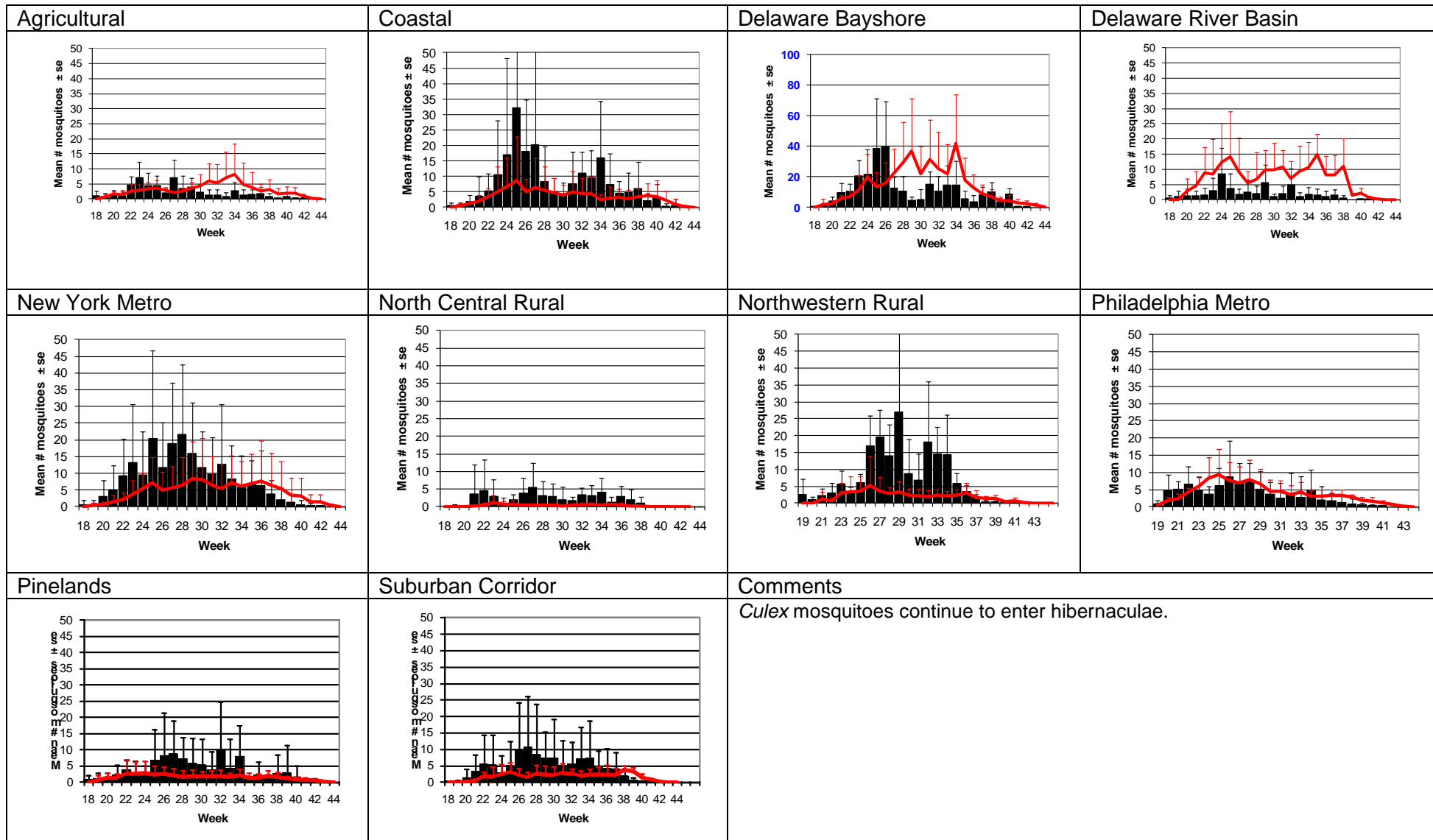
## Weekly Means Against 5-year Average



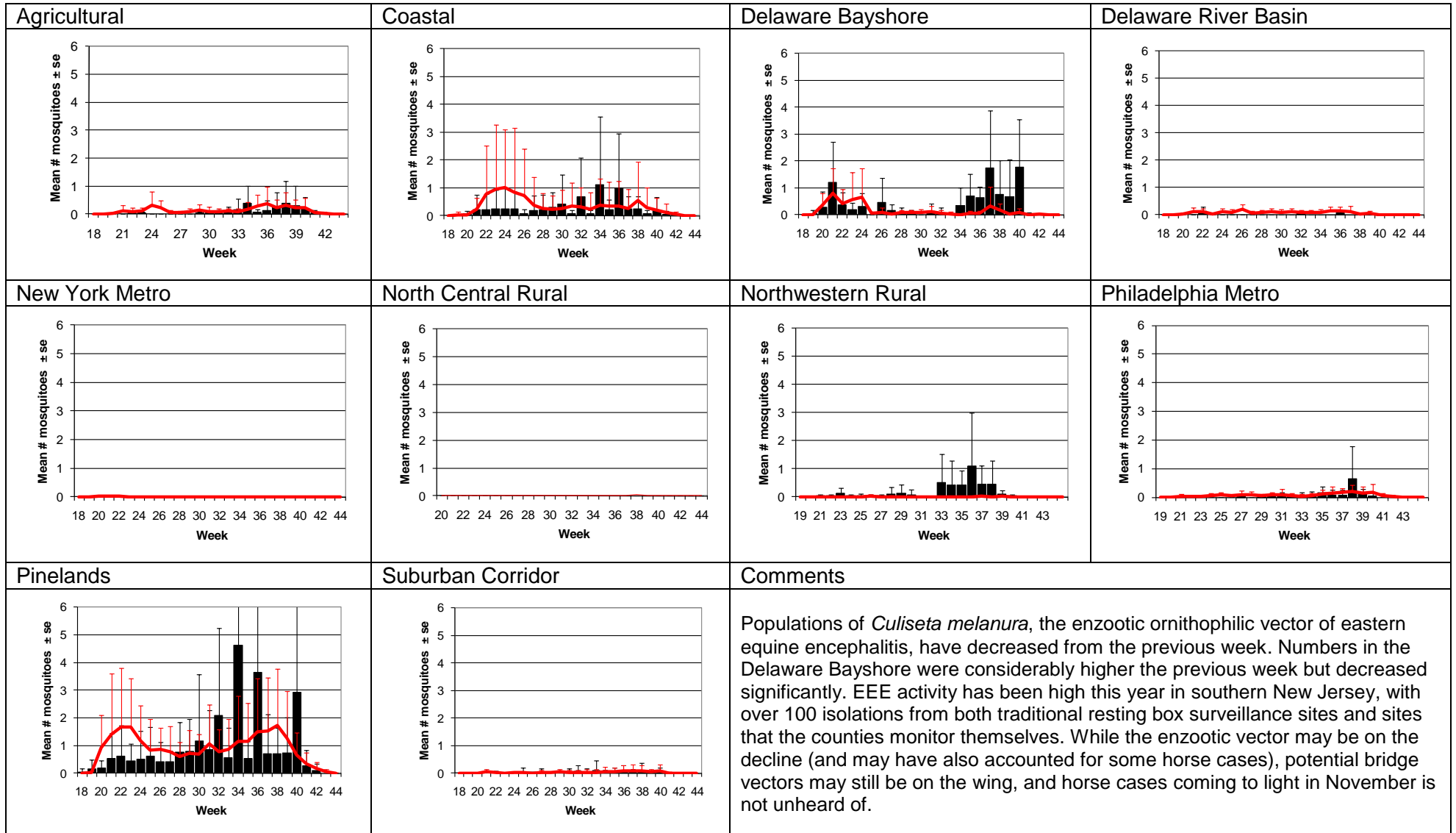
# *Aedes vexans* - Fresh Floodwater Species Multivoltine Aedine (*Ae. vexans* Type)



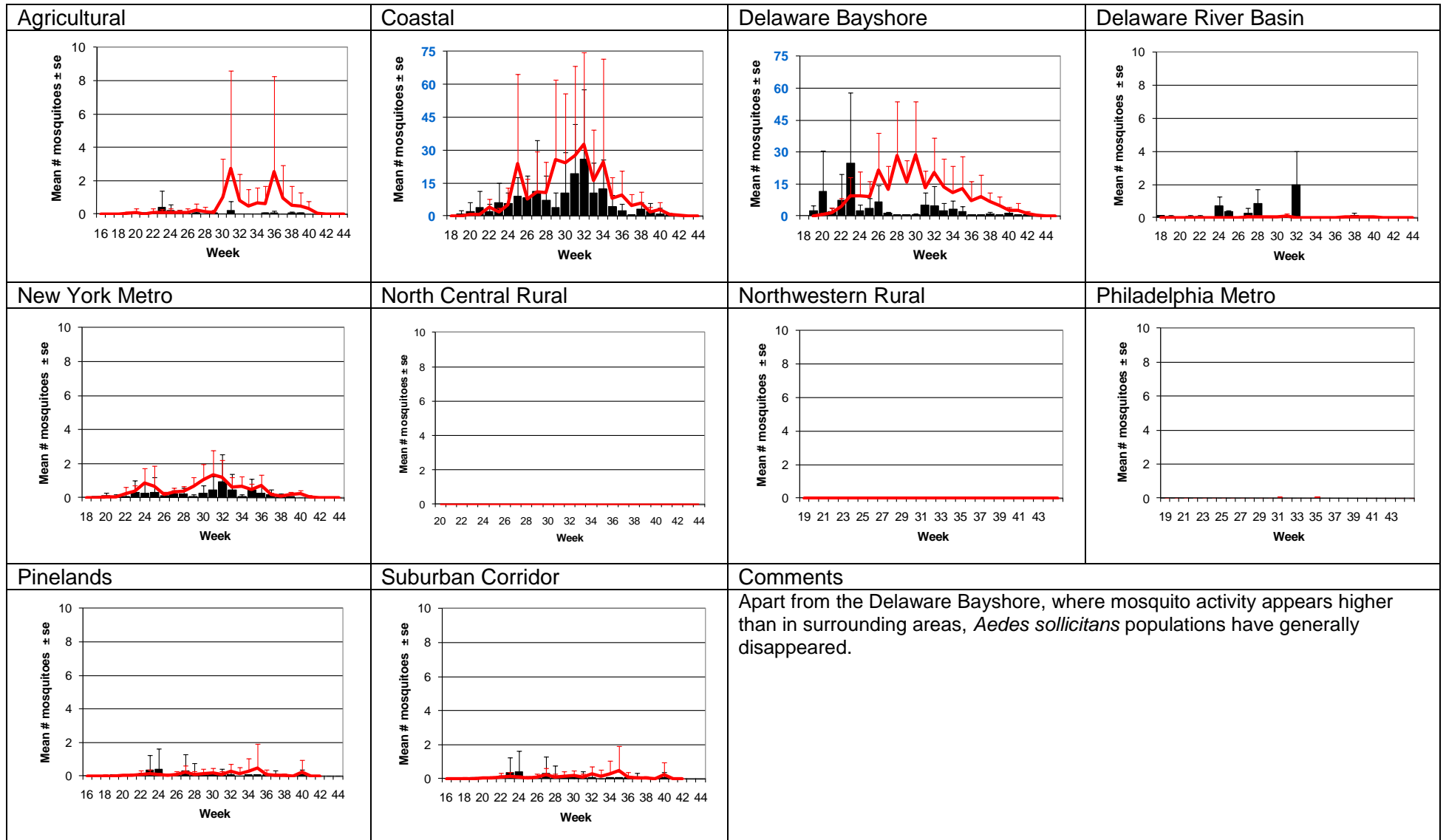
# Culex Mix – Permanent Water Species Multivoltine *Culex/Anopheles* (*Cx. pipiens* Type)



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



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

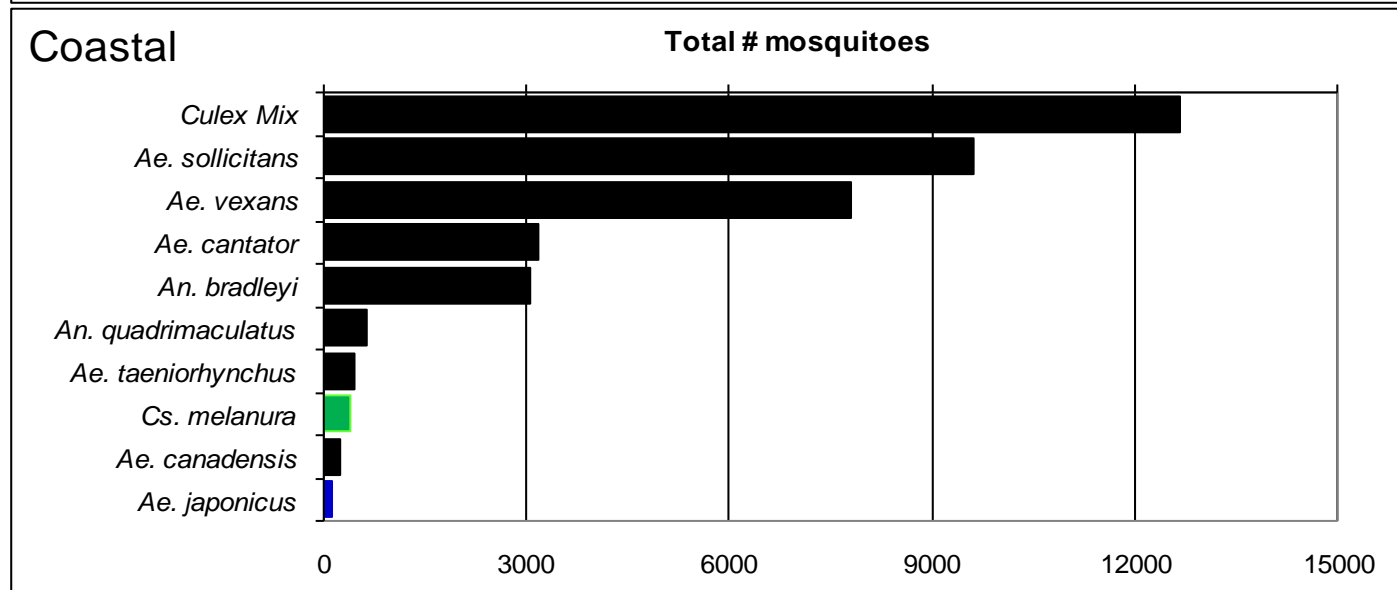
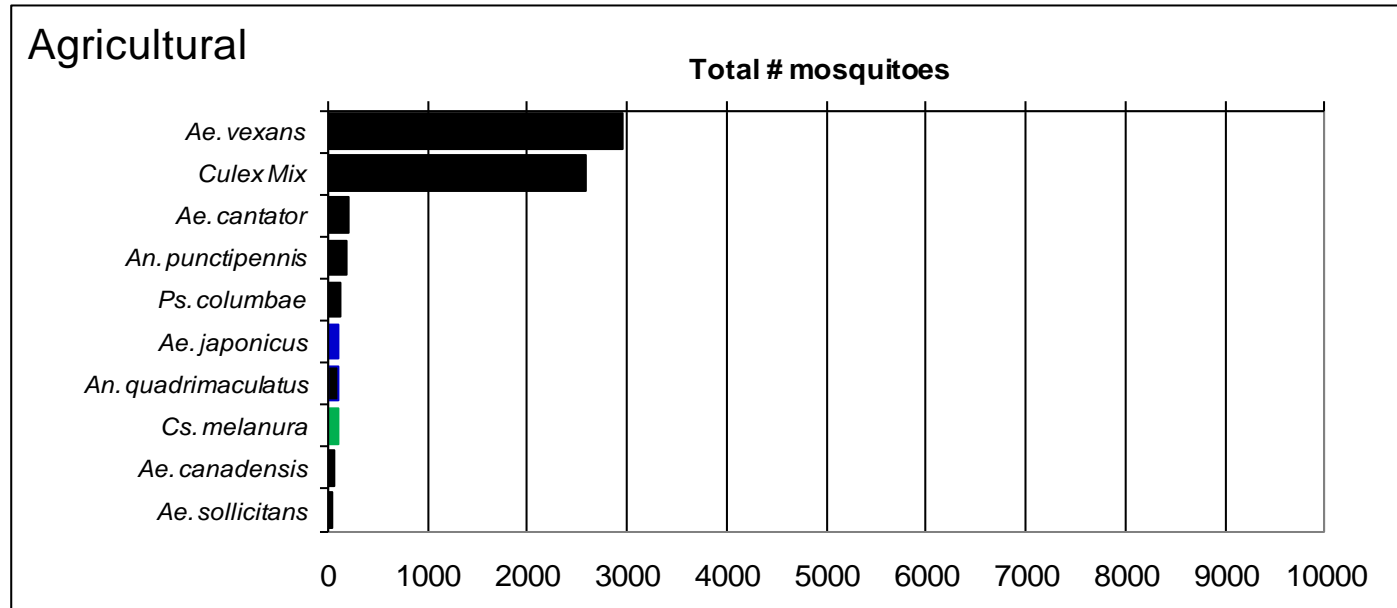


WNV

EEE

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

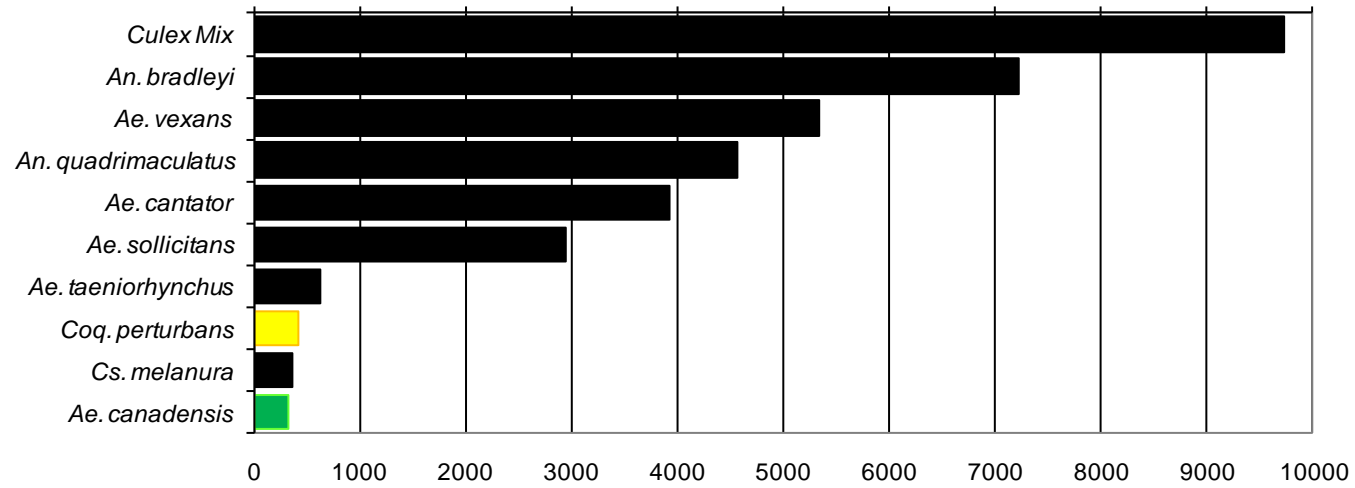
Note: In early season when fewer species are caught, graphs may show less than ten species listed.





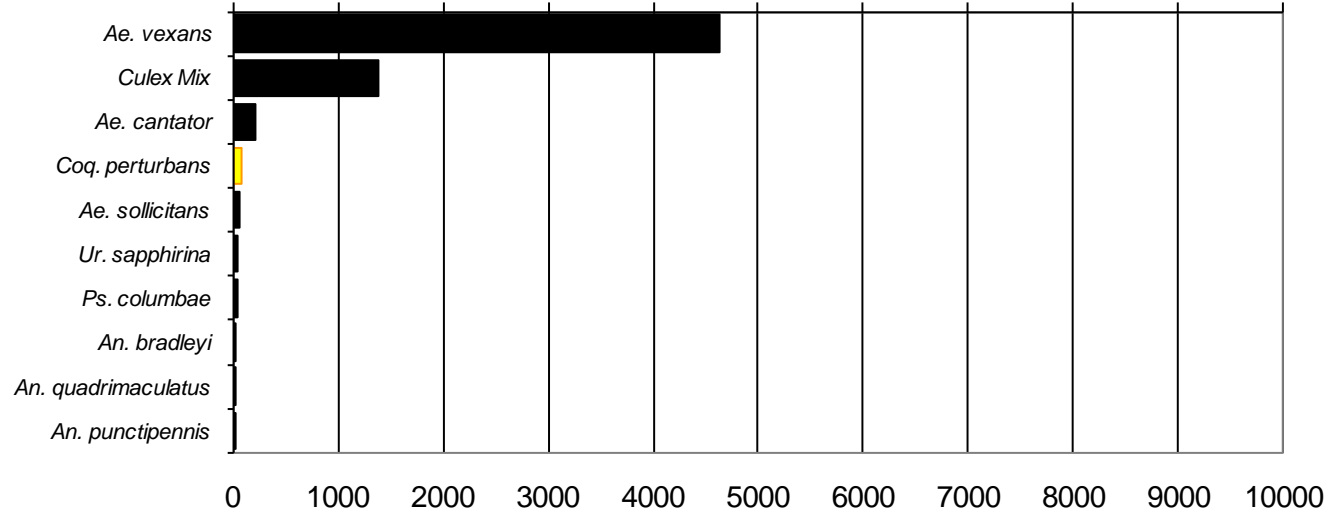
## Delaware Bayshore

### Total # mosquitoes



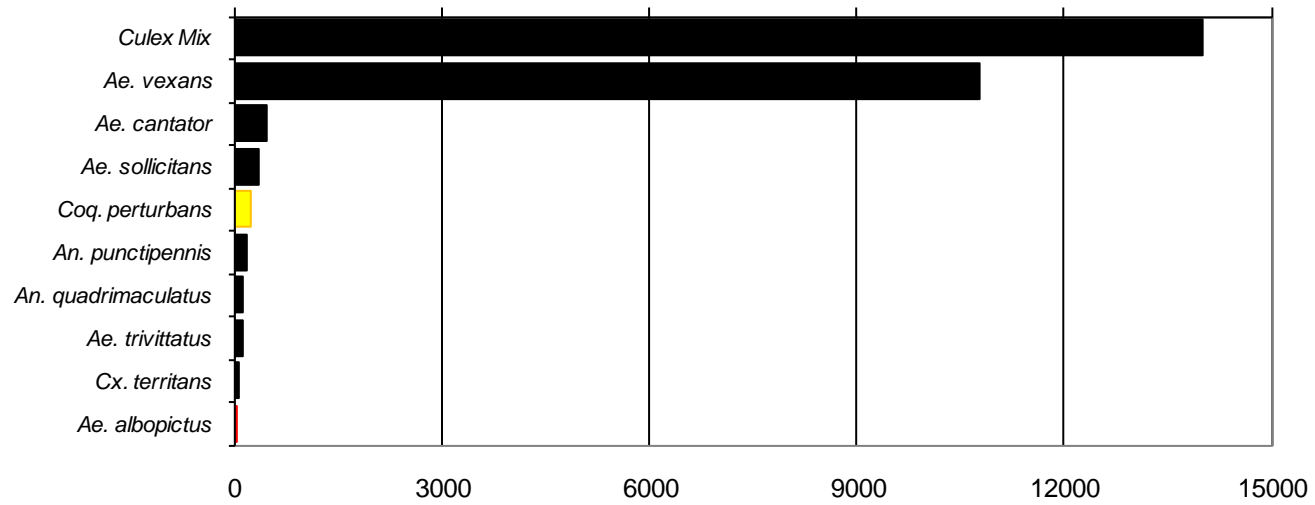
## Delaware River Basin

### Total # mosquitoes



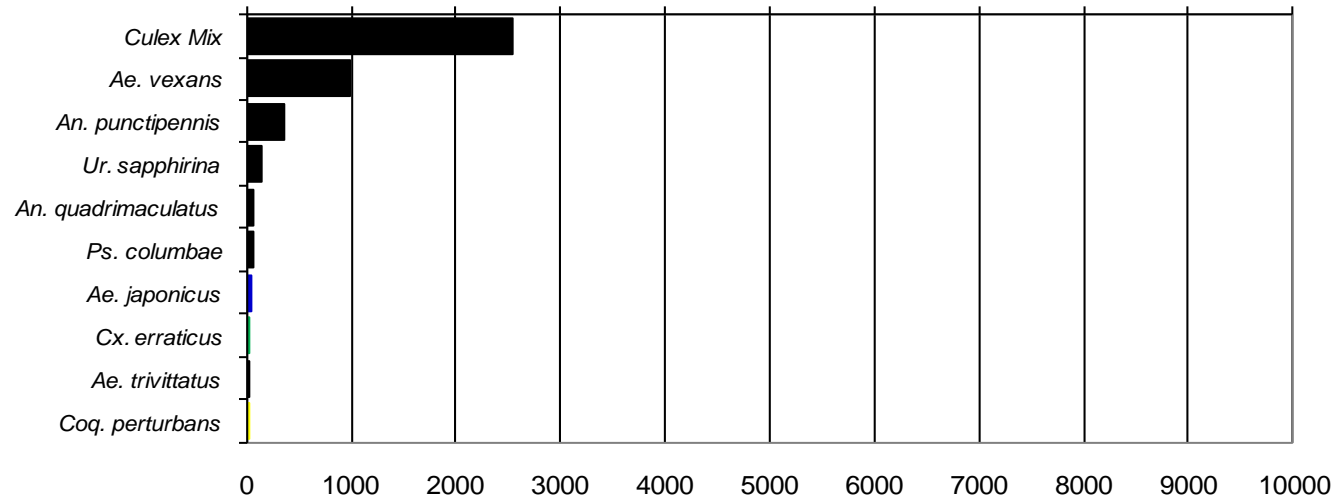
## New York Metropolitan

### Total # mosquitoes



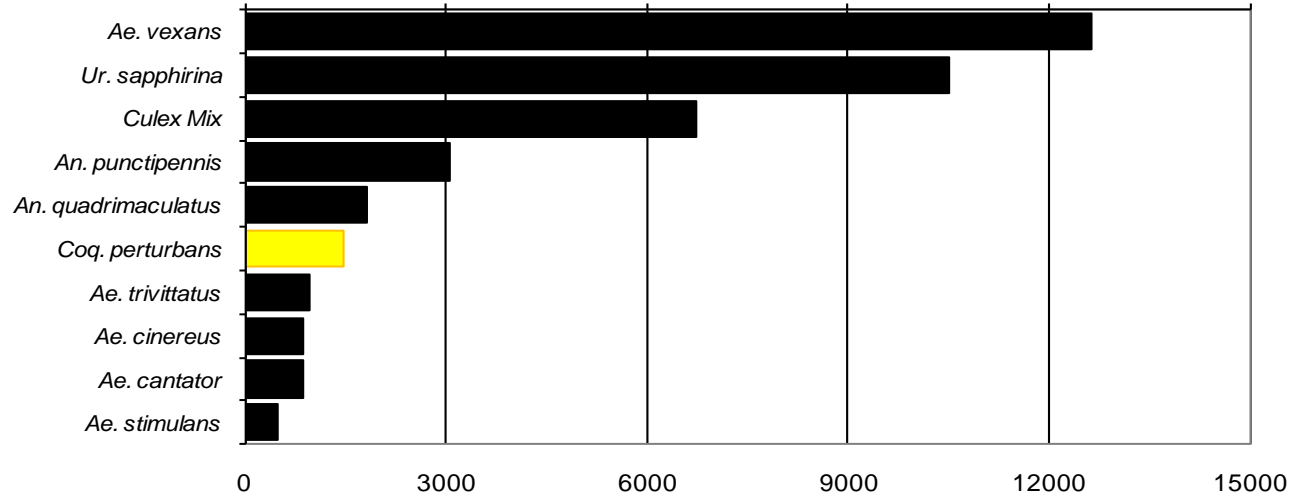
## North Central Rural

### Total # mosquitoes



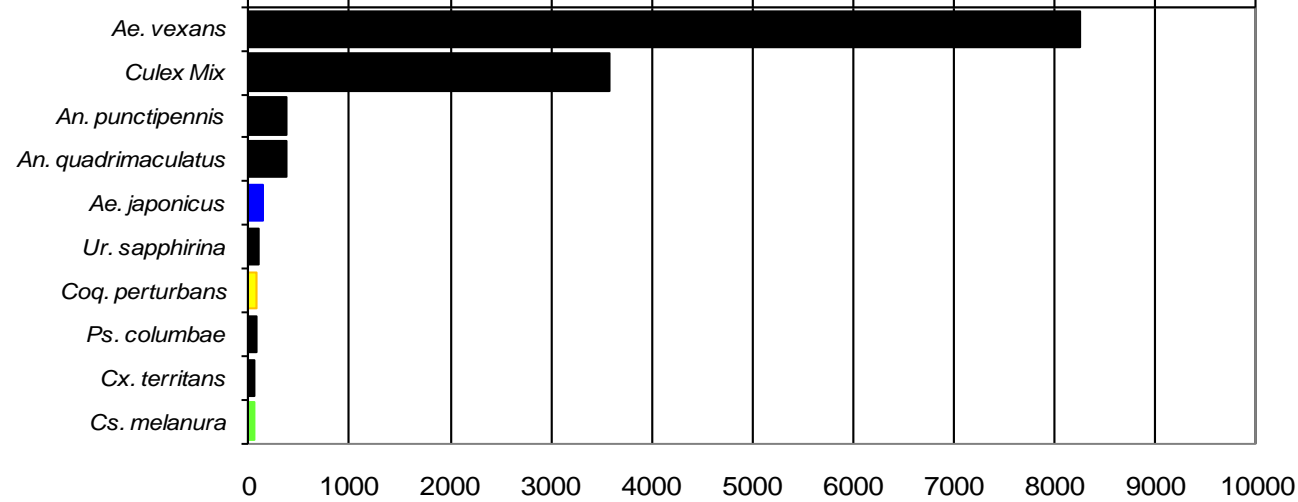
## Northwest Rural

Total # mosquitoes



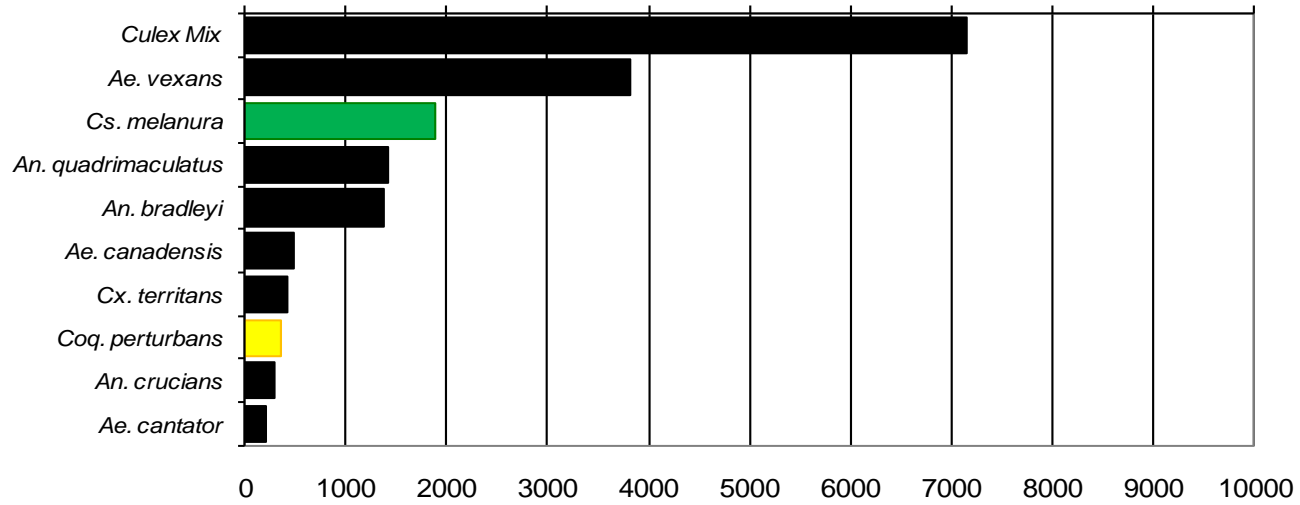
## Philadelphia Metropolitan

Total # mosquitoes



## Pinelands

Total # mosquitoes



## Suburban Corridor

Total # mosquitoes

