

NEW JERSEY ADULT MOSQUITO SURVEILLANCE
Report for 10 October to 16 October 2010, CDC Week 41
Prepared by Lisa M. Reed, Scott Crans and Mark Robson
Center for Vector Biology

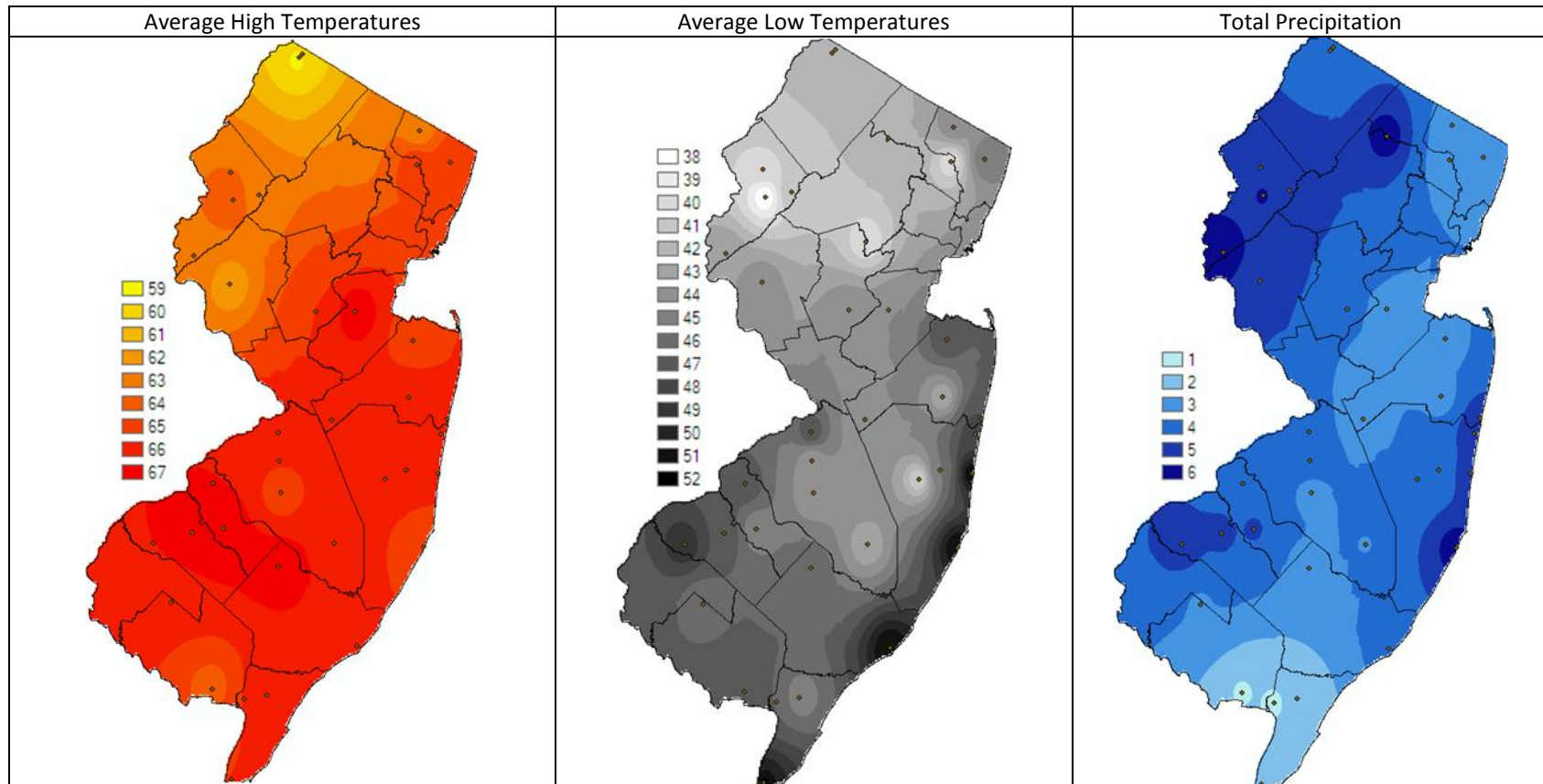
Summary table – Week 41

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	0.02	2.76	0	0.24	1.43	0	0.00	0.00	0	0.00	0.01	0
Coastal	0.16	0.85	0	0.19	1.94	0	0.00	0.00	0	0.00	0.36	0
Delaware Bayshore	0.23	0.43	0	1.11	2.82	0	0.00	0.00	0	0.03	1.68	0
Delaware River Basin	0.00	0.26	0	0.00	0.59	0	0.00	0.03	0	0.00	0.00	0
New York Metro	0.00	0.27	0	0.01	1.16	0	0.00	0.00	0	0.00	0.02	0
North Central Rural	0.00	0.03	0	0.02	0.01	3	0.00	0.00	0	0.00	0.00	0
Northwest Rural	0.37	1.45	0	0.00	0.70	0	0.00	0.00	0	0.00	0.00	0
Philadelphia Metro	0.17	1.78	0	0.24	1.04	0	0.00	0.00	0	0.00	0.00	0
Pinelands	0.09	0.68	0	0.12	0.48	0	0.00	0.00	0	0.17	0.00	
Suburban Corridor	0.00	0.39	0	0.01	0.89	0	0.00	<0.01	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: *Culex Mix* activity in the North Central Rural region has picked up over historical trends, although numbers are significantly low and this species is declining in general. Numbers continue to also decrease for *Aedes vexans* and *Aedes sollicitans* while *Coquillettidia perturbans* is done for the season.

Climate Factors

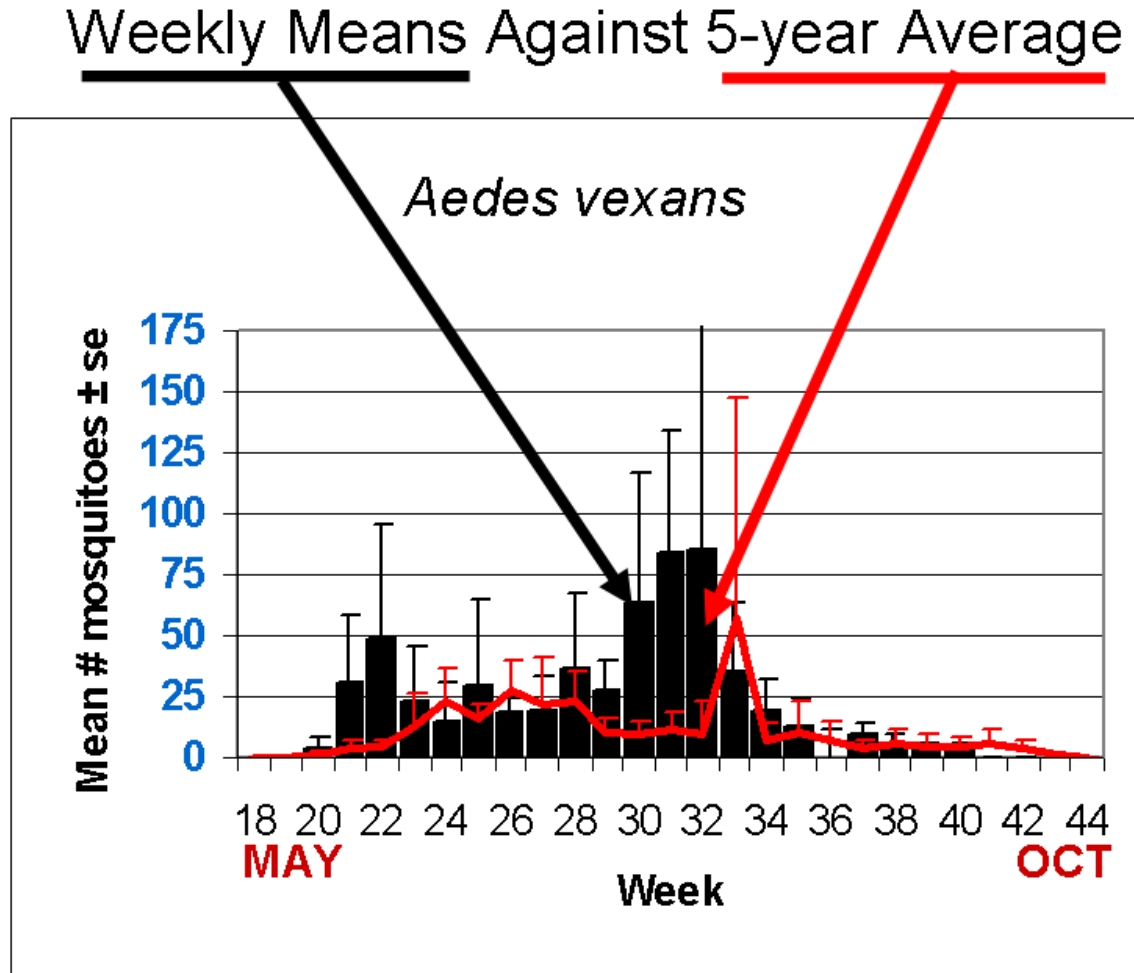


The three figures show the interpolation of average maximum and minimum temperature and total precipitation for October 1-14, 2010 in New Jersey. Data points are from ~40 weather stations maintained through the New Jersey Weather & Climate Network and the State Climatologist. Interpolation between points was performed using ArcMap 9.2.

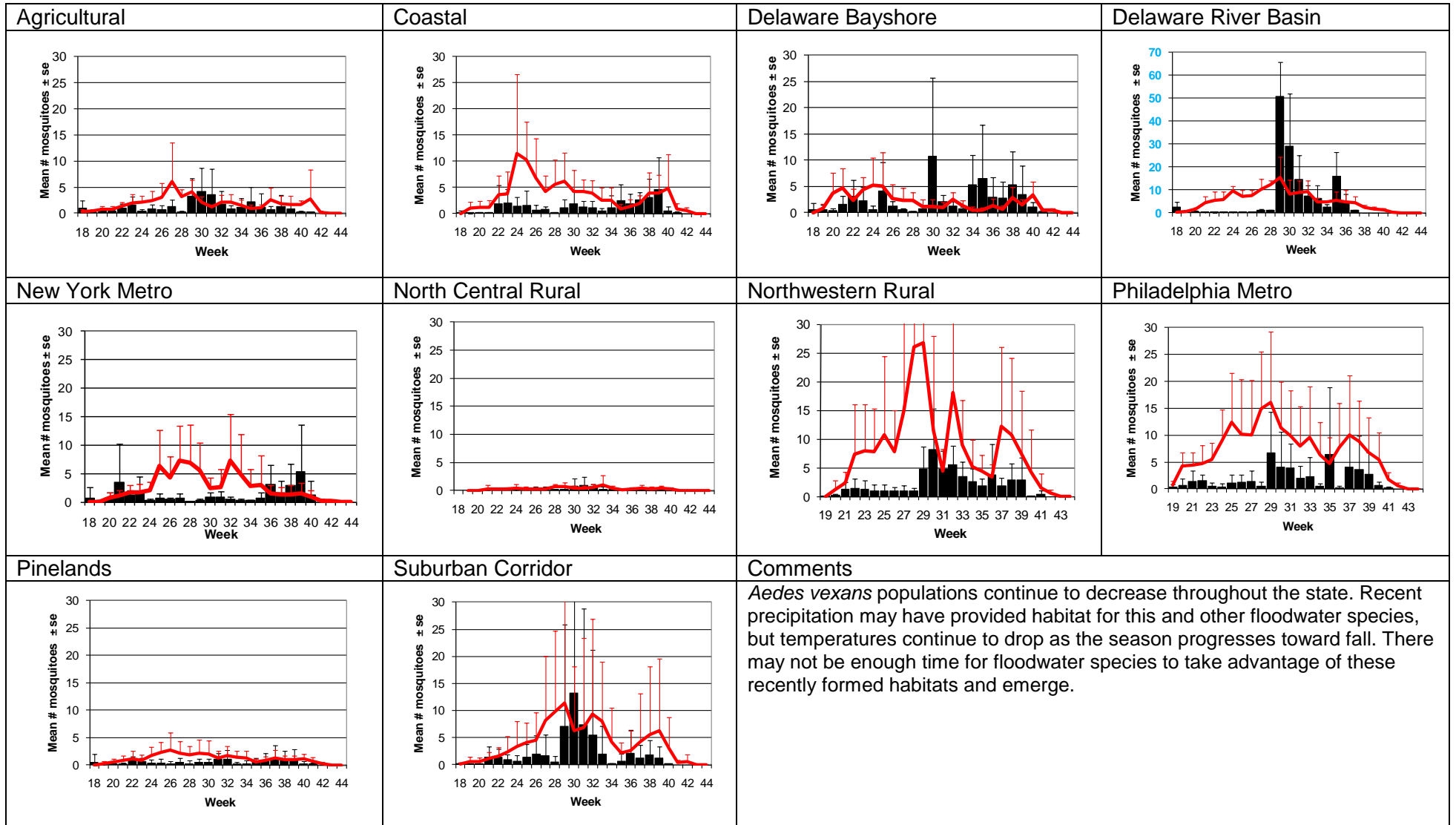
Both average daytime and nighttime temperatures decreased. Daytime temperatures were highest in the pinelands the center of the state while nighttime temperatures were warmest along the coast. Precipitation was highest in the northwestern and coastal portions of the state and overall most areas gained in precipitation from the previous week.

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 Camden, Cape May, Monmouth, Morris, Salem, and Warren counties. Note: Previous week's data are from Atlantic, Bergen, Burlington, Camden, Cape May, Essex, Hudson, Monmouth, Morris, Salem, and Warren counties.

Participation is concluding for the year for several counties as mosquito populations are decreasing rapidly and seasonal help has ended.

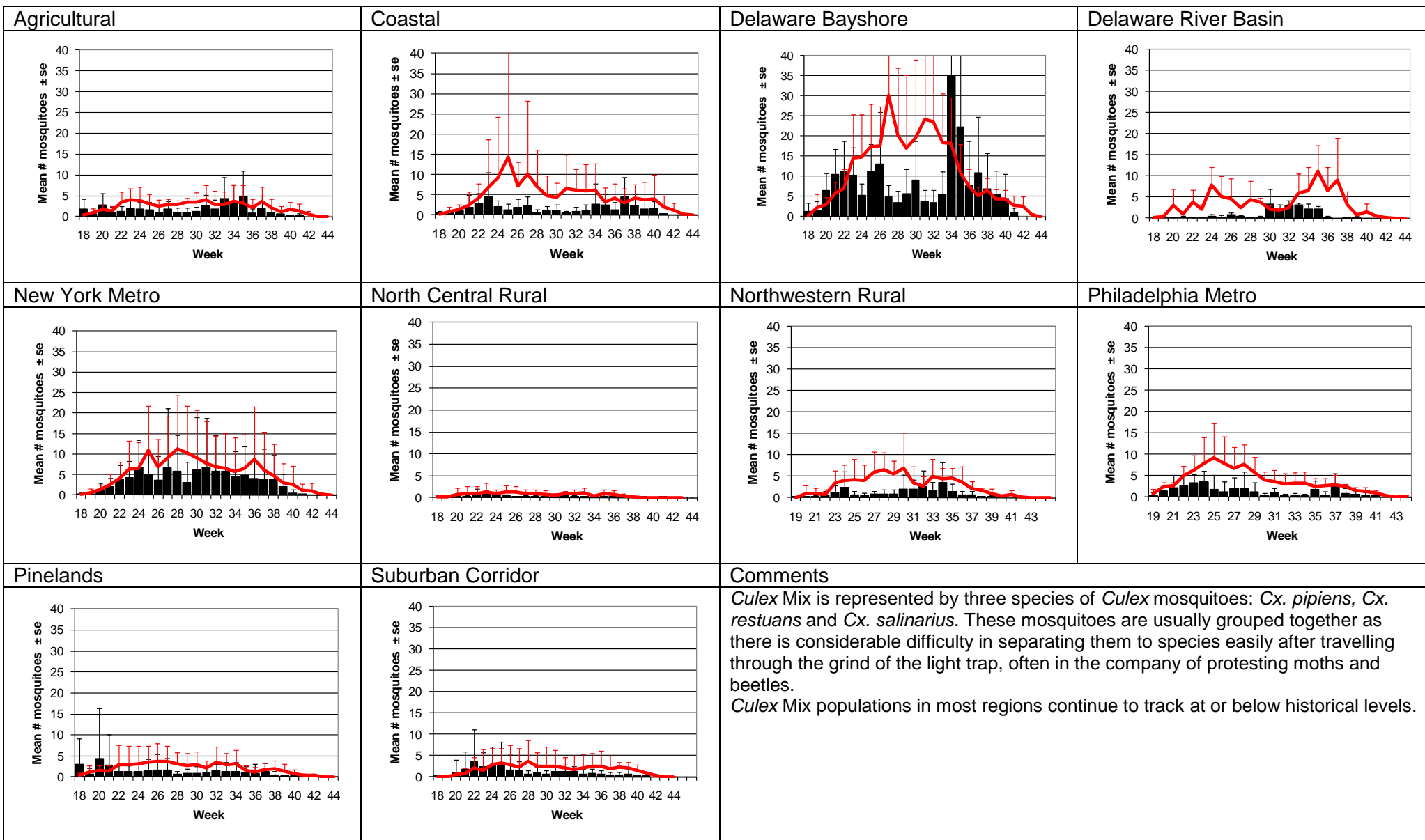


Aedes vexans - Fresh Floodwater Species Multivoltine Aedine (*Ae. vexans* Type)

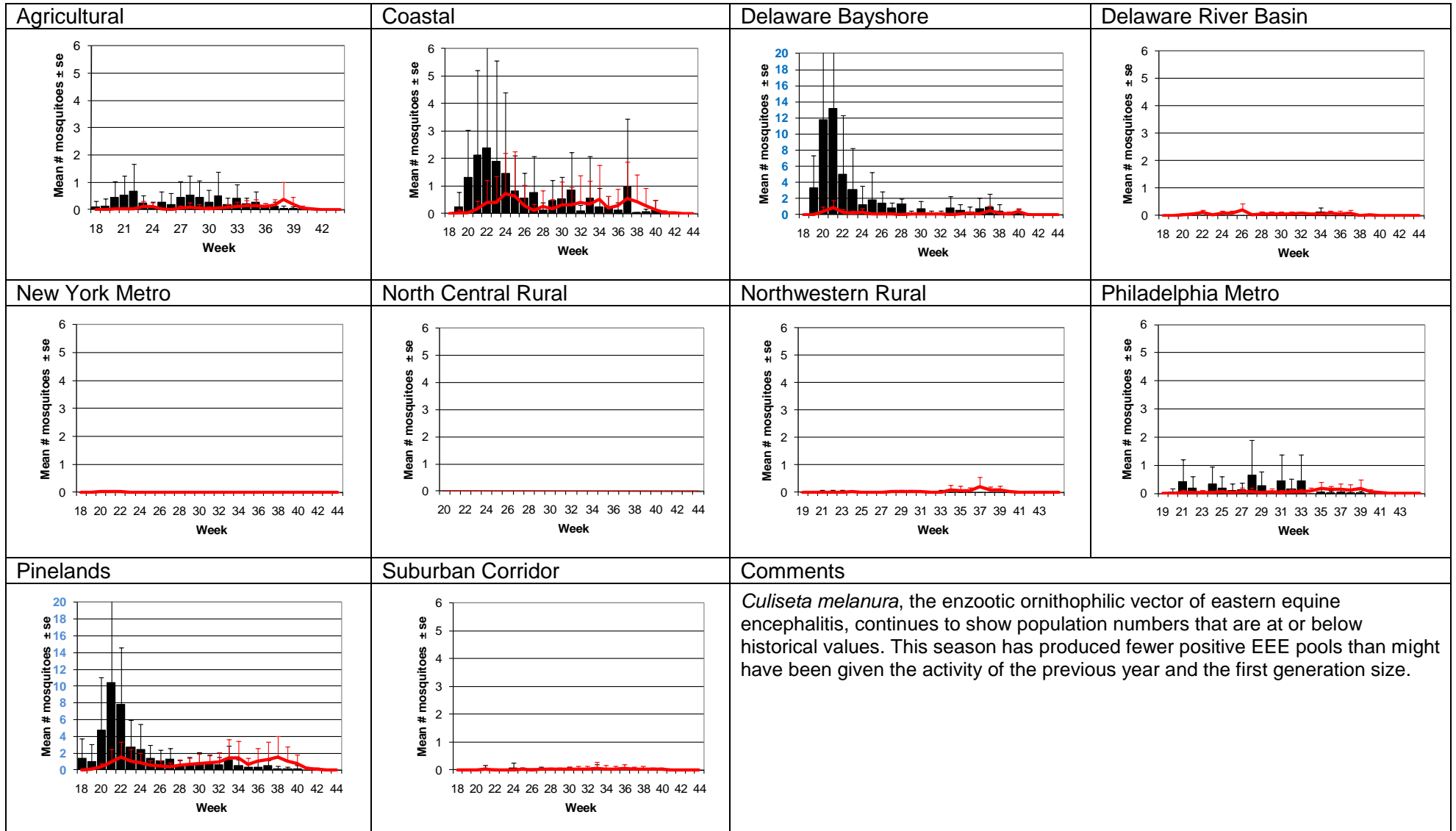


Culex Mix – Permanent Water Species

Multivoltine *Culex/Anopheles* (*Cx. pipiens* Type)

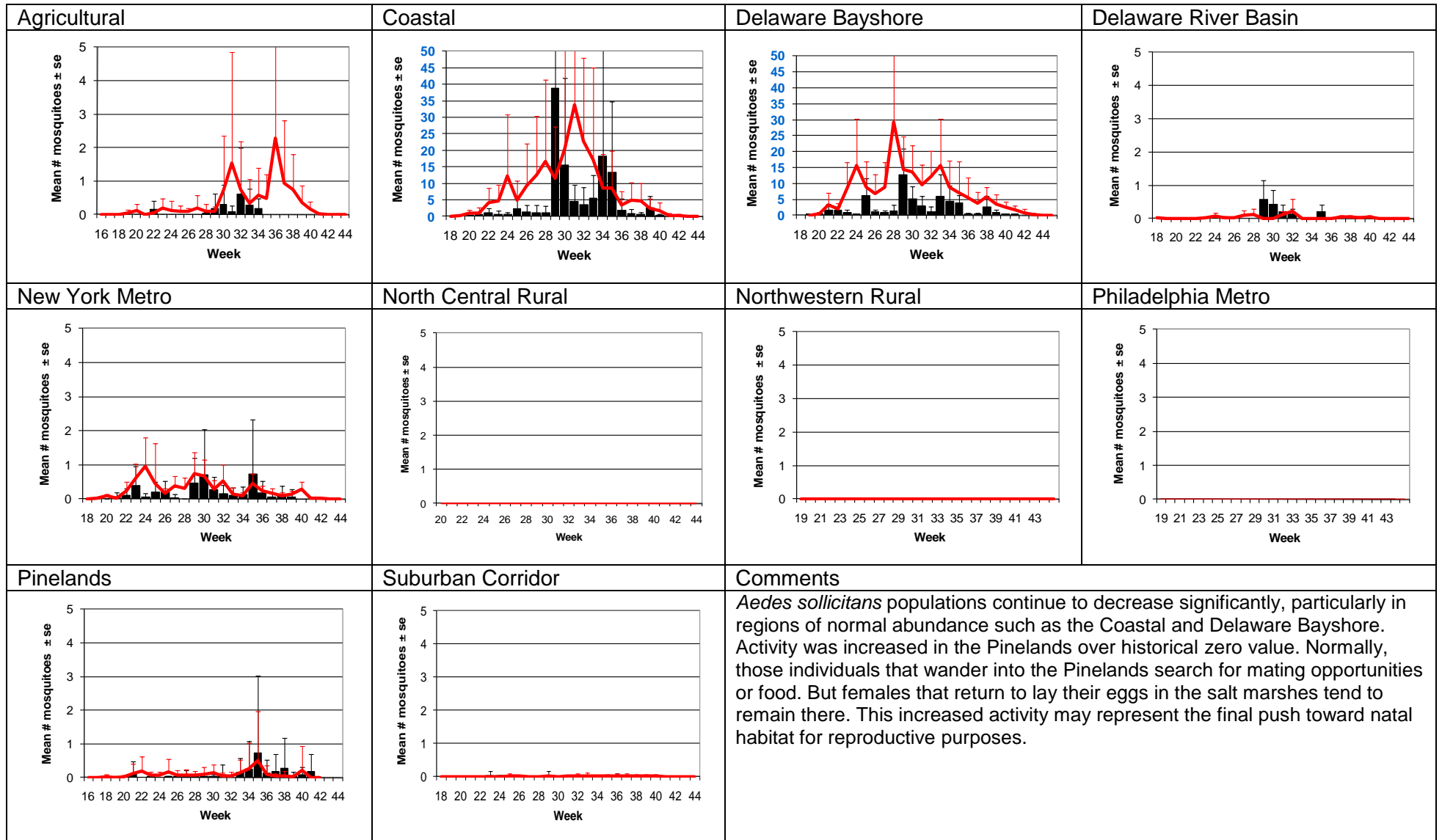


Culiseta melanura – Miscellaneous Group Unique (*Cs. melanura* Type)

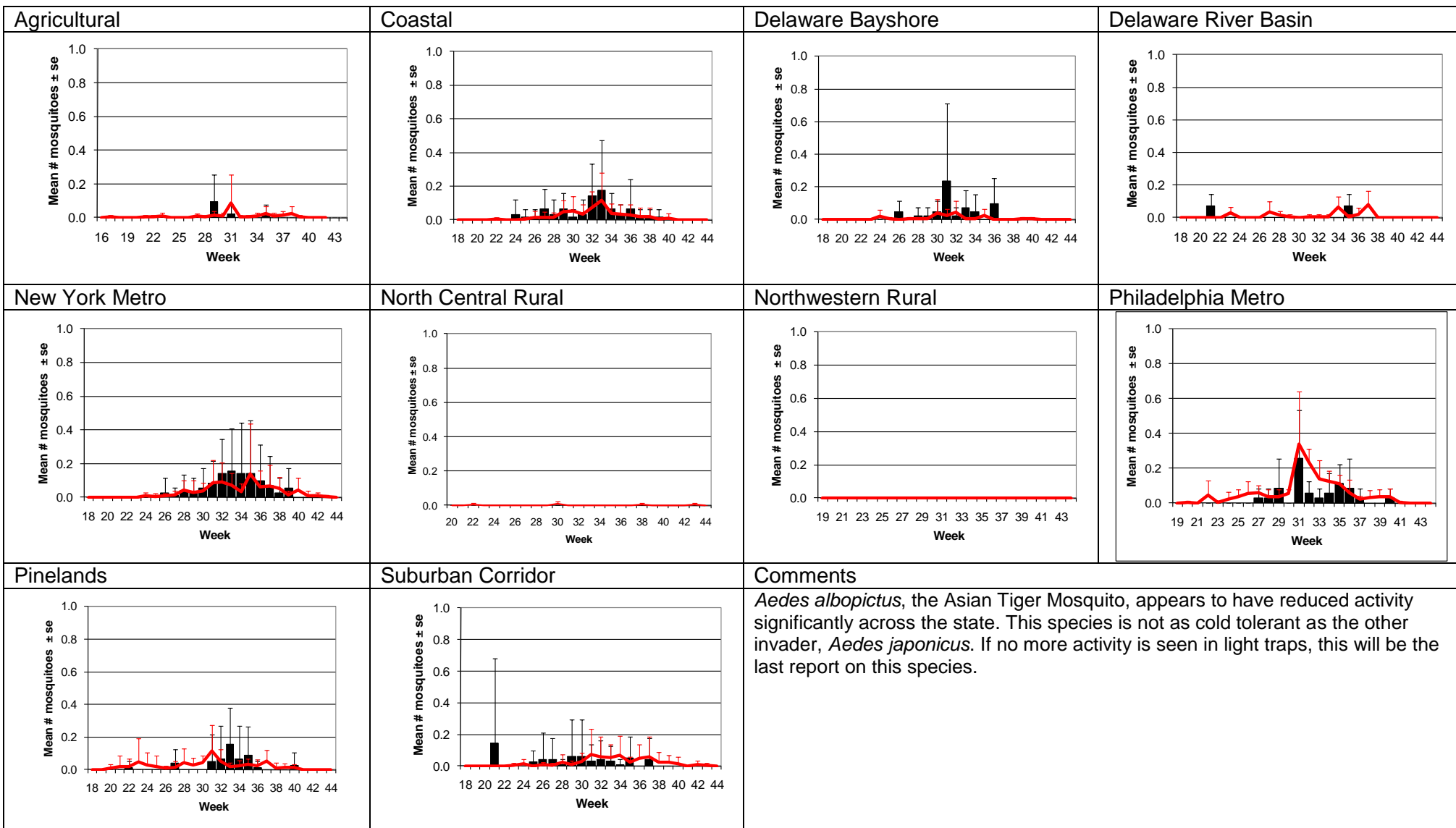


Aedes sollicitans - Salt Floodwater Species

Multivoltine Aedine (*Ae. sollicitans* Type)



Aedes albopictus – Container Species Multivoltine Aedine (*Ae. triseriatus* Type)



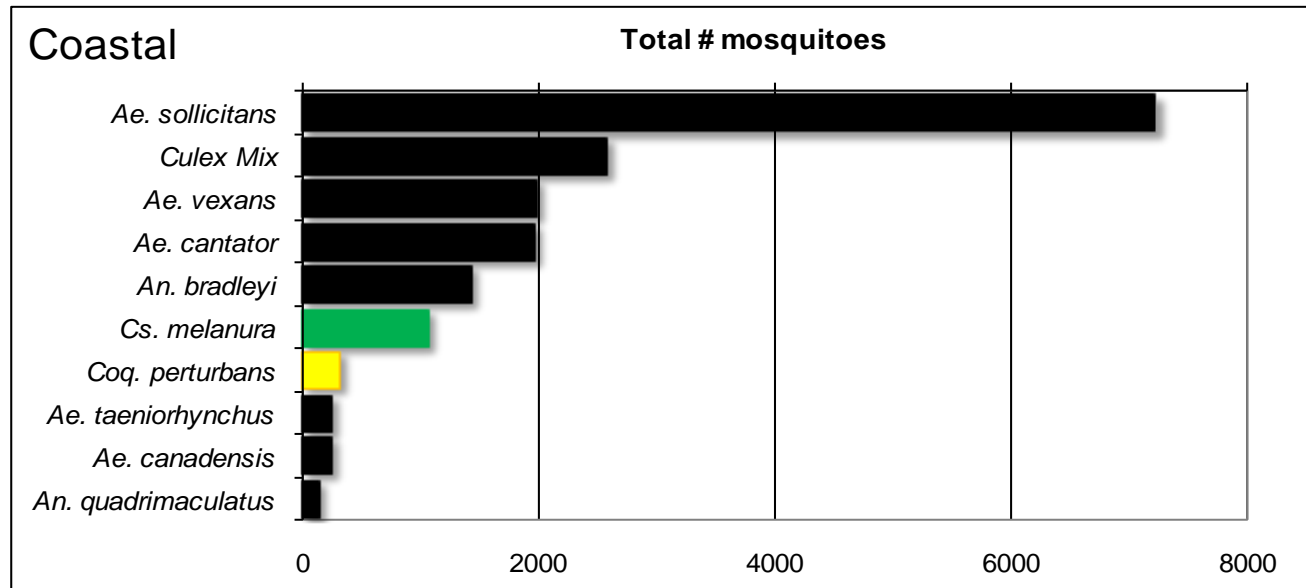
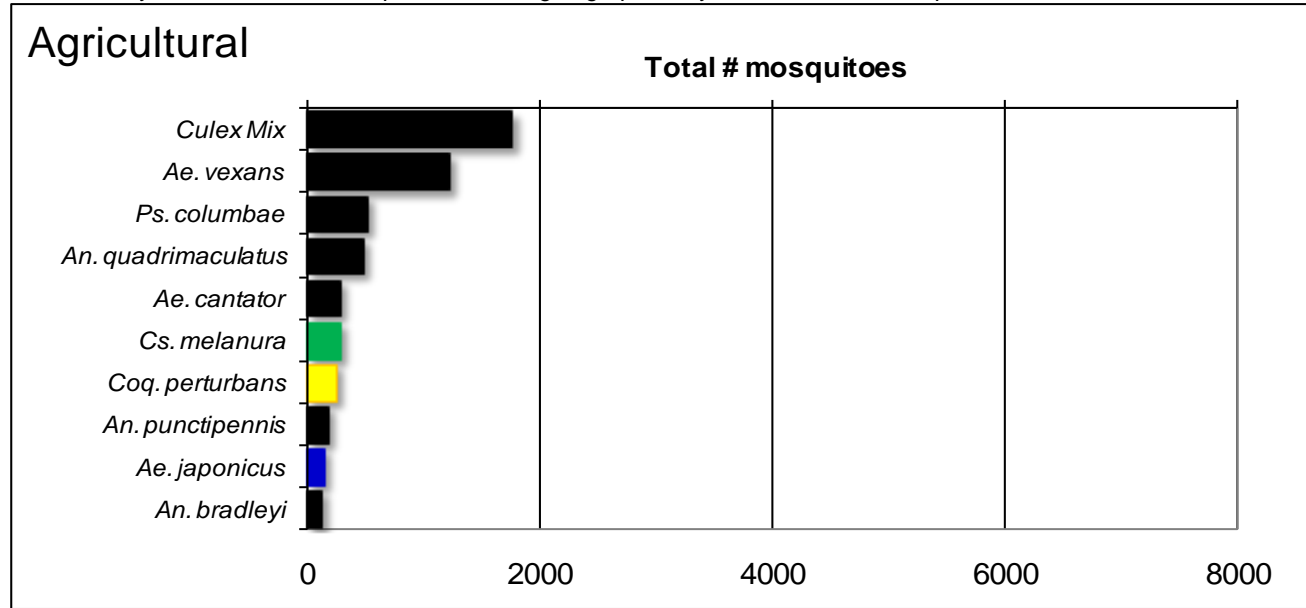
WNV

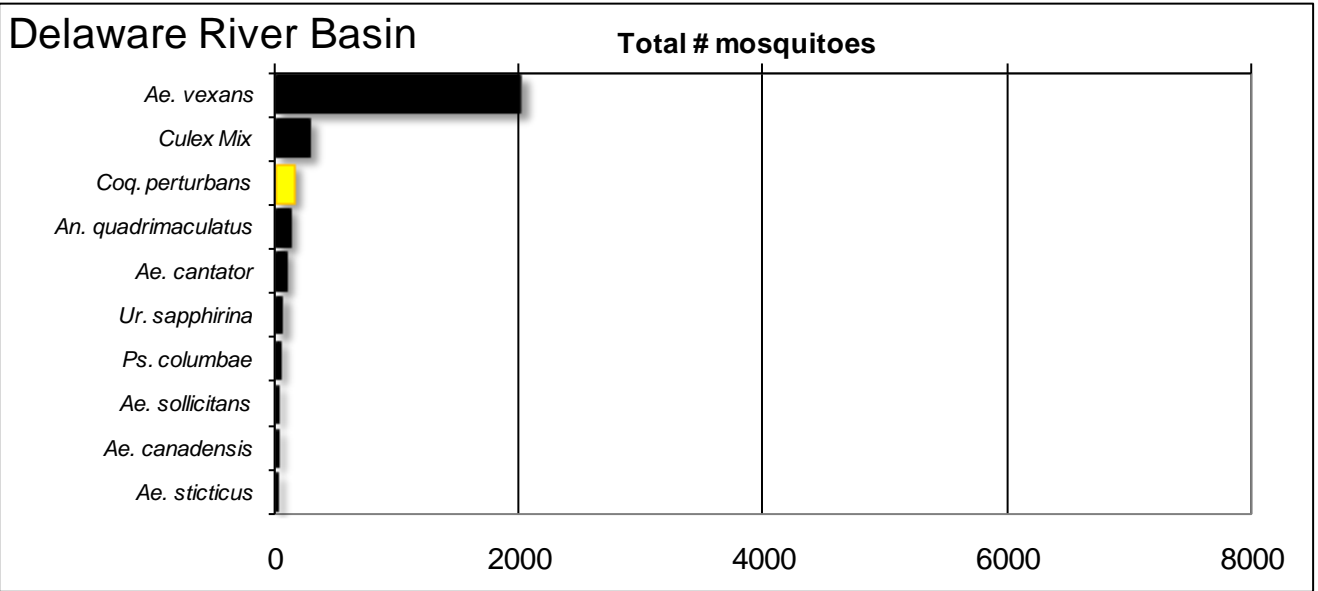
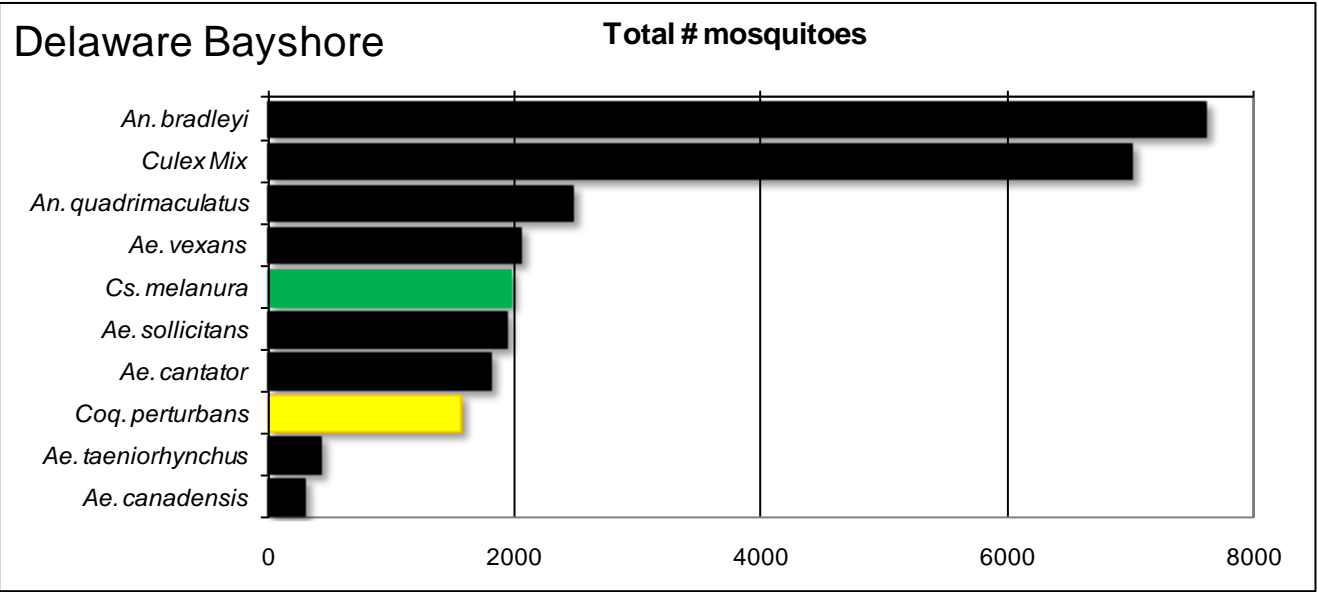
EEE

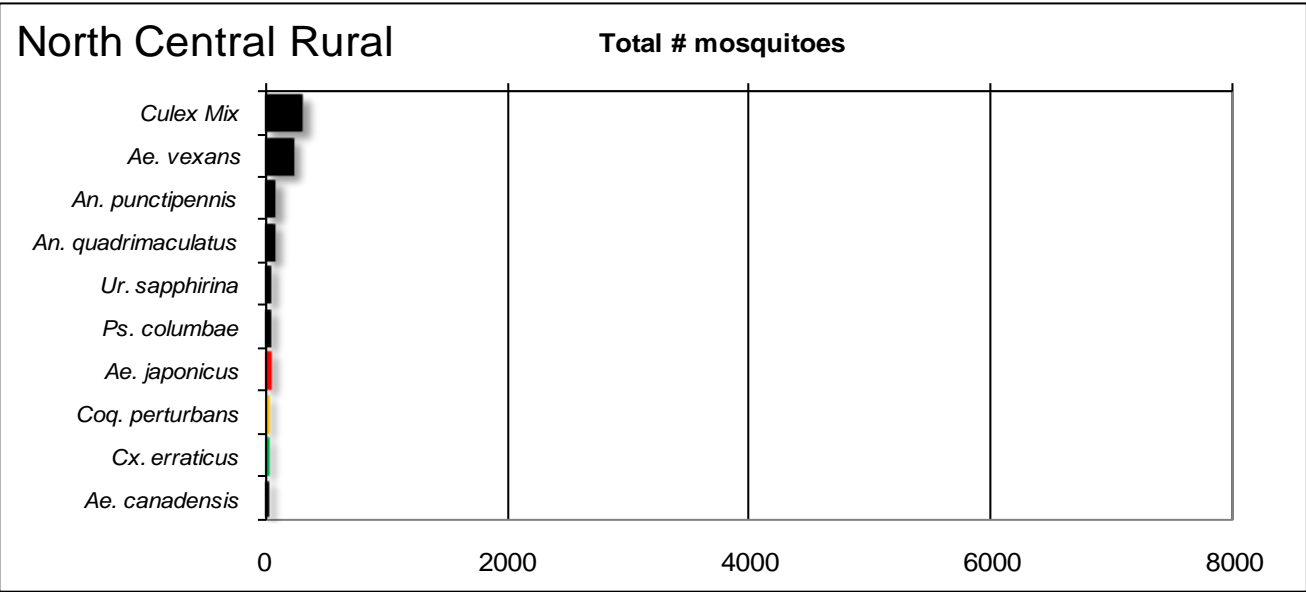
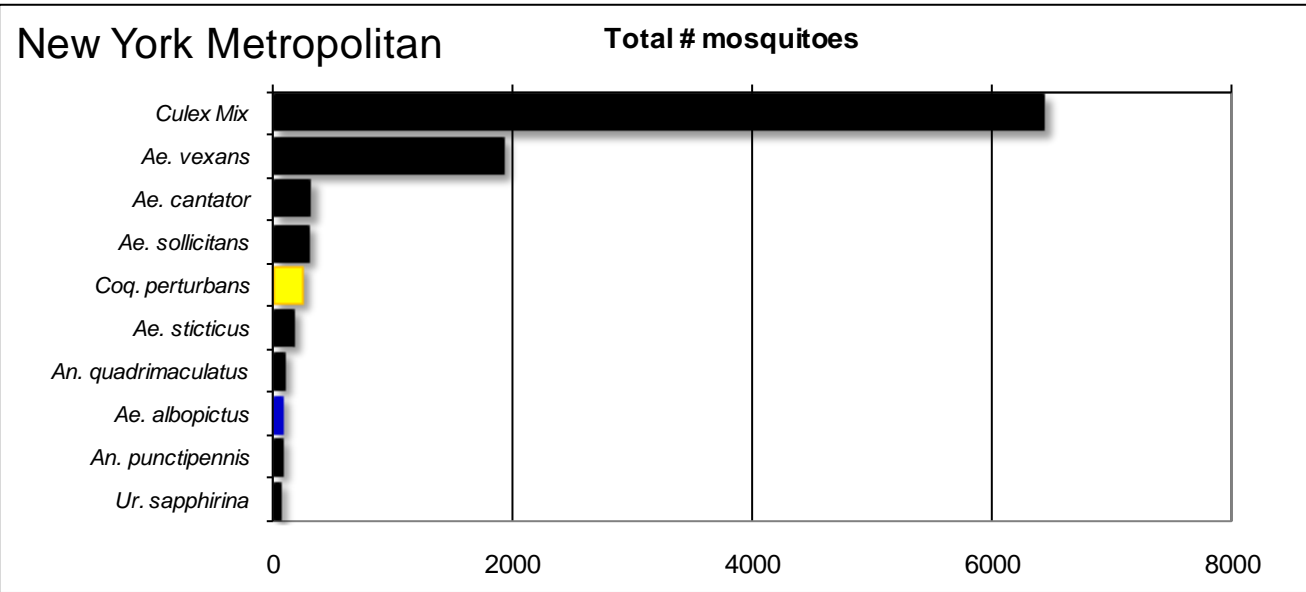
Top Ten Cumulative Mosquito Species/Region - ■ *Ae. albopictus*, ■ *Ae. japonicus* (invasives); ■ *Cs. melanura* or *Cx. erraticus*

■ *Coq. perturbans*

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

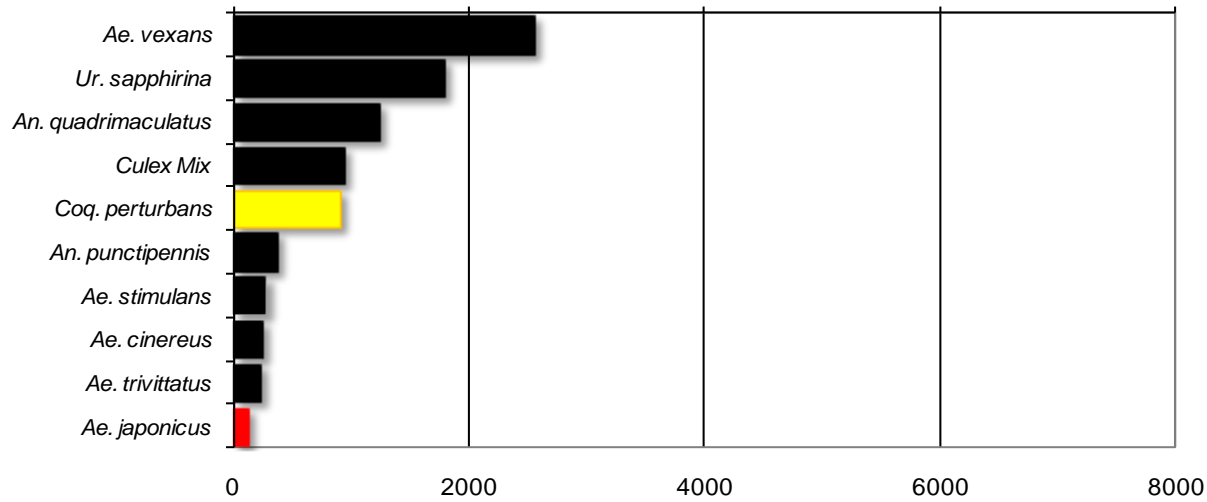






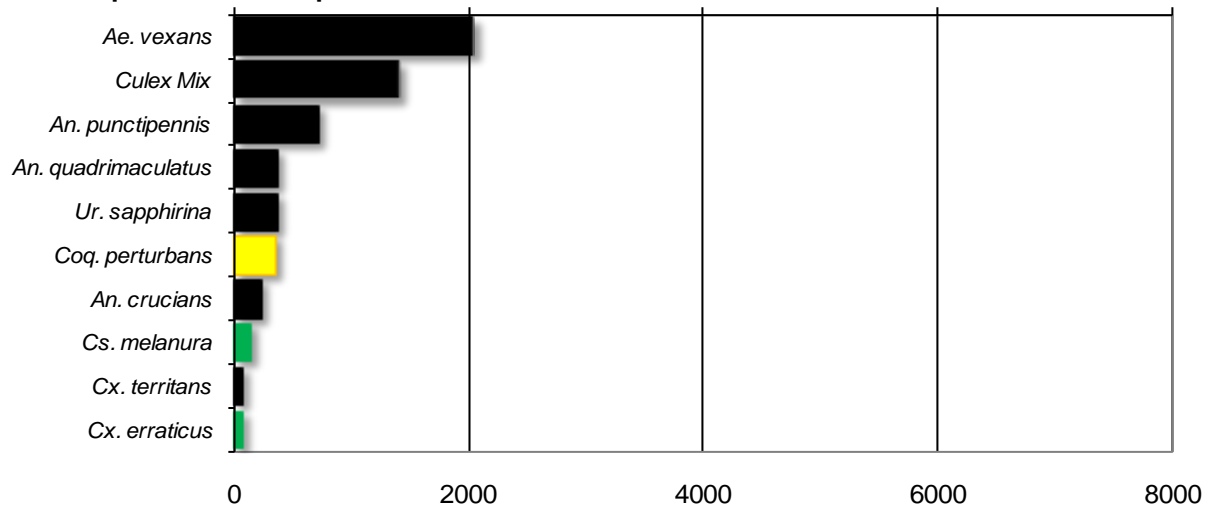
Northwest Rural

Total # mosquitoes



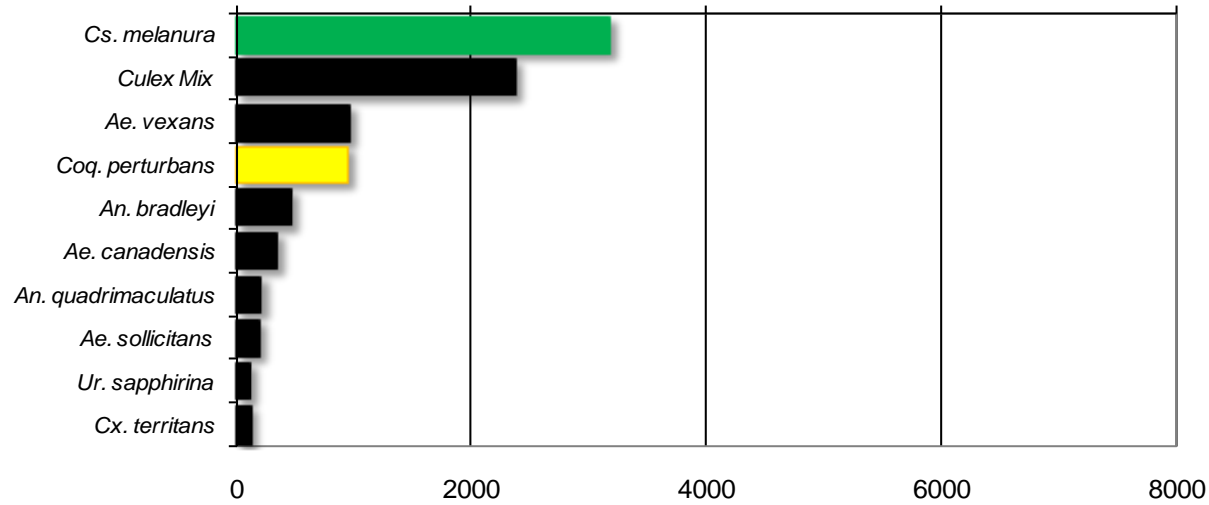
Philadelphia Metropolitan

Total # mosquitoes



Pinelands

Total # mosquitoes



Suburban Corridor

Total # mosquitoes

