

NEW JERSEY ADULT MOSQUITO SURVEILLANCE

Report for 25 September to 1 October 2016, CDC Week 39

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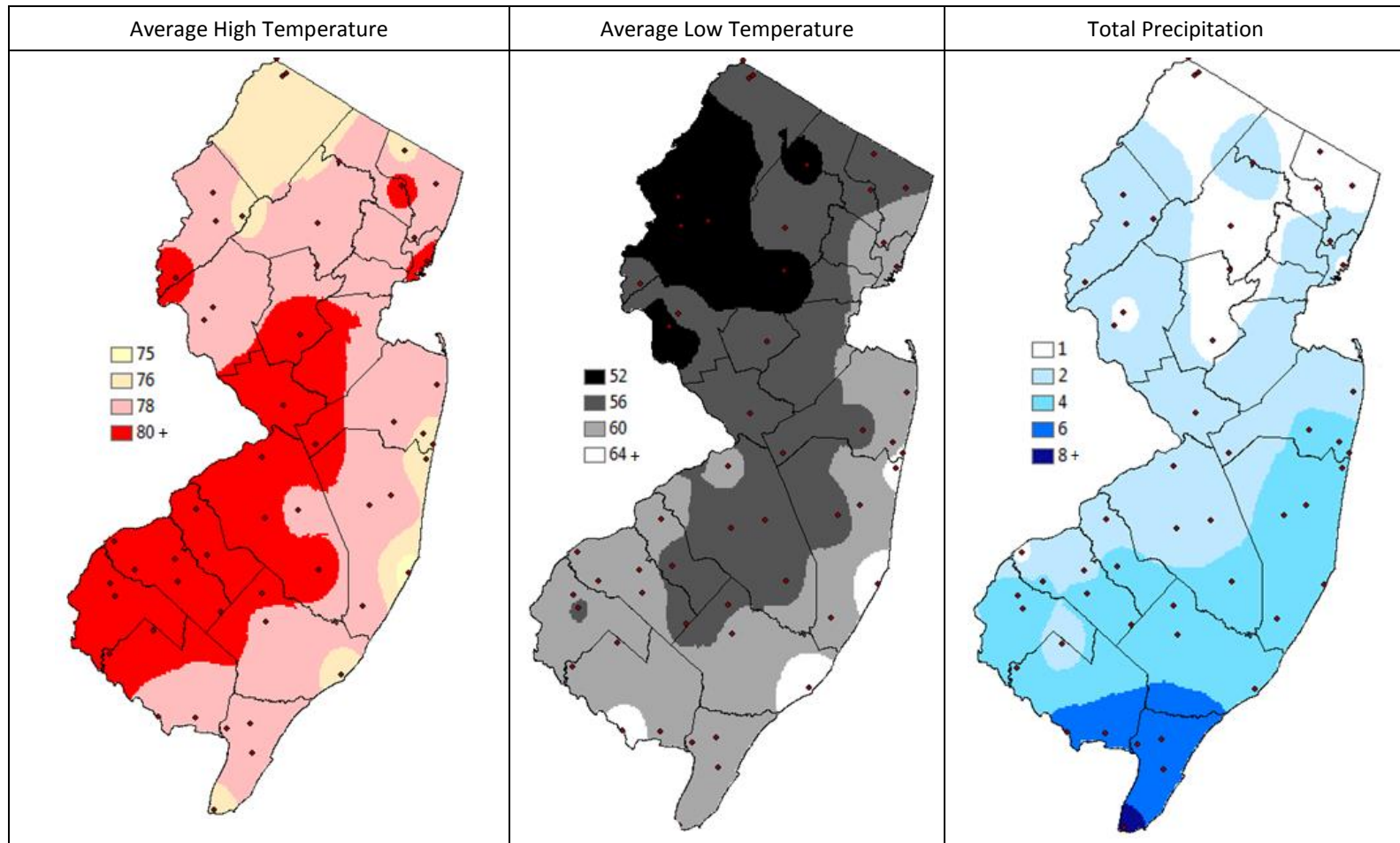
Summary Table – Week 39

| 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 | 0.07 | 2.12 | 0 | 3.48 | 1.43 | 3 | 0.02 | 0.00 | 0 | 0.00 | 0.01 | 0 |
| Coastal | 0.02 | 4.16 | 0 | 0.30 | 3.92 | 0 | 0.00 | 0.02 | 0 | 0.44 | 0.83 | 0 |
| Delaware Bayshore | 0.00 | 2.31 | 0 | 1.00 | 5.05 | 0 | 0.00 | <0.01 | 0 | 0.11 | 0.34 | 0 |
| Delaware River Basin | 2.14 | 1.30 | 2 | 7.07 | 0.54 | 4 | 0.00 | 0.00 | 0 | 0.00 | 0.00 | 0 |
| New York Metro | 0.13 | 1.23 | 0 | 3.46 | 2.83 | 1 | 0.00 | 0.03 | 0 | 0.03 | 0.17 | 0 |
| North Central Rural | 0.04 | 0.16 | 0 | 0.63 | 0.12 | 4 | 0.02 | 0.00 | 0 | 0.00 | 0.00 | 0 |
| Northwest Rural | 0.00 | 6.05 | 0 | 0.00 | 1.26 | 0 | 0.00 | 0.01 | 0 | 0.00 | 0.00 | 0 |
| Philadelphia Metro | nd | 6.30 | 0 | nd | 2.69 | 0 | nd | 0.00 | 0 | nd | 0.00 | 0 |
| Pinelands | 0.22 | 1.23 | 0 | 0.45 | 2.08 | 0 | 0.03 | 0.13 | 0 | 0.00 | 0.03 | 0 |
| Suburban Corridor | 0.04 | 2.39 | 0 | 0.19 | 0.74 | 0 | 0.00 | 0.12 | 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. nd=no data reported.

State Summary: *Aedes vexans* numbers were moderately elevated above historical levels in the Delaware River Basin while *Culex Mix* were reported at higher than average values for the Agricultural, Delaware River Basin and North Central Rural regions and mildly elevated in the New York Metropolitan region. *Coquillettidia perturbans* persisted in the Agricultural and North Central Rural beyond historical amounts.

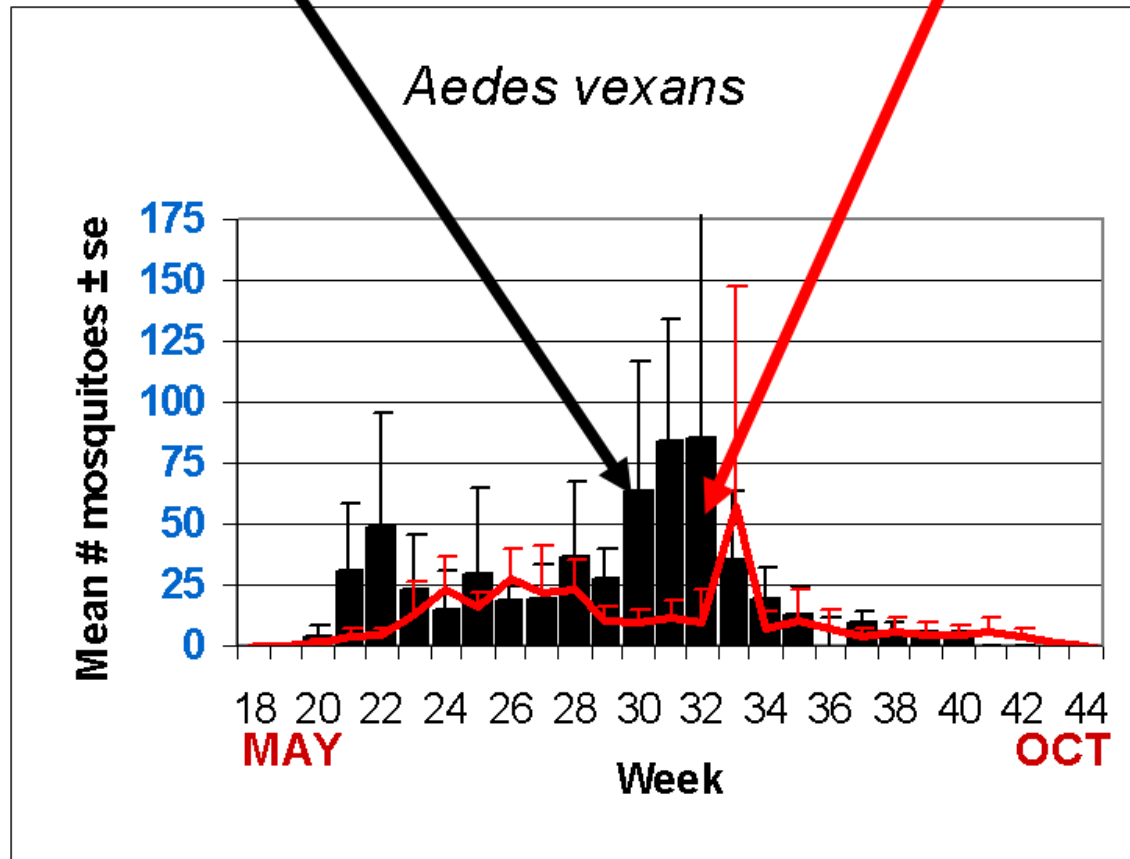
Climate Factors



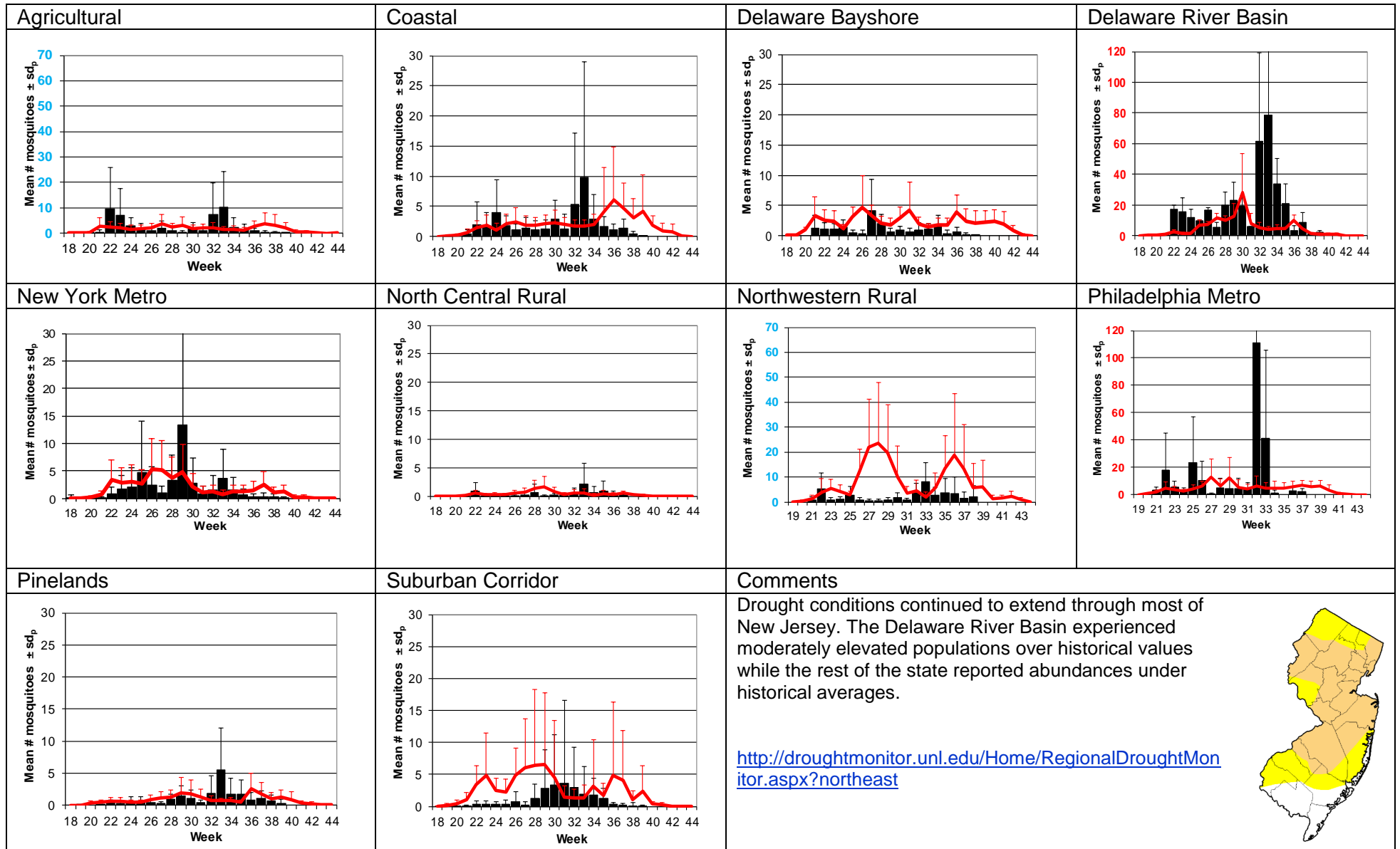
The three figures show the interpolation of average maximum ($^{\circ}\text{F}$) and minimum temperature ($^{\circ}\text{F}$) and total precipitation (inches) for 30 days prior to 30 September 2016 in New Jersey. Data points are from about 57 weather stations maintained through the New Jersey Weather & Climate Network and the State Climatologist. Interpolation between points was performed using ArcMap 10.1.

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 Cumberland, Hudson, Monmouth, Morris, Ocean, Passaic, Salem, Union and Warren counties. Data for the previous week are from Atlantic, Bergen, Camden, Cape May, Cumberland, Hudson, Hunterdon, Monmouth, Morris, Ocean, Passaic, Salem, Union and Warren counties.

Weekly Means Against 5-year Average

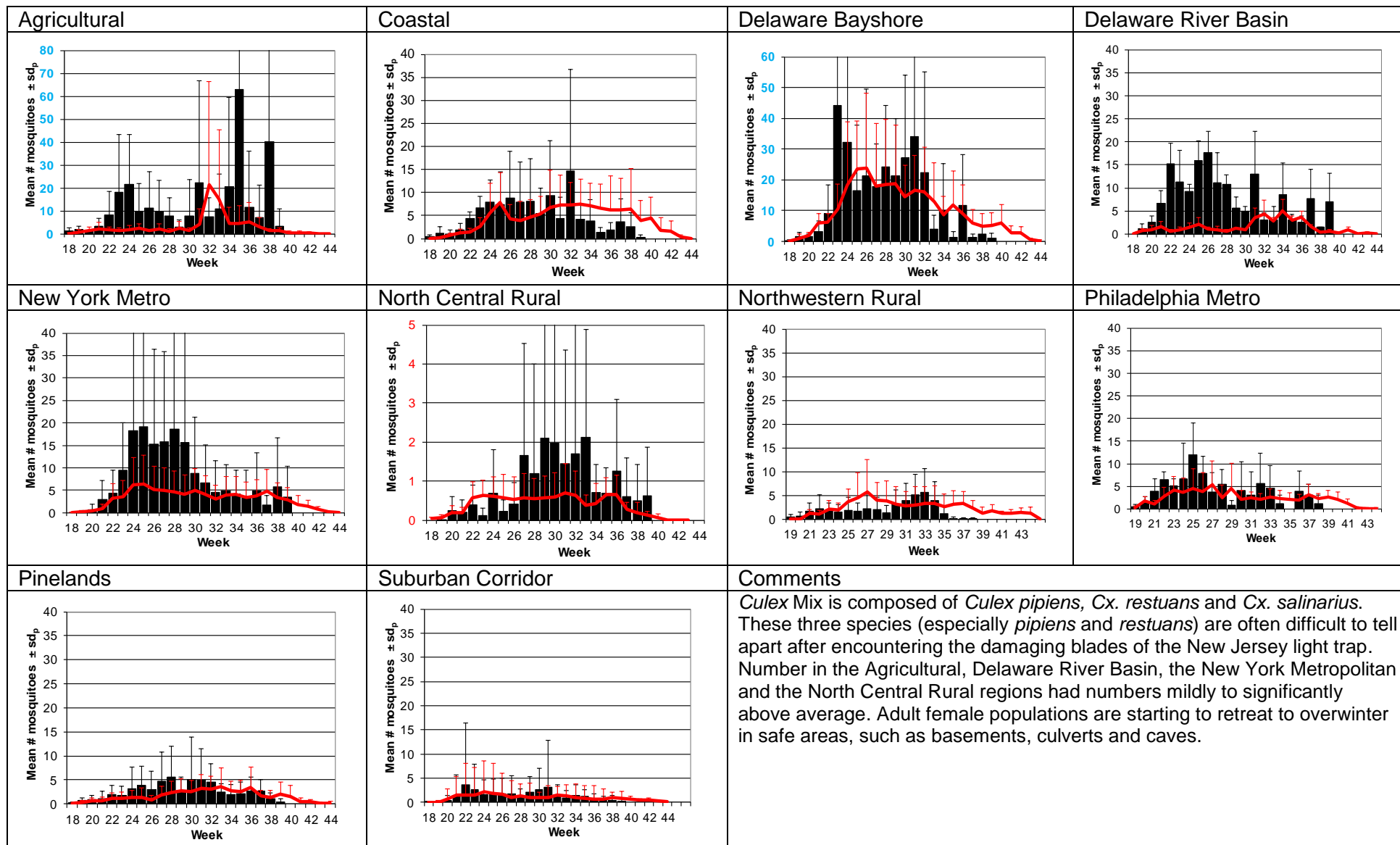


Aedes vexans - Fresh Floodwater Species Multivoltine Aedine (Ae. vexans Type)

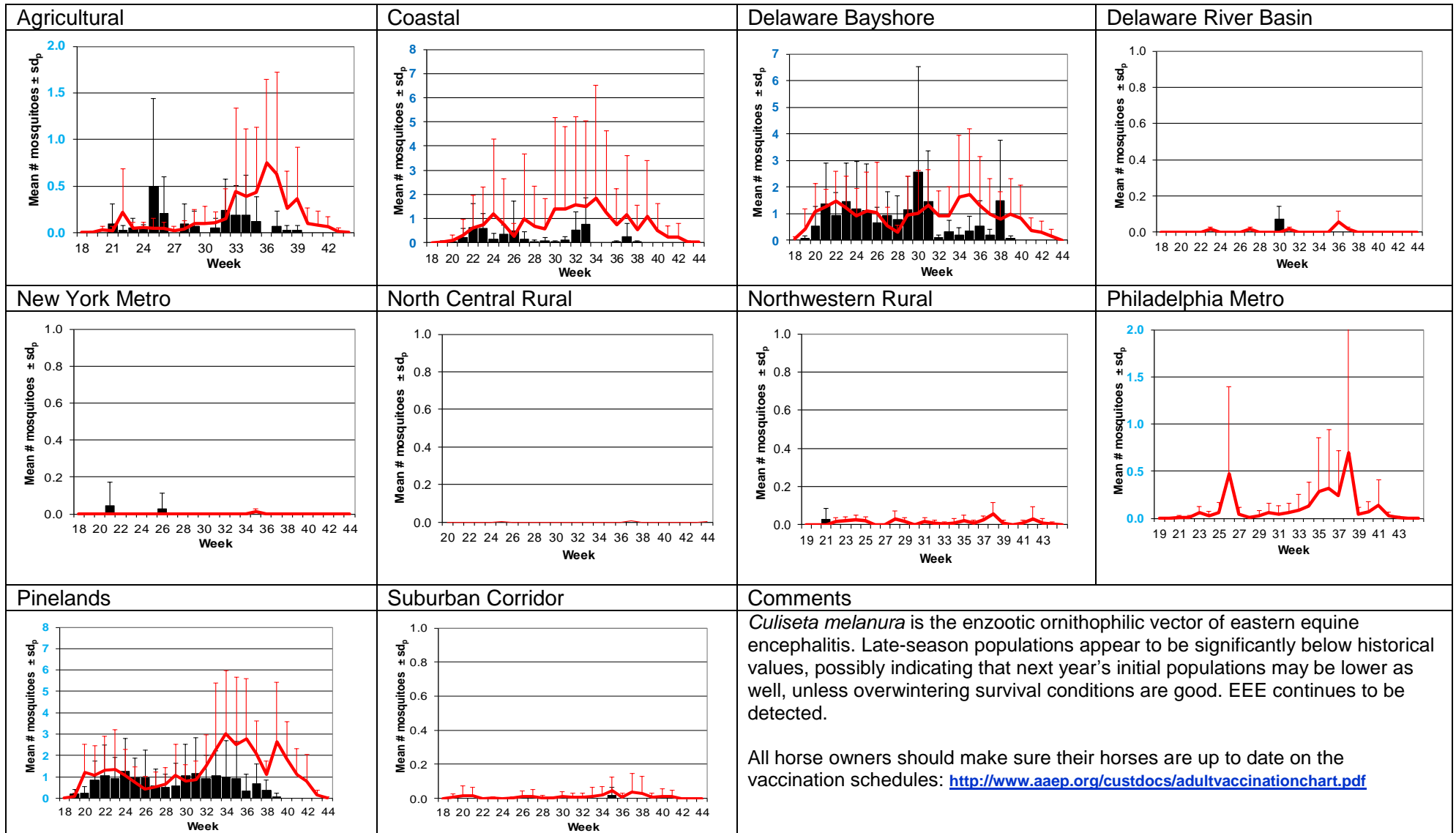


Culex Mix – Permanent Water Species

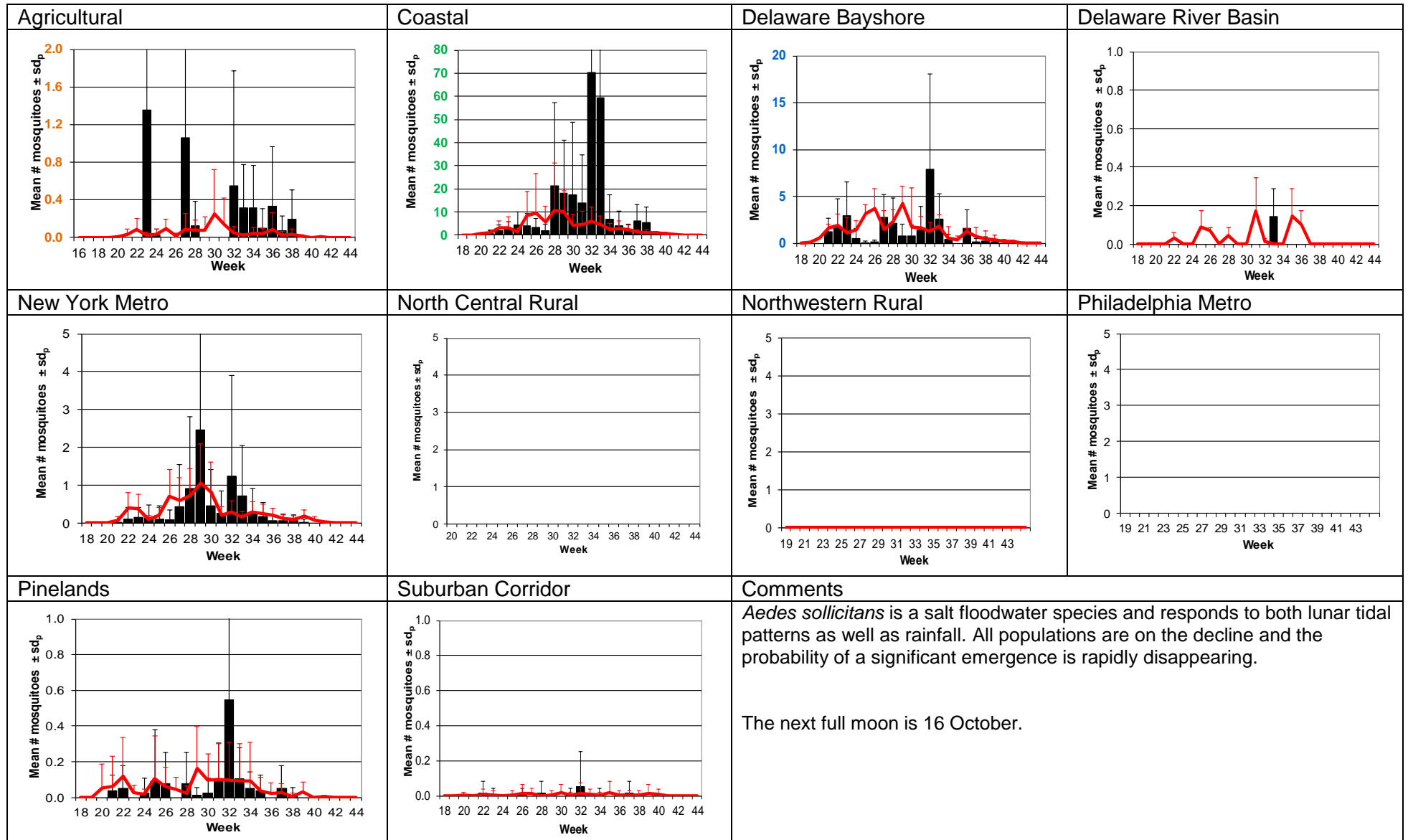
Multivoltine *Culex/Anopheles* (*Cx. pipiens* Type)



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

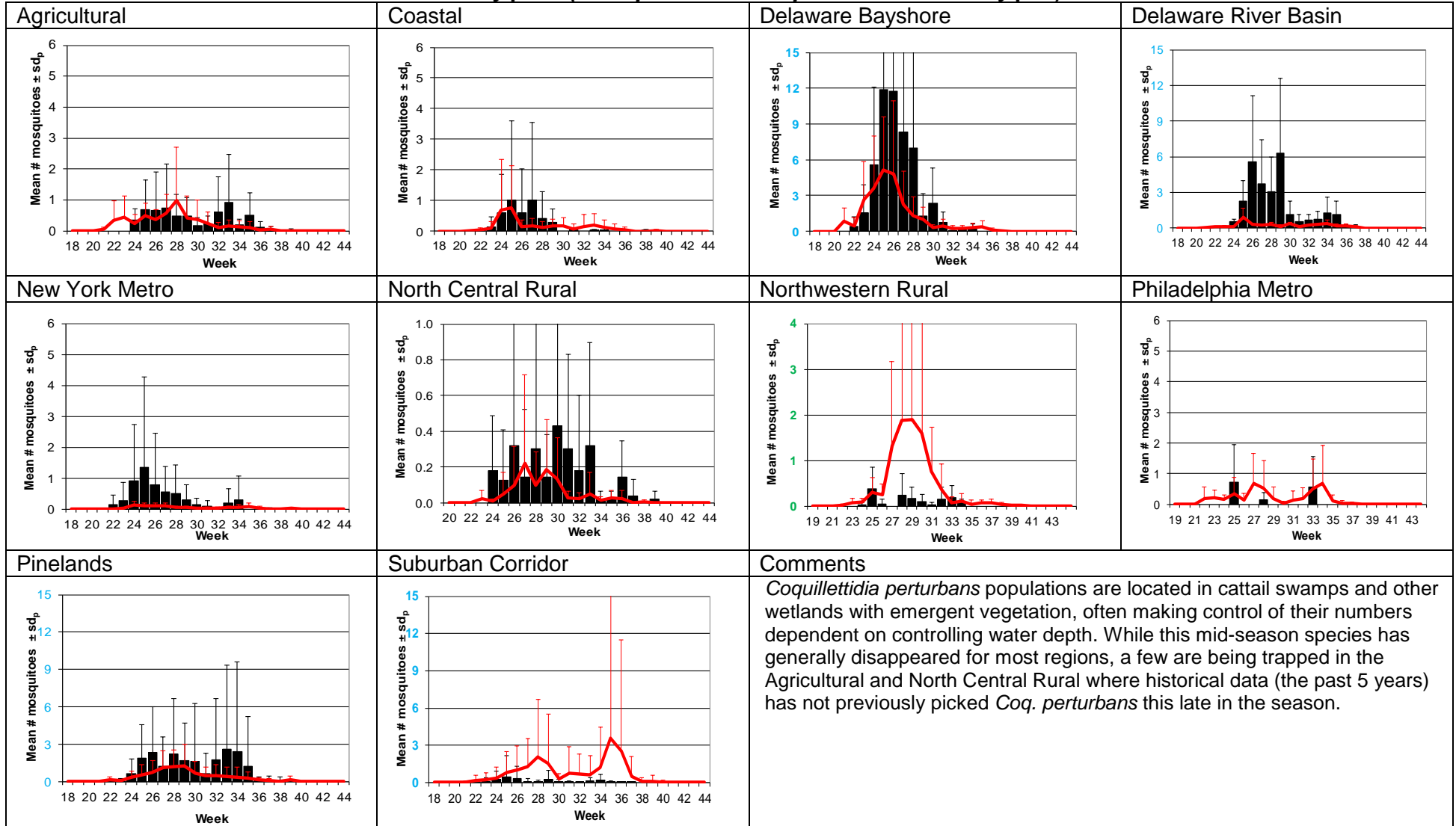


Aedes sollicitans - Salt Floodwater Species Multivoltine Aedine (*Ae. sollicitans* Type)



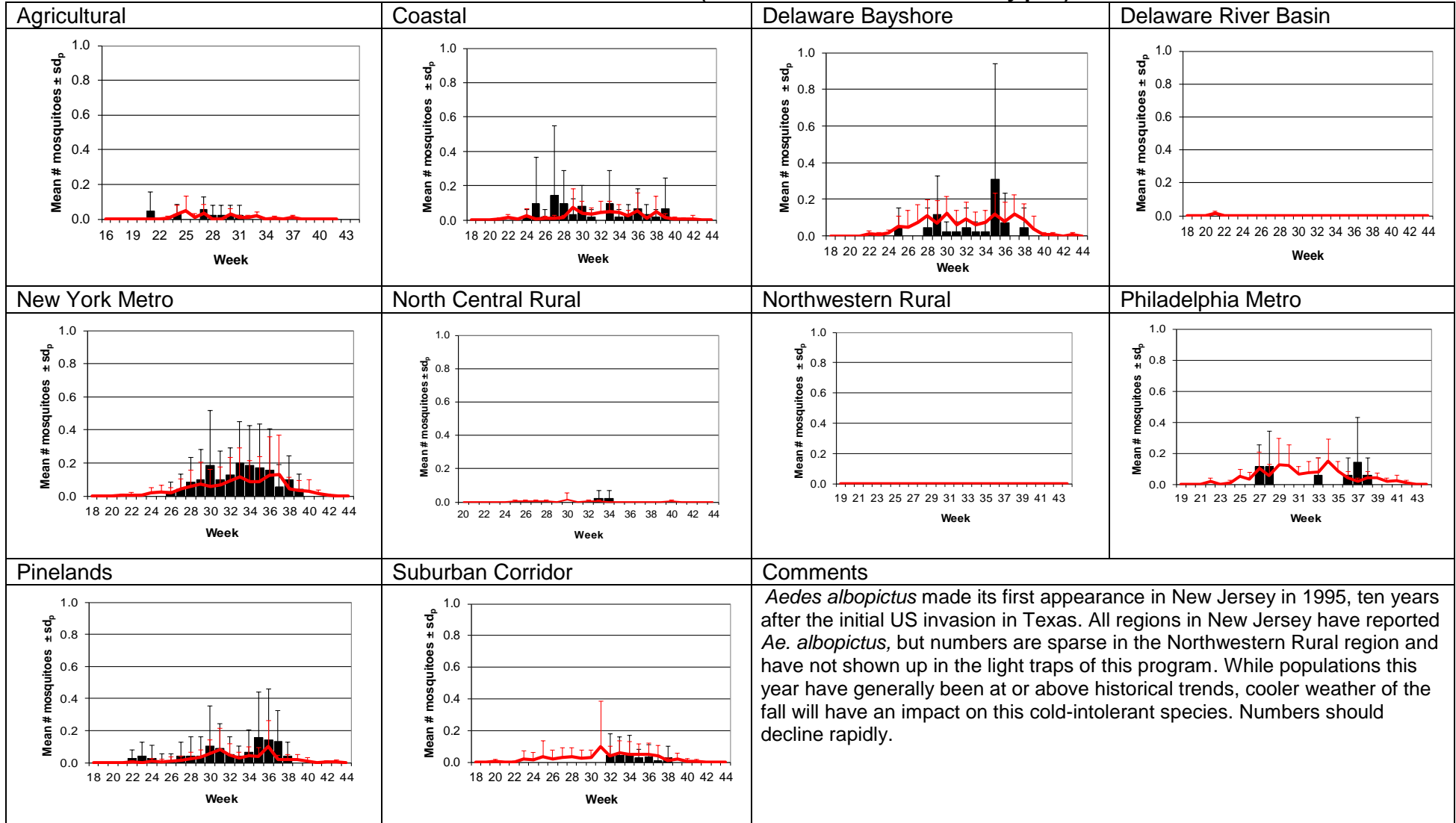
Coquillettidia perturbans

Monotypic (*Coquillettidia perturbans* Type)



Aedes albopictus

Multivoltine Aedine (*Aedes triseriatus* Type)

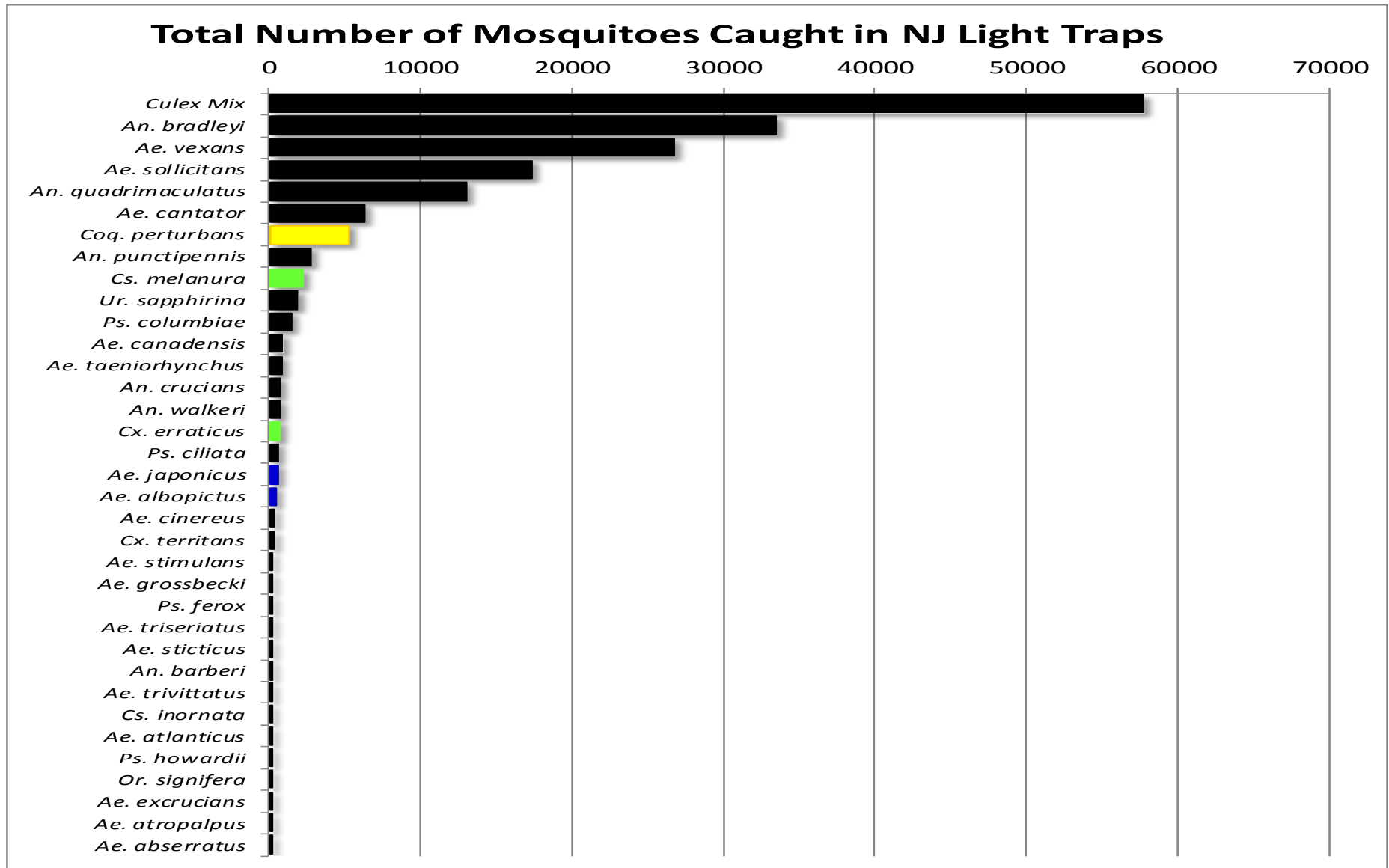


WNV

EEE

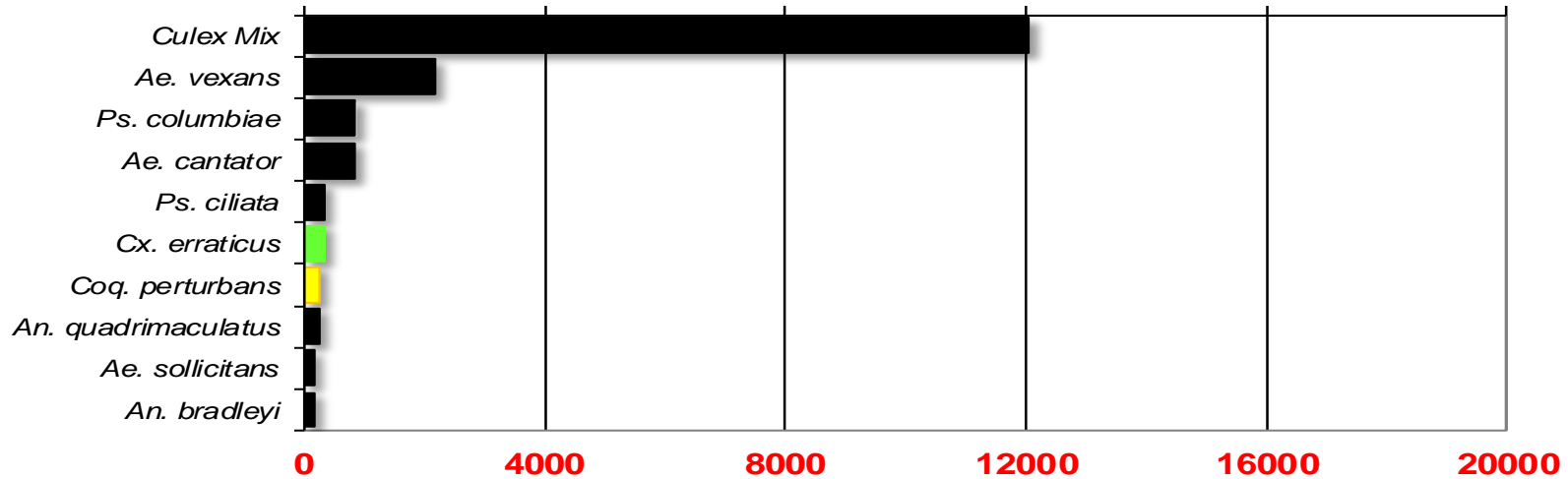
Top Ten Mosquito Species/Region - ■ *Ae. albopictus*, ■ *Ae. japonicus* (invasives); ■ *Cs. melanura* or *Cx. erraticus* ■ *Coq. perturbans*

Note: In early season when fewer species are caught, graphs may show less than ten species/region or 25 statewide.



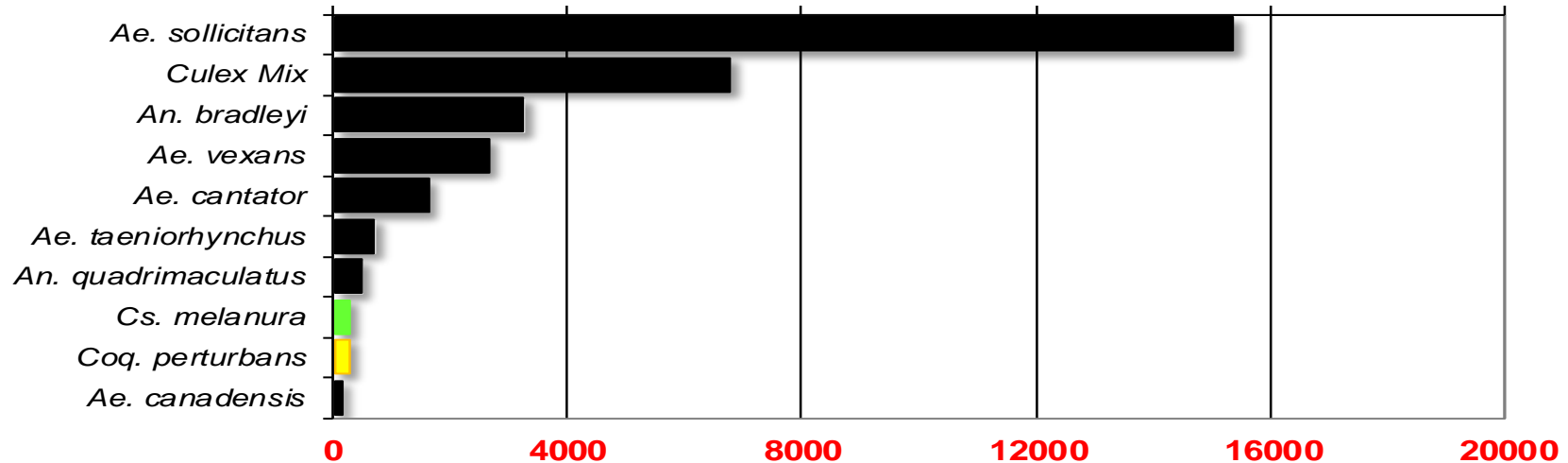
Agricultural

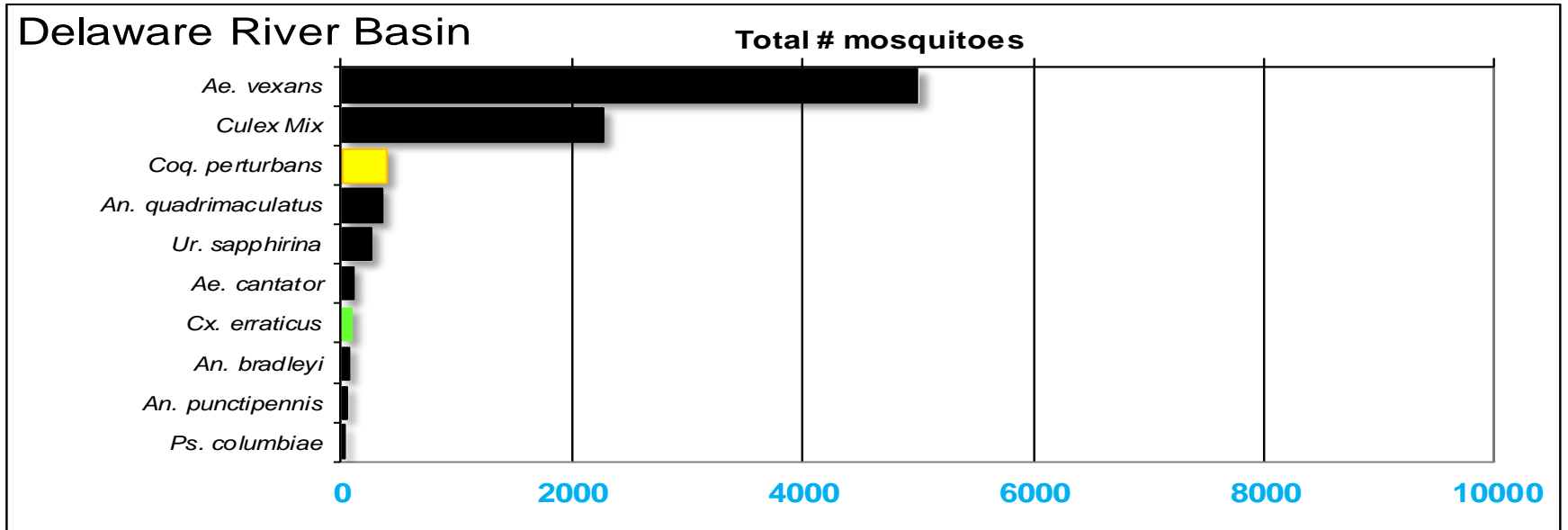
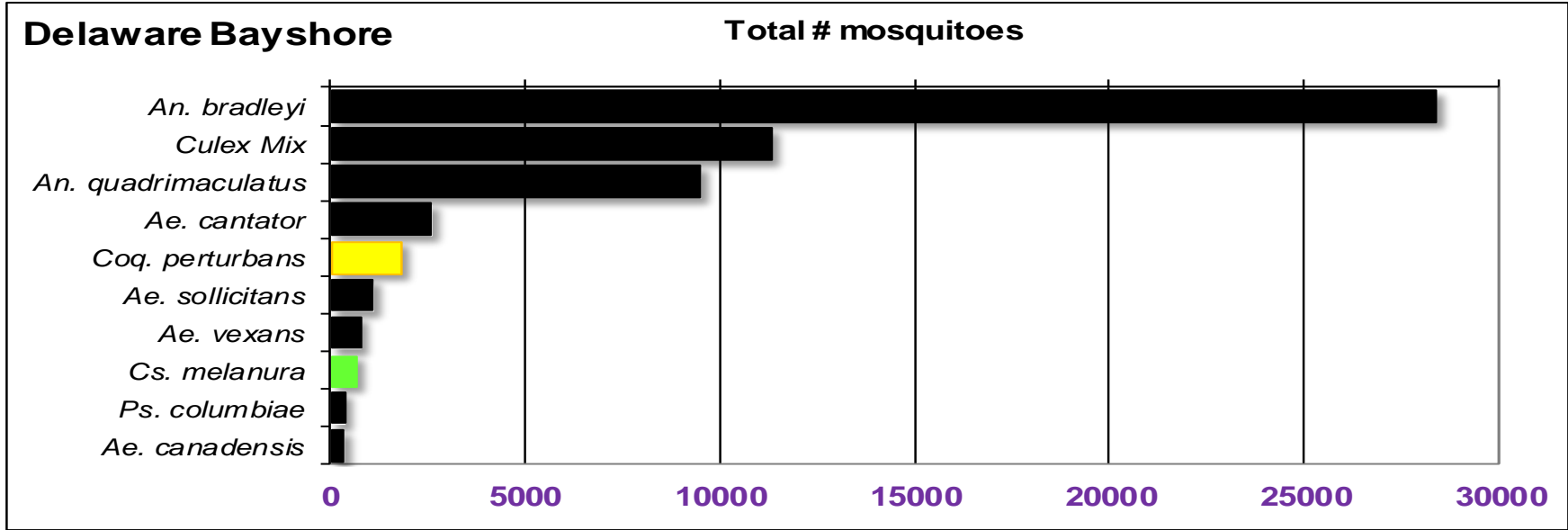
Total # mosquitoes



Coastal

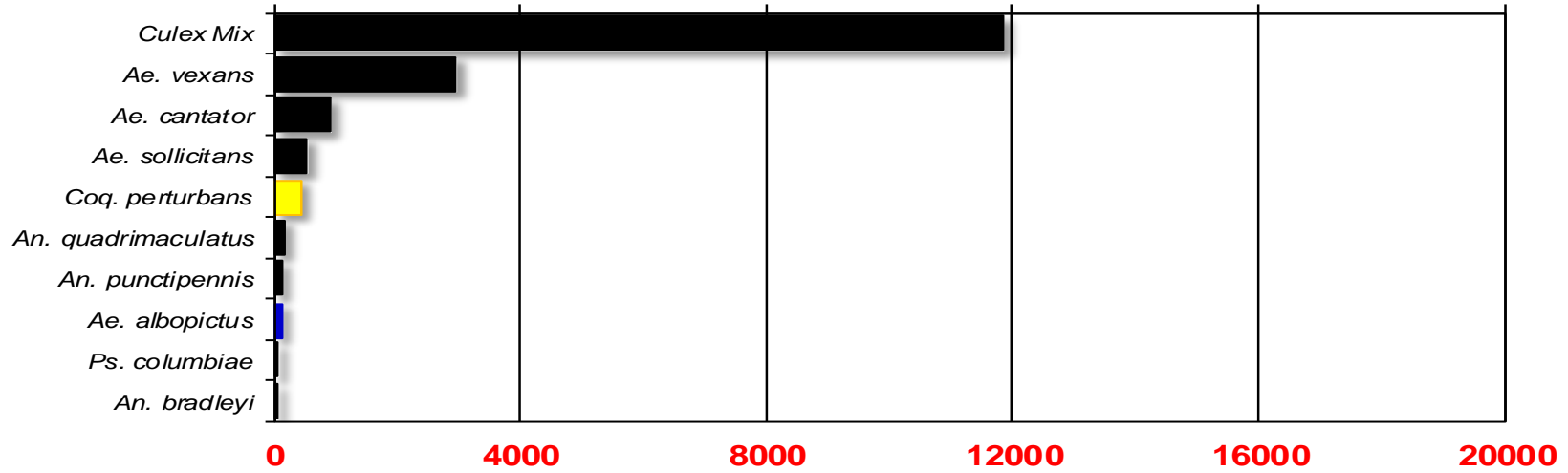
Total # mosquitoes





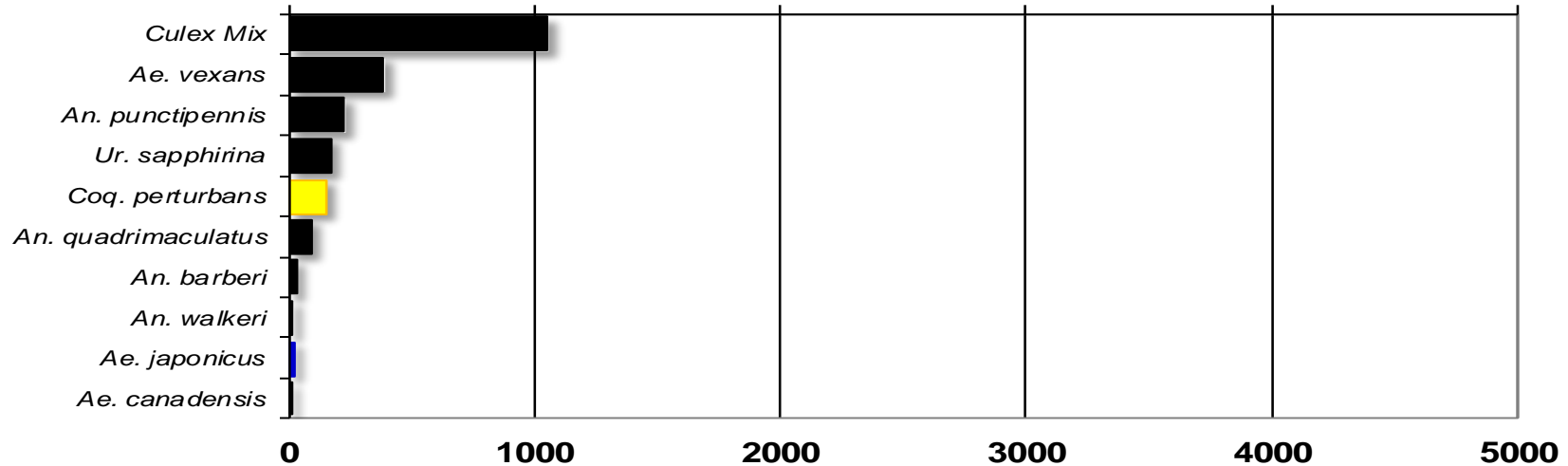
New York Metropolitan

Total # mosquitoes



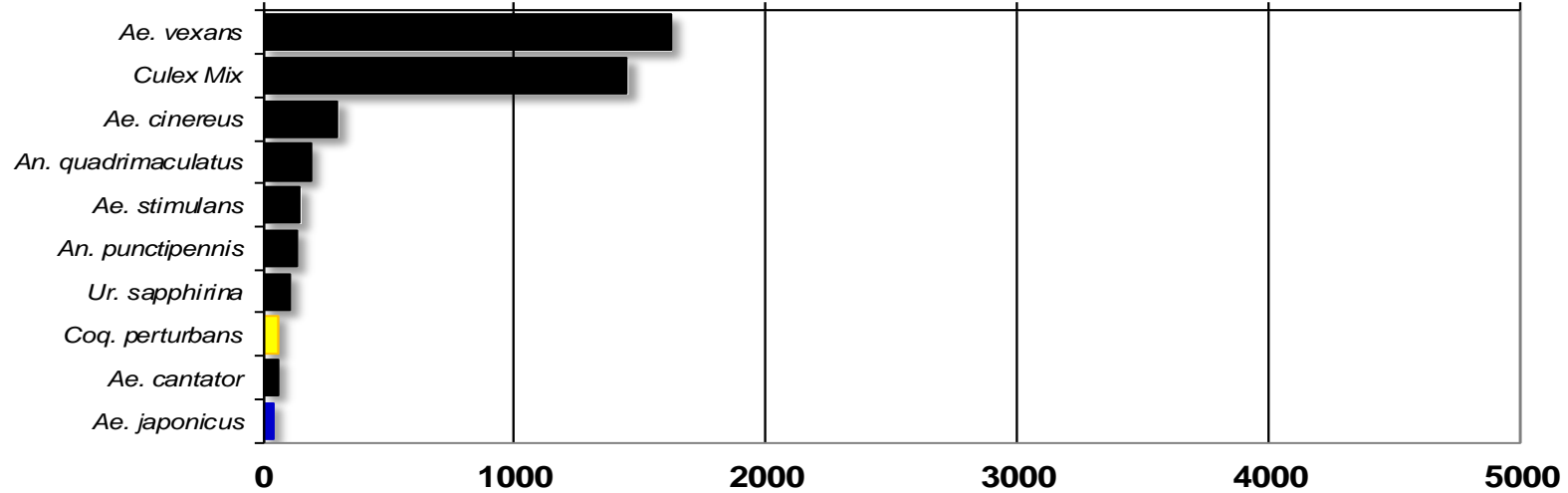
North Central Rural

Total # mosquitoes



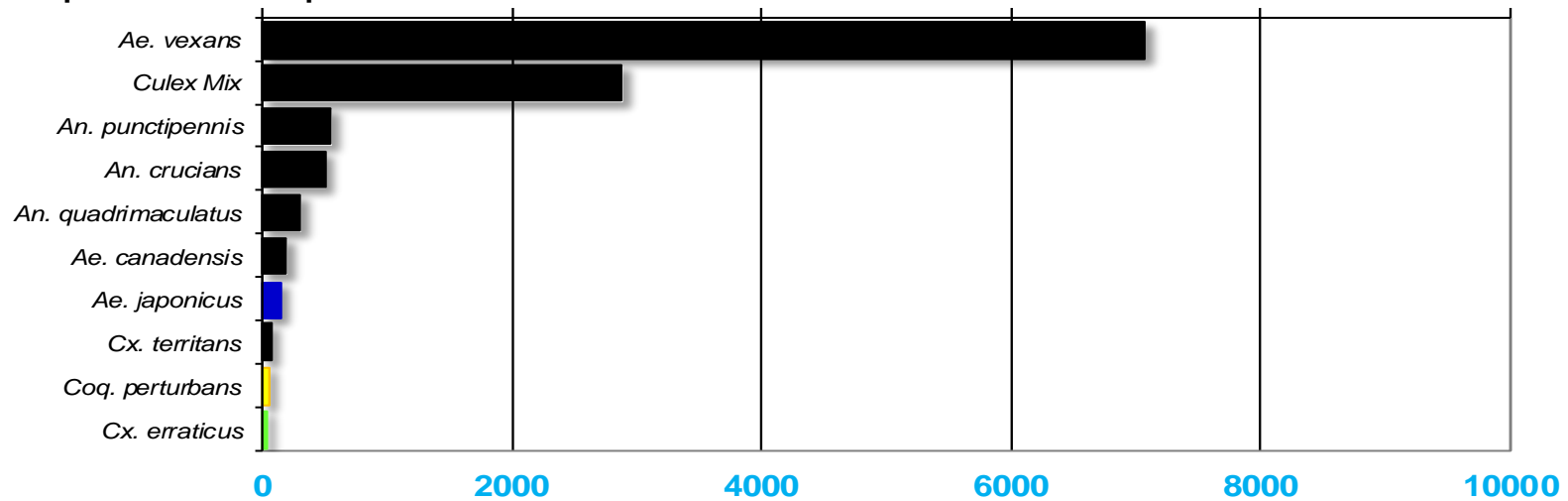
Northwest Rural

Total # mosquitoes



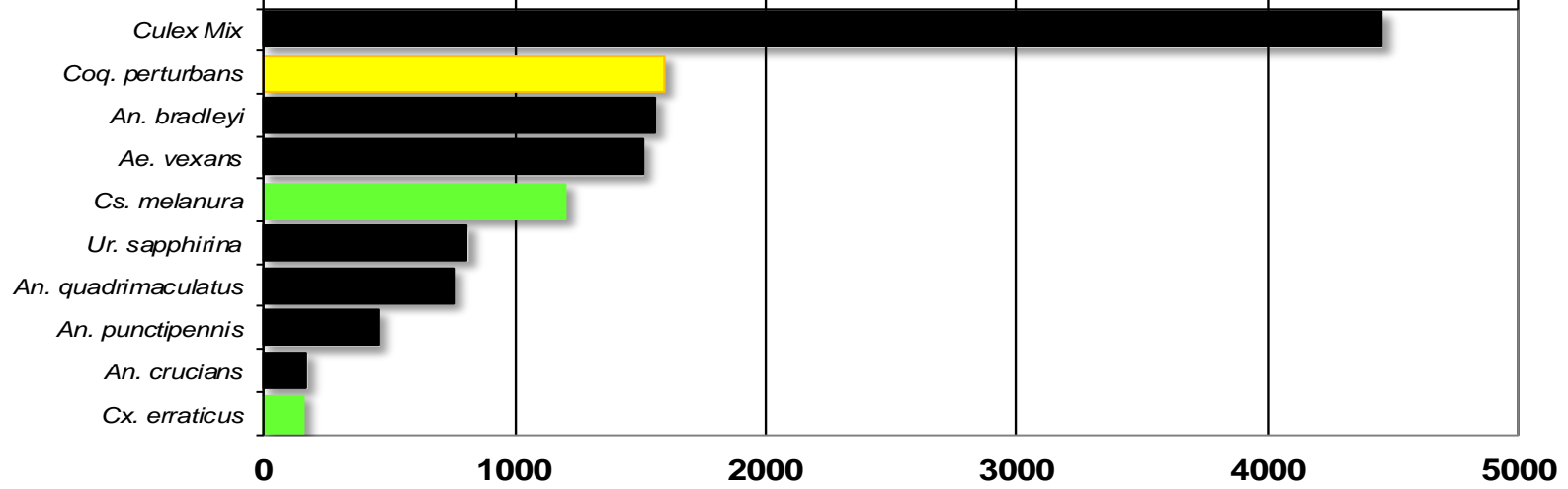
Philadelphia Metropolitan

Total # mosquitoes



Pinelands

Total # mosquitoes



Suburban Corridor

Total # mosquitoes

