

NEW JERSEY STATEWIDE SURVEILLANCE

Week 21 Report for 16 May to 22 May, 2005

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Purpose: Data from 84 New Jersey light traps contributed by county mosquito control agencies are used to calculate trends in mosquito populations for species of nuisance or health concerns.

Calculations are based on regional distributions, with emphasis on mosquito habitat and land use. Trends will allow a statewide evaluation of changing mosquito populations, in response to control and/or changes in habitat.

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Figure 1a: Map of ten regions selected for the New Jersey Surveillance Program overlaid with county borders.

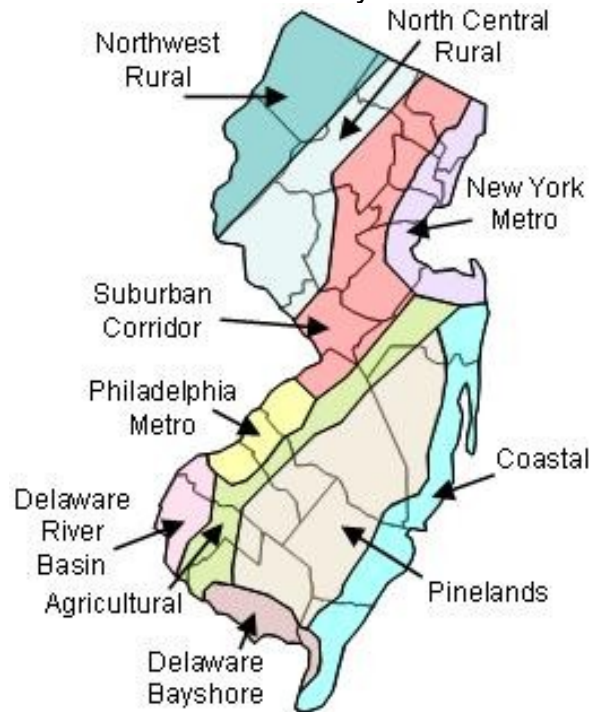


Figure 1b. Trap lat-long locations.



Summary table

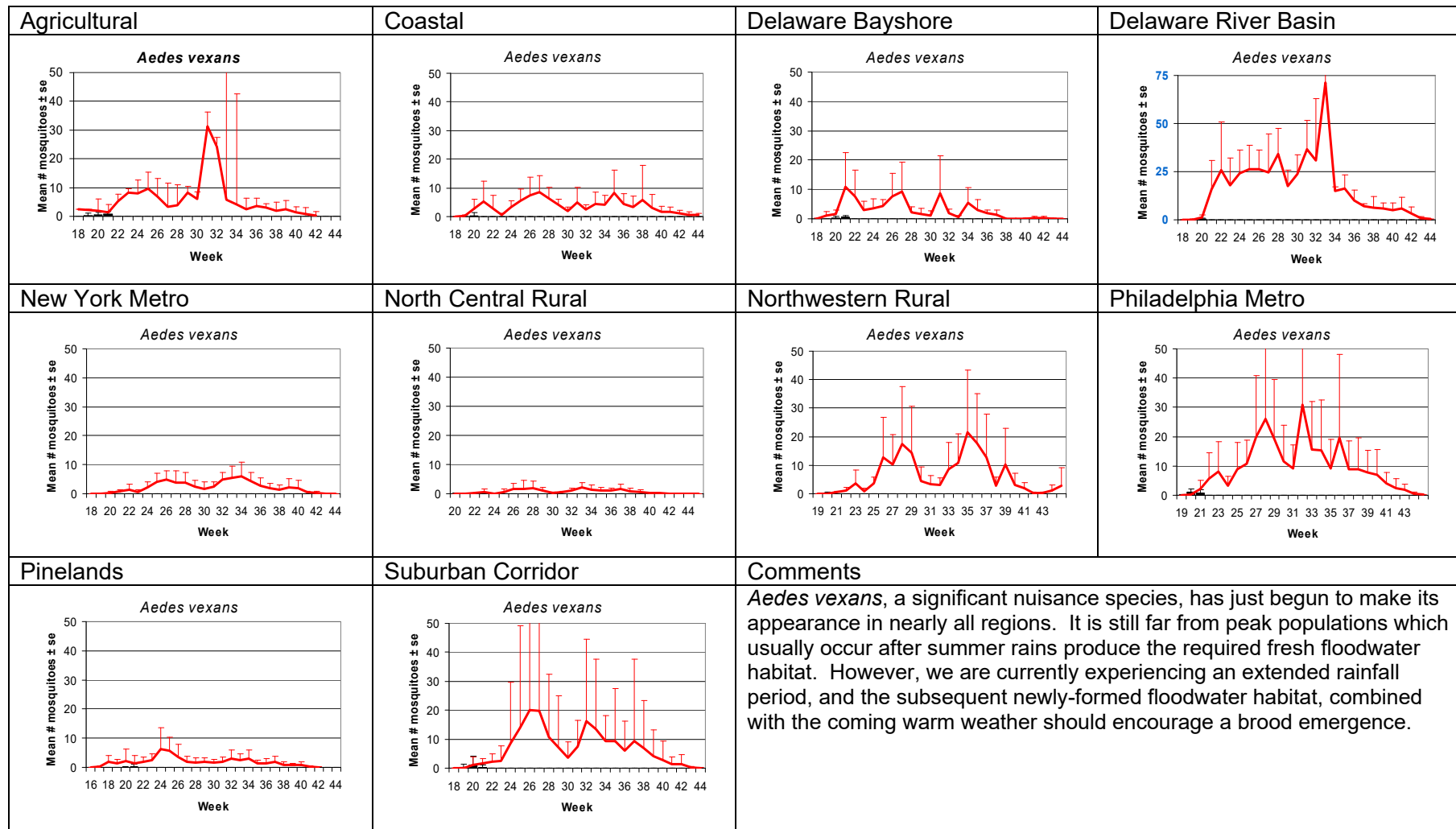
	<i>Aedes vexans</i>		<i>Culex complex</i>		<i>Coquillettidia perturbans</i>		<i>Ochlerotatus sollicitans</i>	
Region	This Week	Average*	This Week	Average*	This Week	Average*	This Week	Average*
Agricultural	0.69	0.28	0.67	1.11	0.00	0.00	0.00	0.00
Coastal	0.03	0.42	0.03	1.38	0.00	0.00	0.00	0.93
Delaware Bayshore	0.48	0.40	1.29	0.17	0.00	0.00	1.10	0.10
Delaware River Basin	0.04	1.88	0.00	2.59	0.00	0.00	0.00	0.04
New York Metro	0.03	0.13	0.13	1.00	0.00	0.00	0.00	0.01
North Central Rural	0.10	0.00	0.12	0.11	0.00	0.00	0.00	0.00
Northwest Rural	0.00	0.05	0.05	0.35	0.00	>0.01	0.00	0.00
Philadelphia Metro	0.74	0.21	0.48	1.42	0.00	0.00	0.00	0.00
Pinelands	0.35	0.13	0.94	0.77	0.00	0.00	0.00	0.03
Suburban Corridor	0.32	0.09	0.20	0.81	0.00	0.00	0.00	0.00

Please Note: Historical data is being entered and not yet complete. These values and graphics will change as more data is entered.

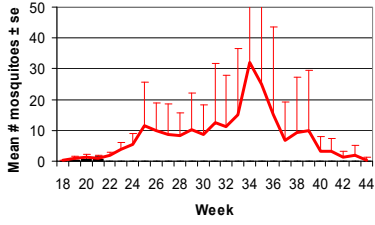
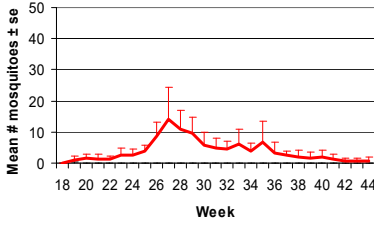
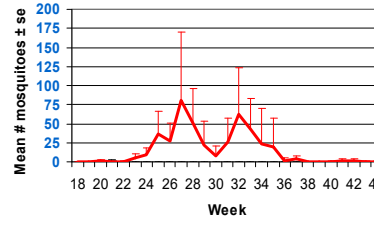
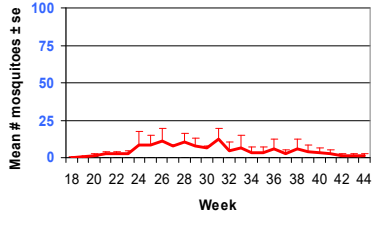
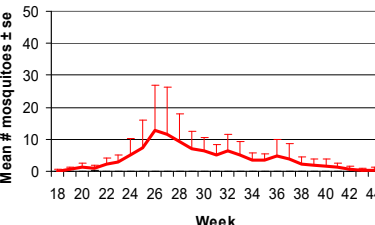
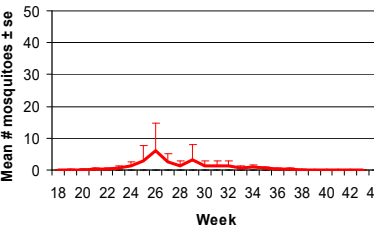
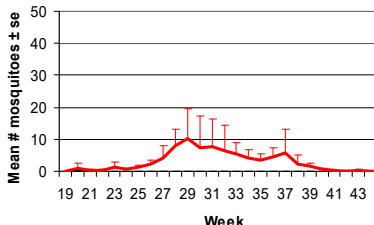
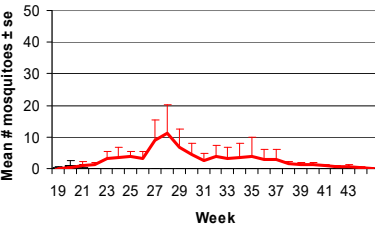
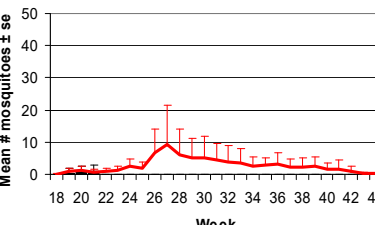
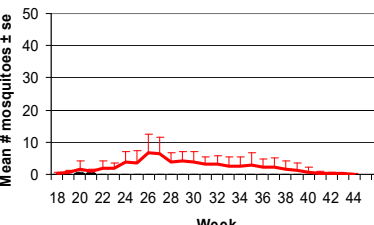
Graphs include *Ae. vexans*, *Culex complex* (*Cx. pipiens*, *Cx. restuans*, and *Cx. salinarius*), *Oc. sollicitans*, *Cs. melanura*, *Oc. japonicus*, and *Oc. cantator*.

9 of 21 counties reporting.

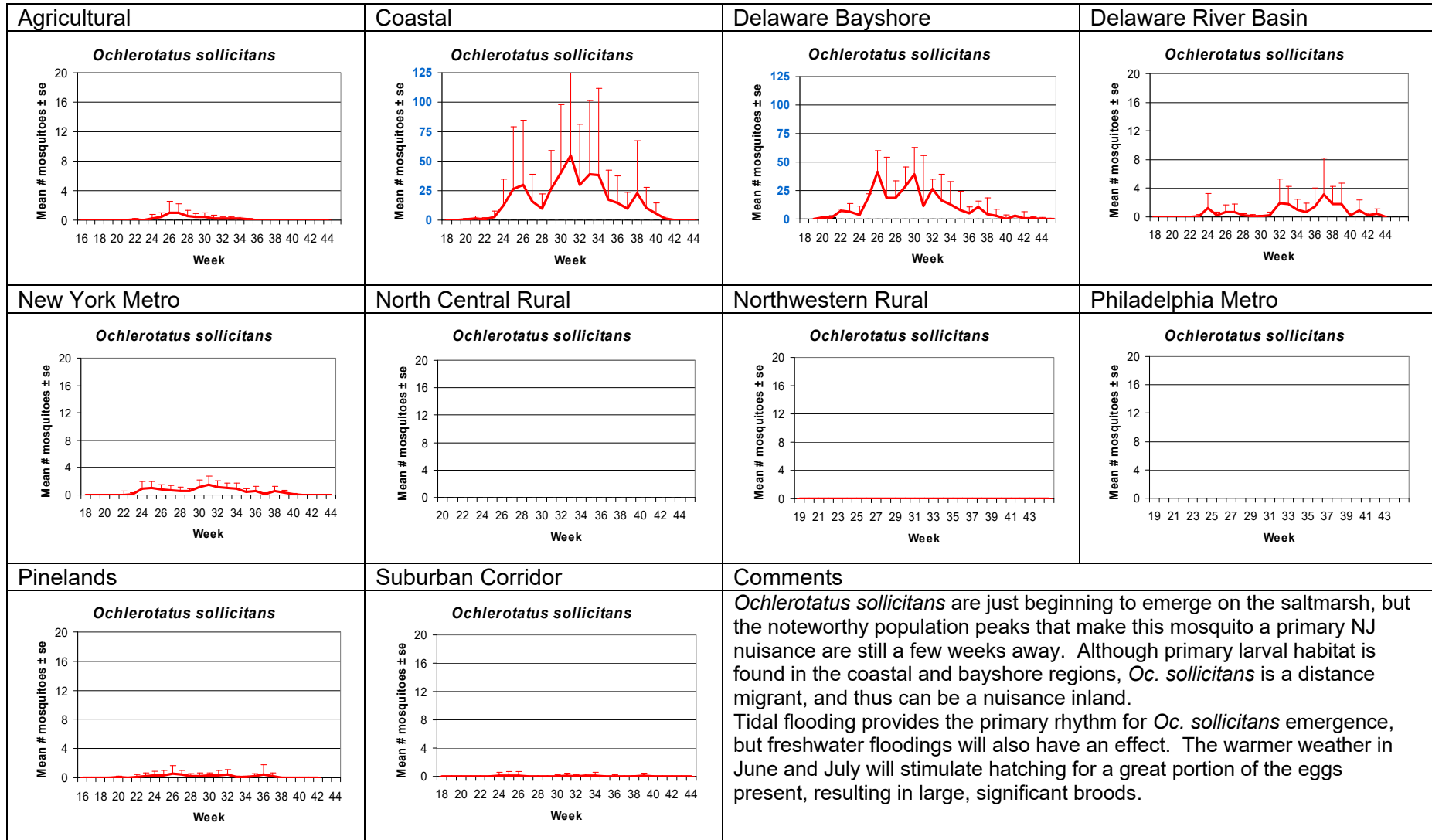
Aedes vexans - Fresh Floodwater Species



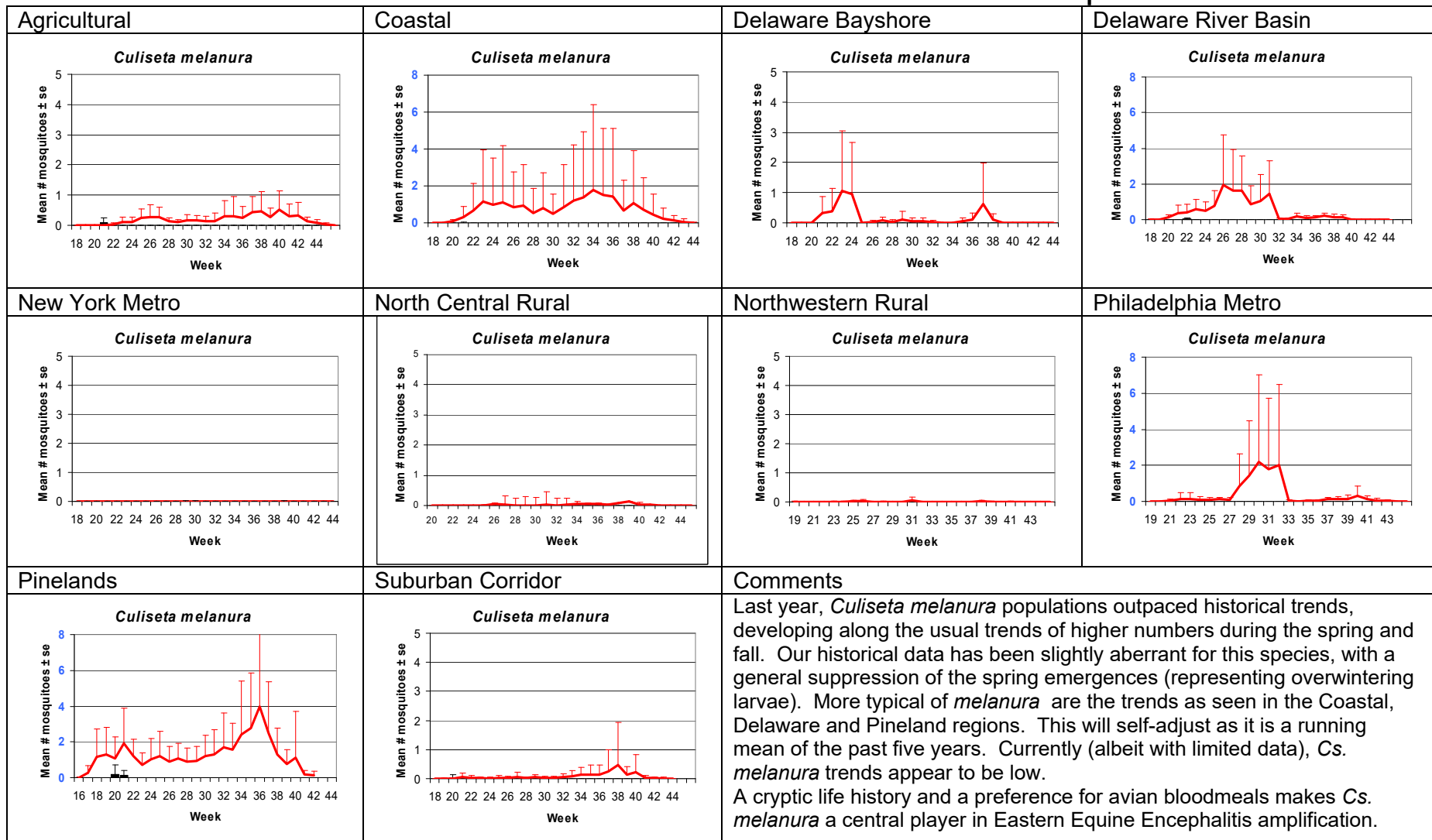
Culex Complex - Multivoltine Culex Species

Agricultural <i>Culex</i> Mix 	Coastal <i>Culex</i> Mix 	Delaware Bayshore <i>Culex</i> Mix 	Delaware River Basin <i>Culex</i> Mix 
New York Metro <i>Culex</i> Mix 	North Central Rural <i>Culex</i> Mix 	Northwestern Rural <i>Culex</i> Mix 	Philadelphia Metro <i>Culex</i> Mix 
Pinelands <i>Culex</i> Mix 	Suburban Corridor <i>Culex</i> Mix 	Comments As the historical data indicates, <i>Culex</i> populations build slowly through the season, peak and then decline slowly as adult females find overwintering hibernaculae. <i>Culex</i> species are combined together as species-identifying characteristics that are notoriously hard to discern get further blurred after spending time in a light-trap collection jar. Populations from metropolitan and suburban areas are primarily <i>Cx. pipiens</i> and <i>Cx. restuans</i>, while coastal populations are <i>Cx. salinarius</i>. Agricultural and rural areas generally have more <i>Cx. restuans</i>.	

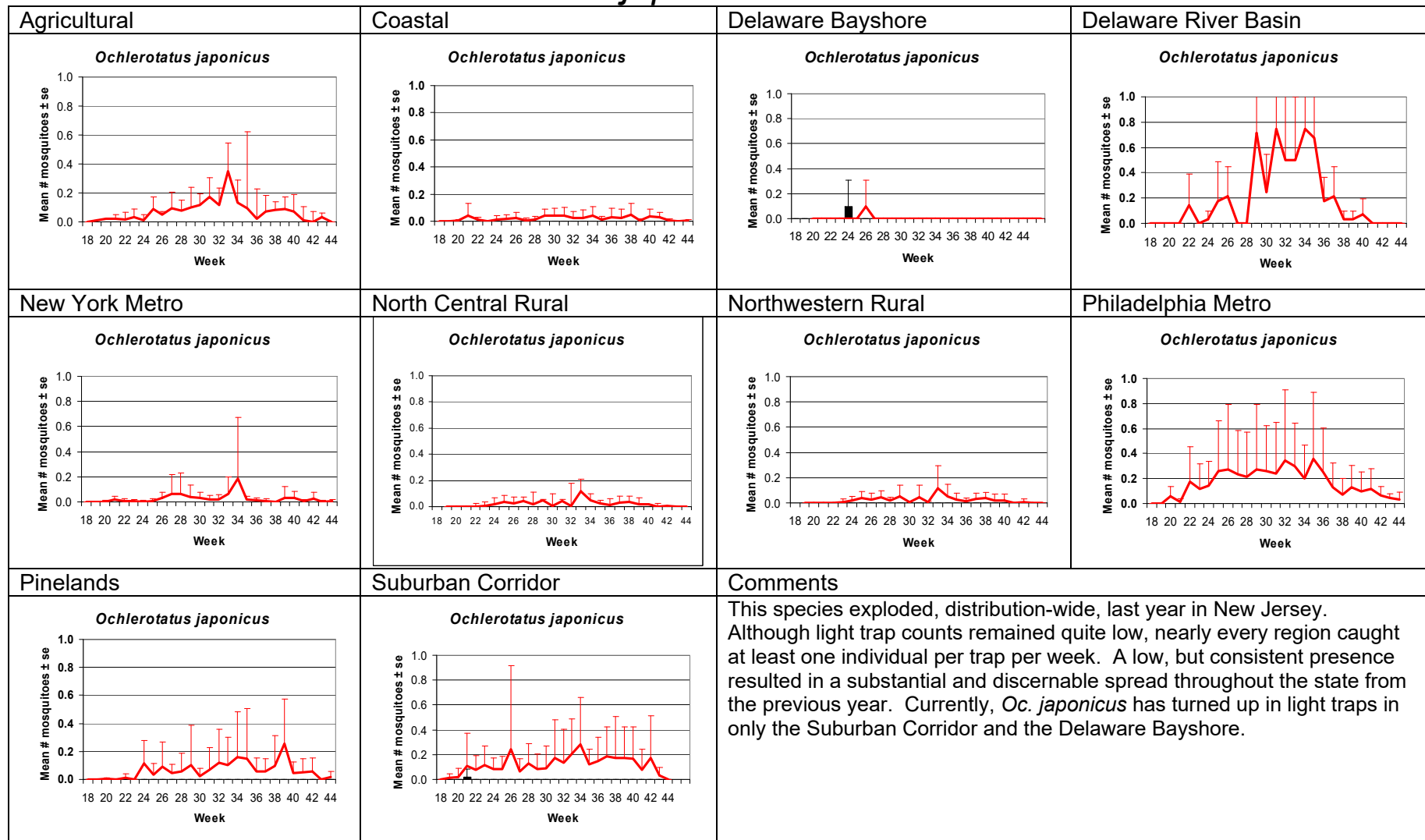
Ochlerotatus sollicitans - Salt Marsh Floodwater Species



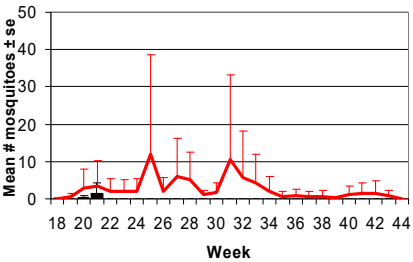
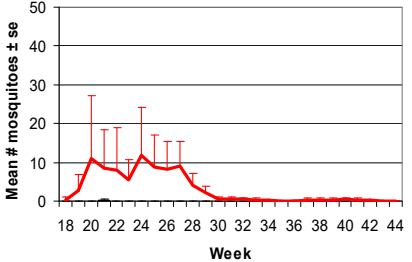
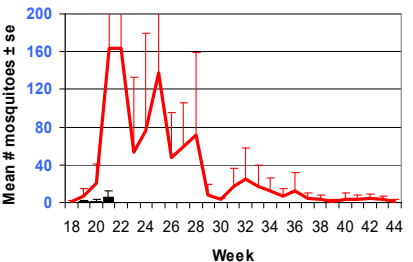
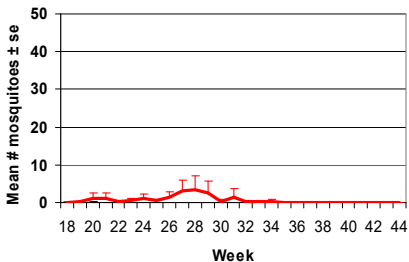
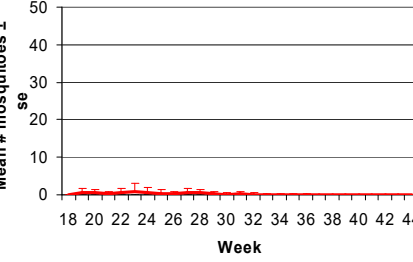
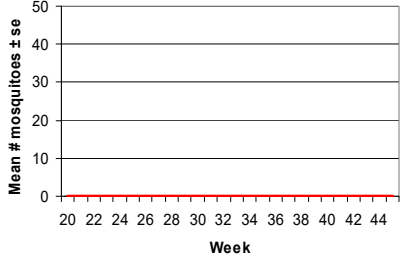
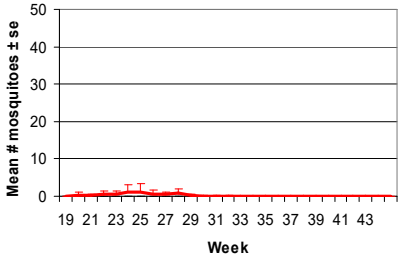
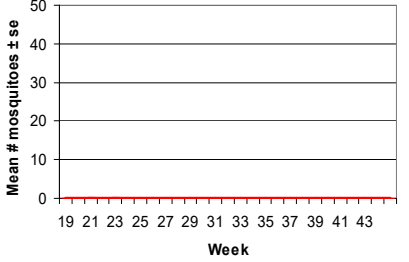
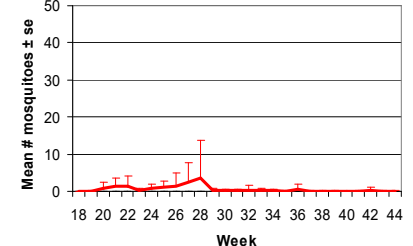
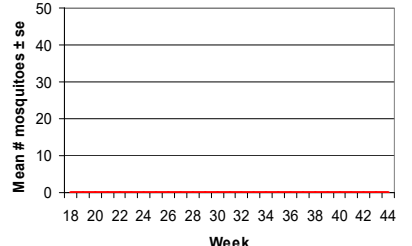
Culiseta melanura – Miscellaneous Group



Ochlerotatus japonicus – Multivoltine Aedine



Ochlerotatus cantator – Saltmarsh Floodwater Species

Agricultural <i>Ochlerotatus cantator</i> 	Coastal <i>Ochlerotatus cantator</i> 	Delaware Bayshore <i>Ochlerotatus cantator</i> 	Delaware River Basin <i>Ochlerotatus cantator</i> 
New York Metro <i>Ochlerotatus cantator</i> 	North Central Rural <i>Ochlerotatus cantator</i> 	Northwestern Rural <i>Ochlerotatus cantator</i> 	Philadelphia Metro <i>Ochlerotatus cantator</i> 
Pinelands <i>Ochlerotatus cantator</i> 	Suburban Corridor <i>Ochlerotatus cantator</i> 	Comments Before <i>Oc. sollicitans</i> makes its presence known on the saltmarsh, <i>Oc. cantator</i> emerges and utilizes the same habitat. More cold-tolerant than <i>sollicitans</i>, <i>Oc. cantator</i> peaks in the early part of the season. Populations of this species will overlap with <i>Oc. sollicitans</i>, and slowly decline over the season. Salt or brackish water habitat is preferred (but not obligatory), and populations can often be found in non-coastal areas, particularly if anthropogenic sources of saltwater are provided. Textile industry, for one, supports these relic populations through the use of salt-based textile dyes.	