

NEW JERSEY STATEWIDE SURVEILLANCE

Week 41 Report for 5 October to 11 October, 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.

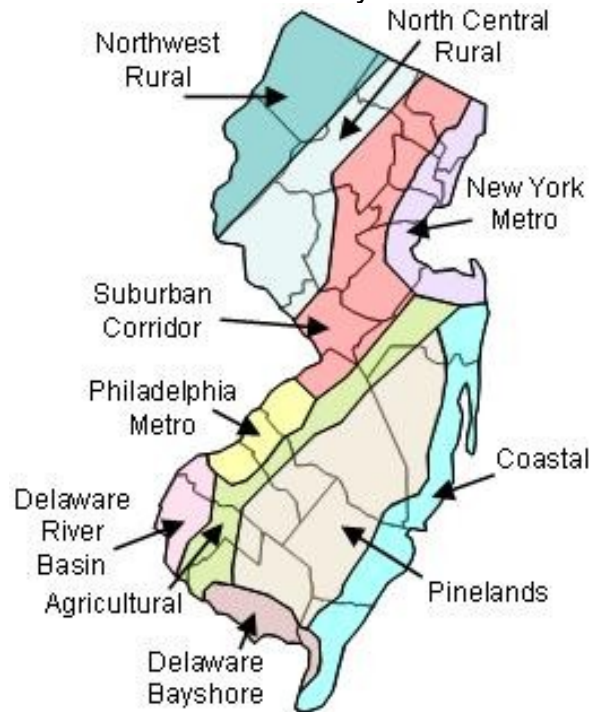


Figure 1b. Trap lat-long locations.



Summary table – Week 41

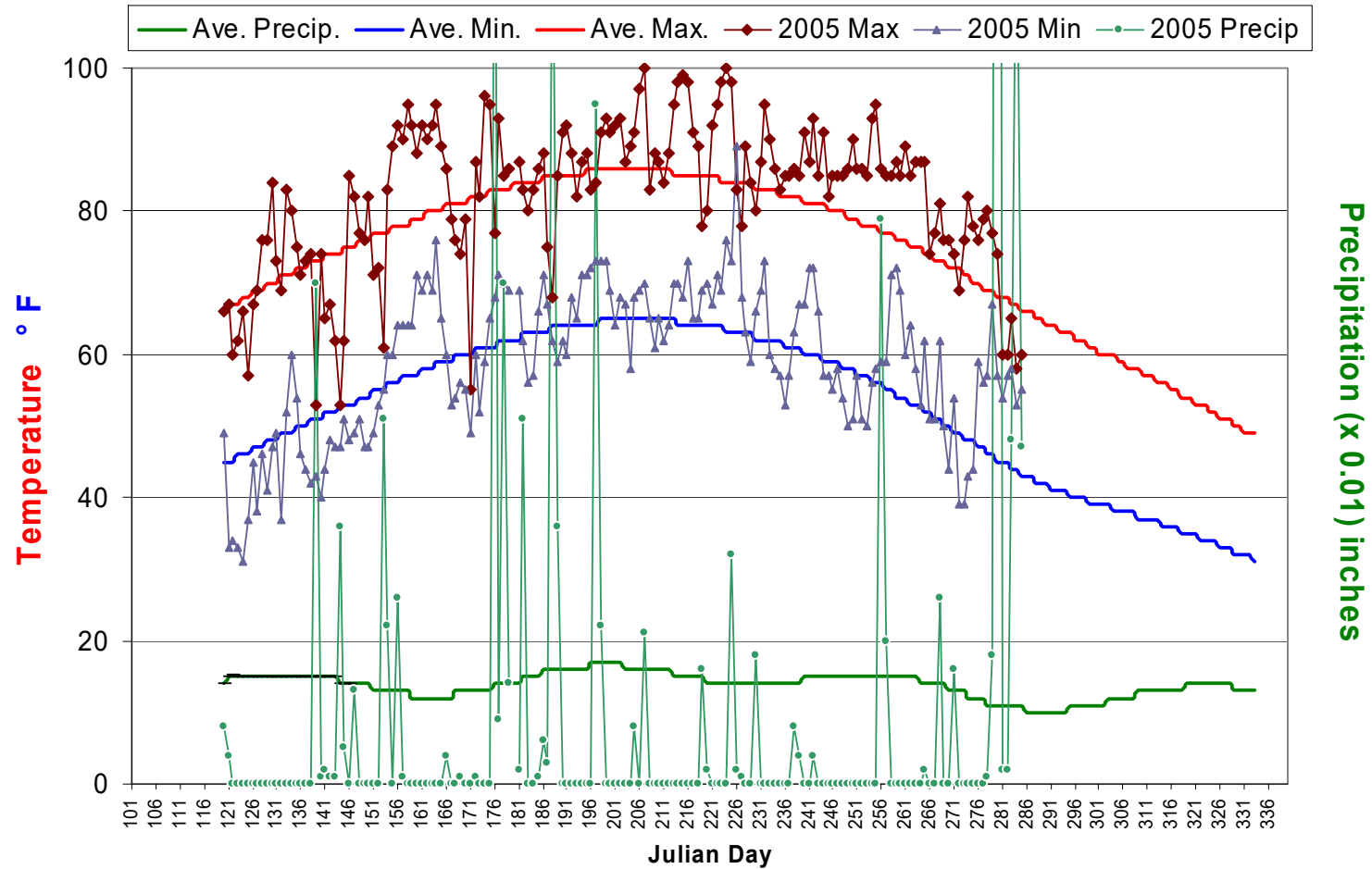
	<i>Aedes vexans</i>		<i>Culex complex</i>		<i>Coquillettidia perturbans</i>		<i>Ochlerotatus sollicitans</i>	
Region	This Week	Average*	This Week	Average*	This Week	Average*	This Week	Average*
Agricultural	0.19	2.36	2.12	3.43	0.00	0.00	0.00	0.30
Coastal	0.25	1.58	0.27	1.65	0.00	0.00	0.59	1.38
Delaware Bayshore	0.17	0.37	1.95	3.29	0.00	0.00	0.26	0.92
Delaware River Basin	0.39	5.82	0.43	2.36	0.00	0.00	0.00	0.93
New York Metro	0.17	0.45	1.44	1.54	0.00	0.00	0.07	0.06
North Central Rural	0.14	0.04	0.02	0.06	0.00	0.00	0.00	0.00
Northwest Rural	0.00	0.25	0.00	0.10	0.00	0.00	0.00	0.00
Philadelphia Metro	3.17	2.48	0.83	0.94	0.00	0.00	0.00	0.00
Pinelands	0.12	0.72	0.14	2.26	0.00	0.00	0.03	0.01
Suburban Corridor	0.50	1.25	0.22	0.60	0.00	0.00	0.00	0.00

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

10 of 21 counties in current week; 20 of 21 counties reporting.

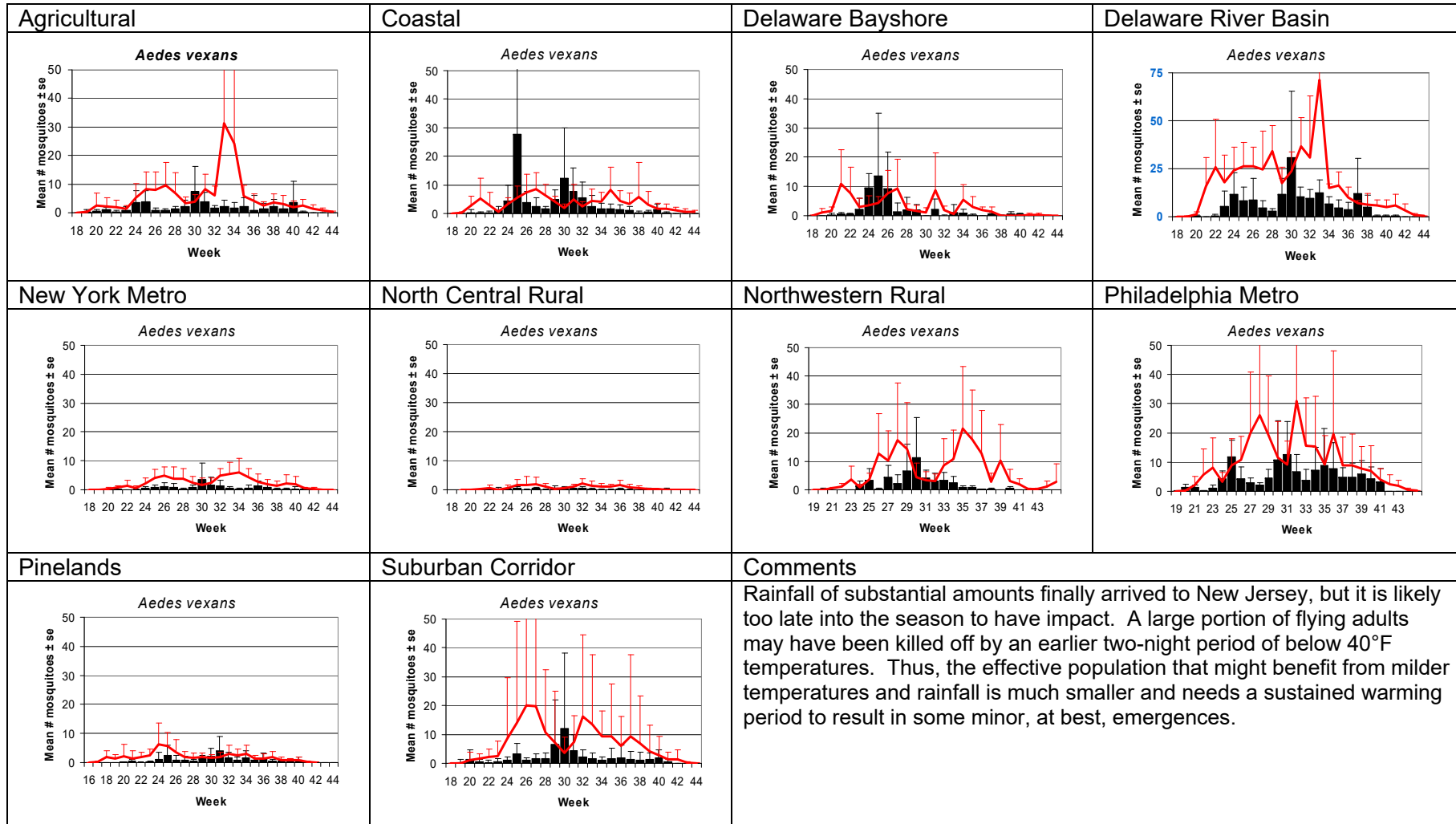
Climate Data

New Brunswick 1971-2000 Historical/Hillsborough 2005

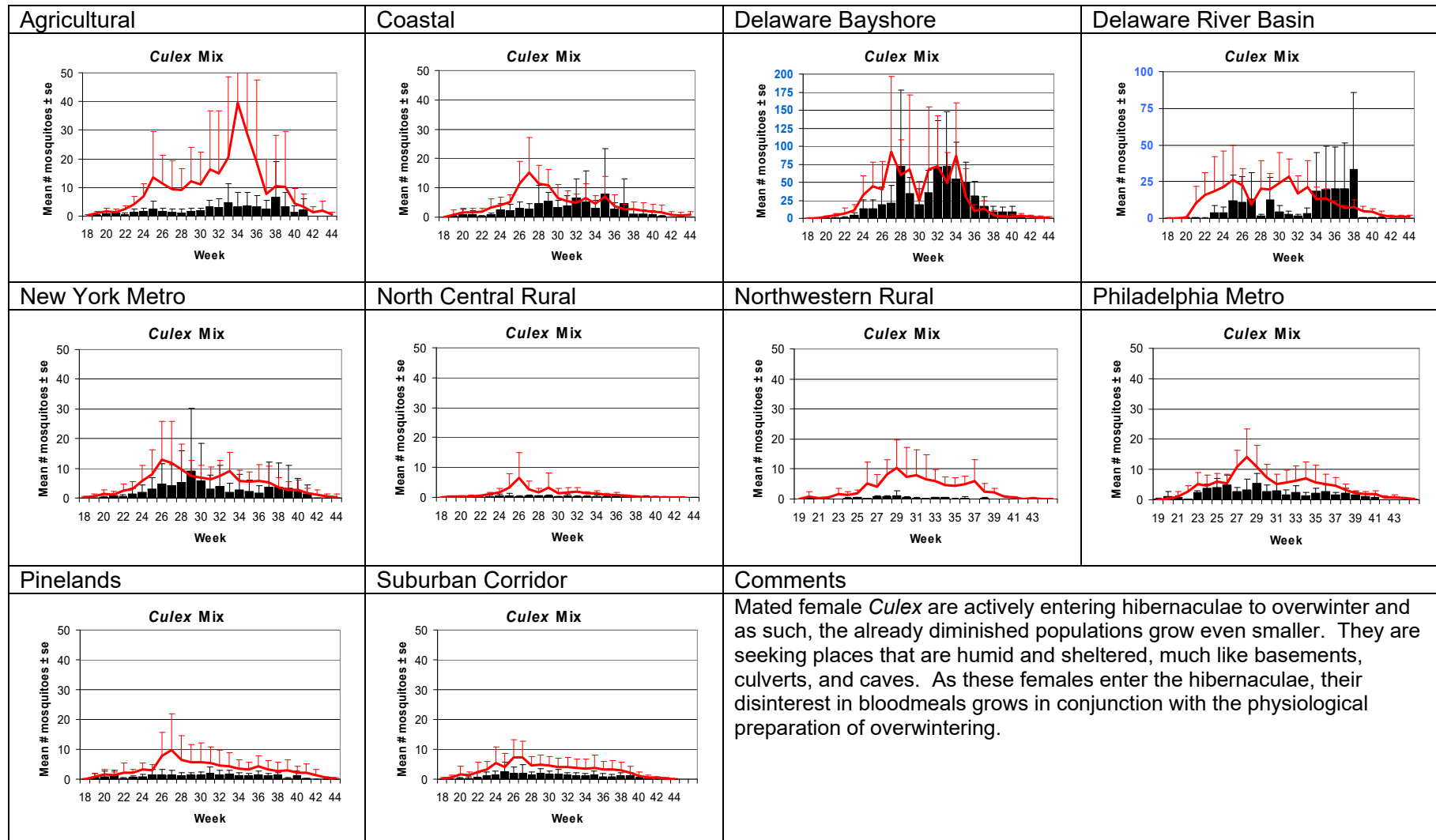


This figure shows historical average maximum and minimum temperatures and average precipitation recorded in the New Brunswick, NJ weather station over a recent 30 year period. Also graphed are the current year's minimum and maximum temperatures as recorded at the Hillsborough NJ weather station (a station close to central NJ which recorded all three parameters and was available online at the NJ state climatologist).

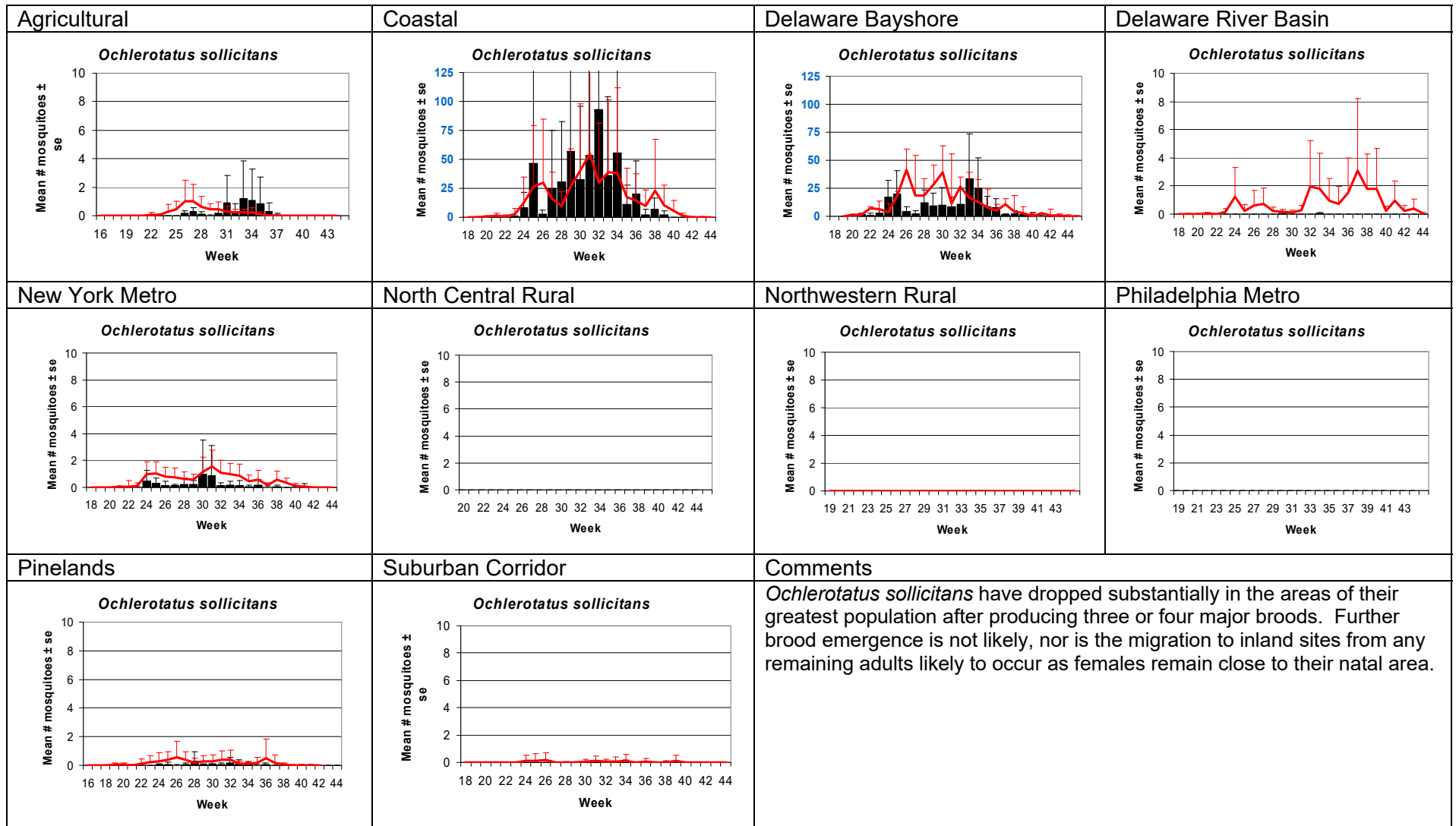
Aedes vexans - Fresh Floodwater Species



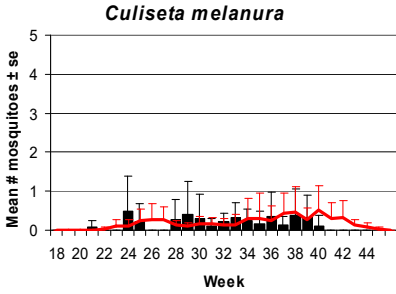
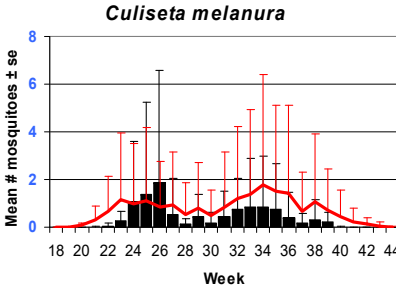
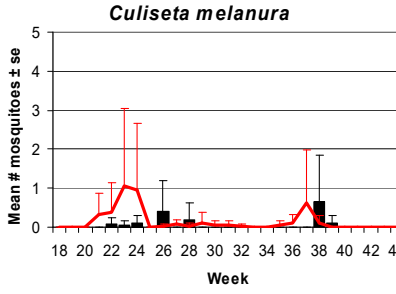
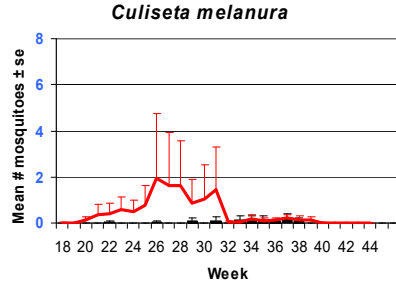
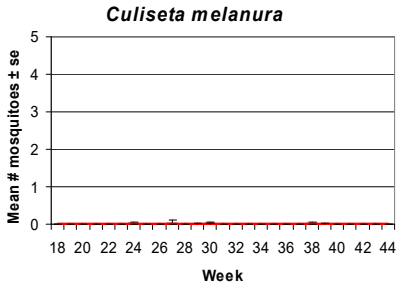
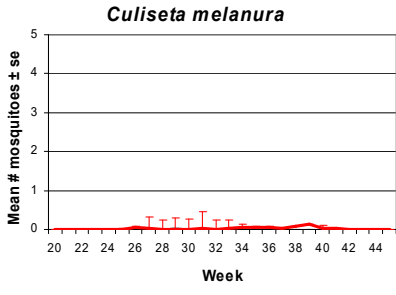
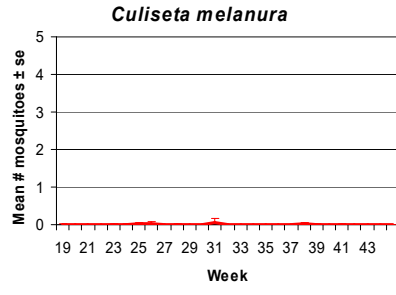
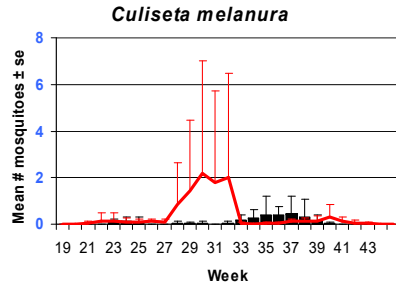
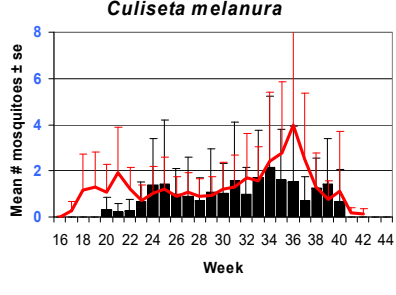
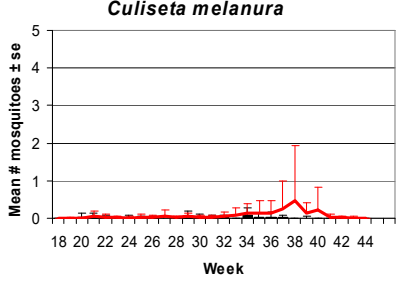
Culex Complex - Multivoltine Culex Species



Ochlerotatus sollicitans - Salt Marsh Floodwater Species



Culiseta melanura – Miscellaneous Group

Agricultural 	Coastal 	Delaware Bayshore 	Delaware River Basin 
New York Metro 	North Central Rural 	Northwestern Rural 	Philadelphia Metro 
Pinelands 	Suburban Corridor 	Comments <i>Culiseta melanura</i> populations drop considerably throughout the state as the season comes to an end for this species. But while this primary vector for arboviruses such as EEE may disappear for the remainder of the season, virus threat does not necessarily decline. <i>Cs. melanura</i> is a bird feeder and we would not expect EEE cases to develop from their bite. Cold-tolerant bridge vectors that bite infected birds (or viremic mammals?) and then bite humans or horses remain a threat.	

Ochlerotatus japonicus – Multivoltine Aedine

