

NEW JERSEY STATEWIDE SURVEILLANCE

Week 33 Report for 10 August to 16 August, 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.

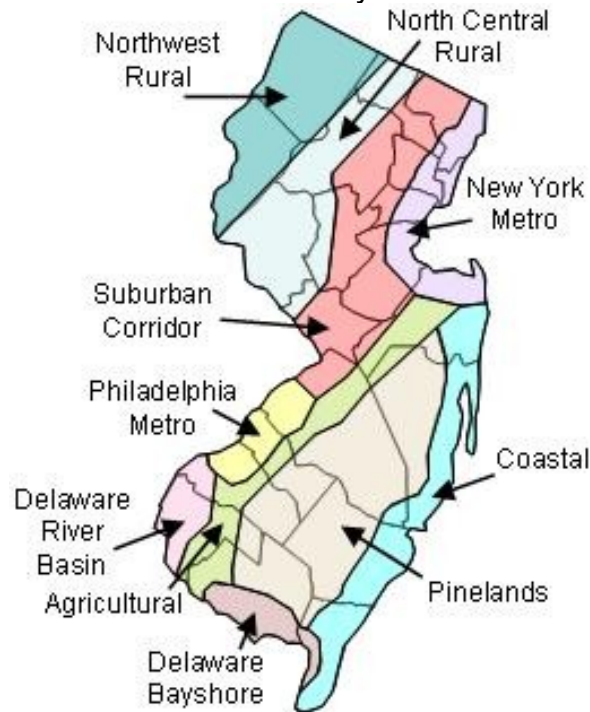


Figure 1b. Trap lat-long locations.



Summary table – Week 33

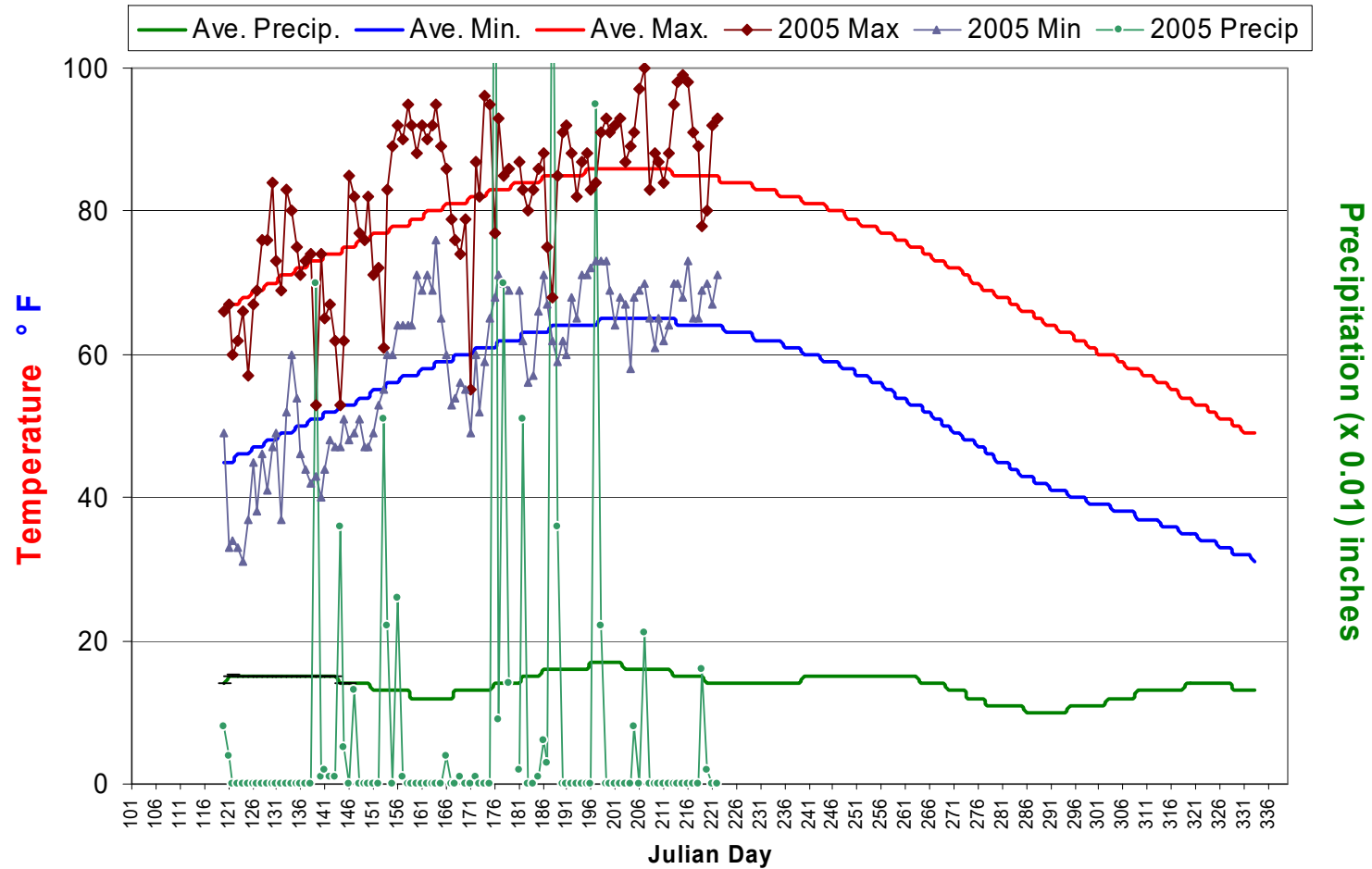
	<i>Aedes vexans</i>		<i>Culex complex</i>		<i>Coquillettidia perturbans</i>		<i>Ochlerotatus sollicitans</i>	
Region	This Week	Average*	This Week	Average*	This Week	Average*	This Week	Average*
Agricultural	1.62	31.27	4.26	20.38	0.14	0.22	1.19	1.80
Coastal	1.97	4.37	0.97	6.44	0.11	0.12	28.49	39.07
Delaware Bayshore	1.14	0.63	57.50	48.77	0.00	0.01	31.76	13.10
Delaware River Basin	10.96	71.29	3.25	21.34	0.21	0.34	0.04	1.79
New York Metro	0.33	5.36	1.46	9.05	0.10	0.05	0.07	0.99
North Central Rural	0.10	1.48	0.06	1.90	0.00	0.03	0.00	0.00
Northwest Rural	0.57	10.83	0.19	4.73	0.00	0.11	0.00	0.00
Philadelphia Metro	2.46	15.44	2.12	6.99	0.31	0.12	0.00	0.00
Pinelands	0.75	1.95	1.32	4.20	0.61	0.36	0.10	0.39
Suburban Corridor	0.53	13.35	0.48	3.65	0.13	0.71	0.00	0.08

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

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

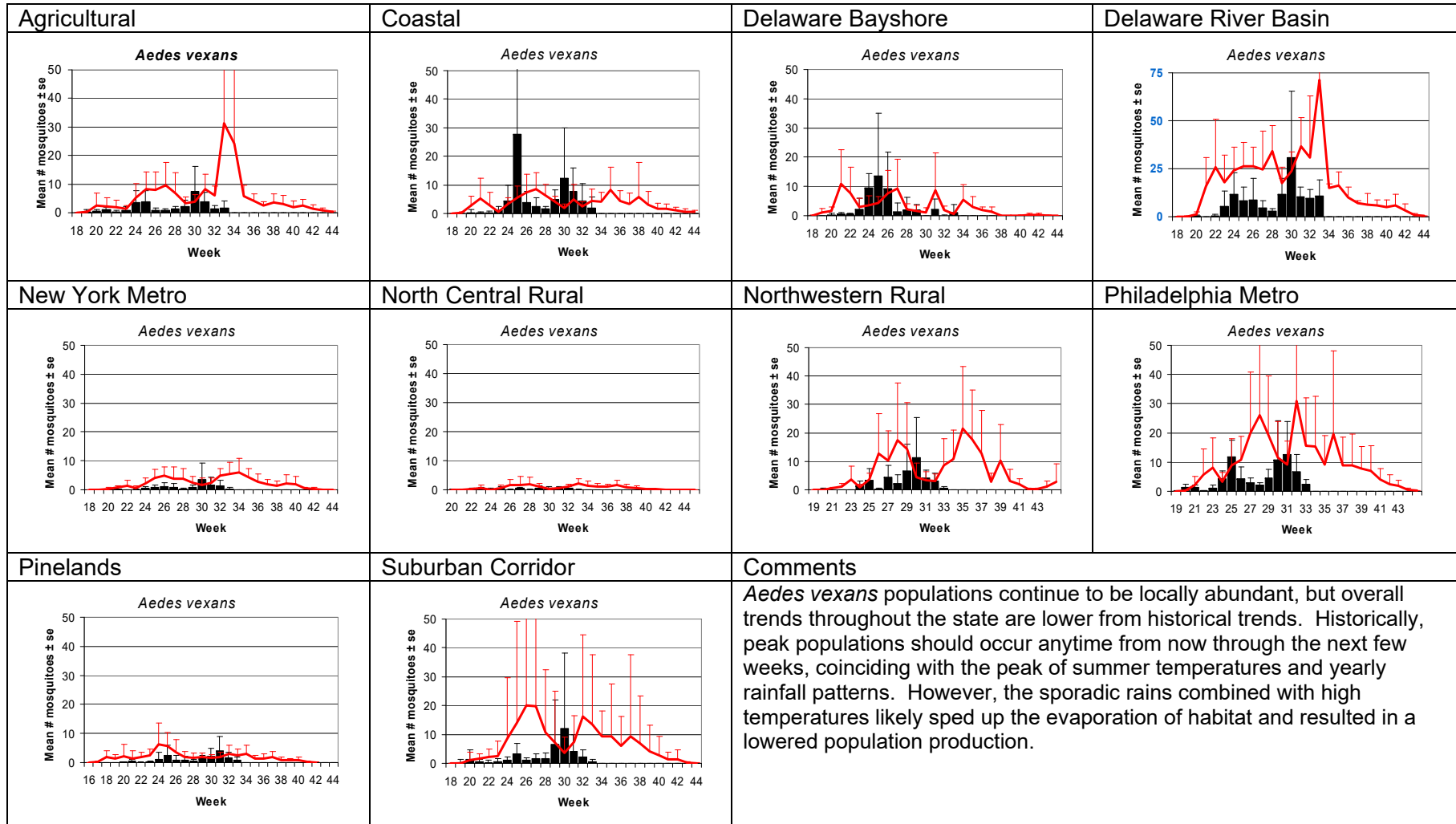
Climate Data

New Brunswick 1971-2000 Historical/Hillsborough 2005

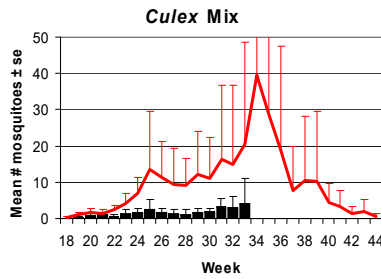
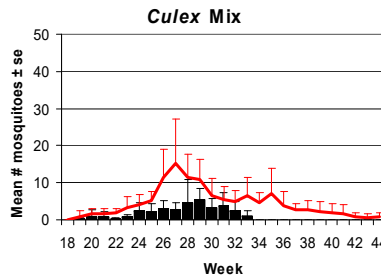
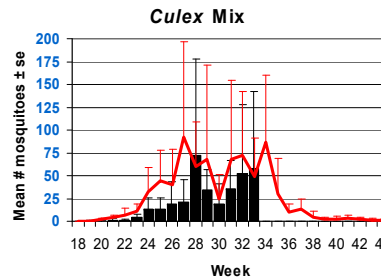
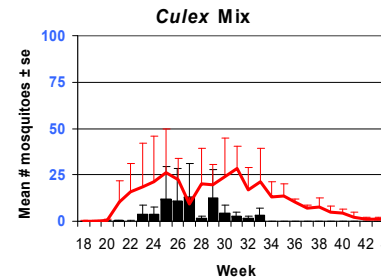
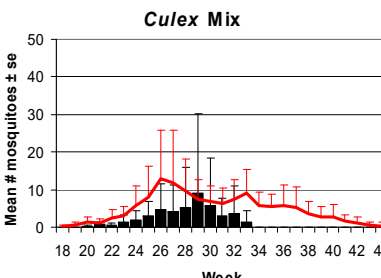
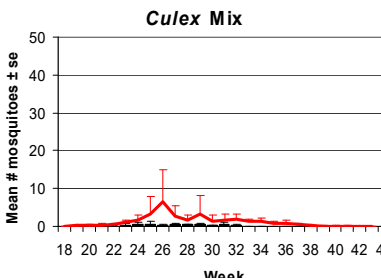
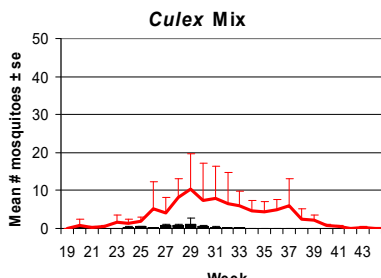
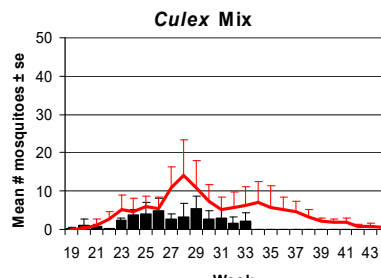
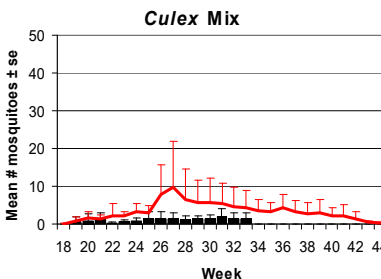
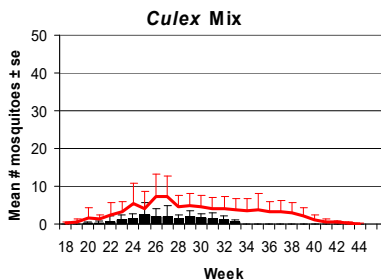


This figure shows historical average maximum and minimum temperatures and average precipitation recorded in the New Brunswick, NJ weather station over a recent 30 year period. Also graphed are the current year's minimum and maximum temperatures as recorded at the Hillsborough NJ weather station (a station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

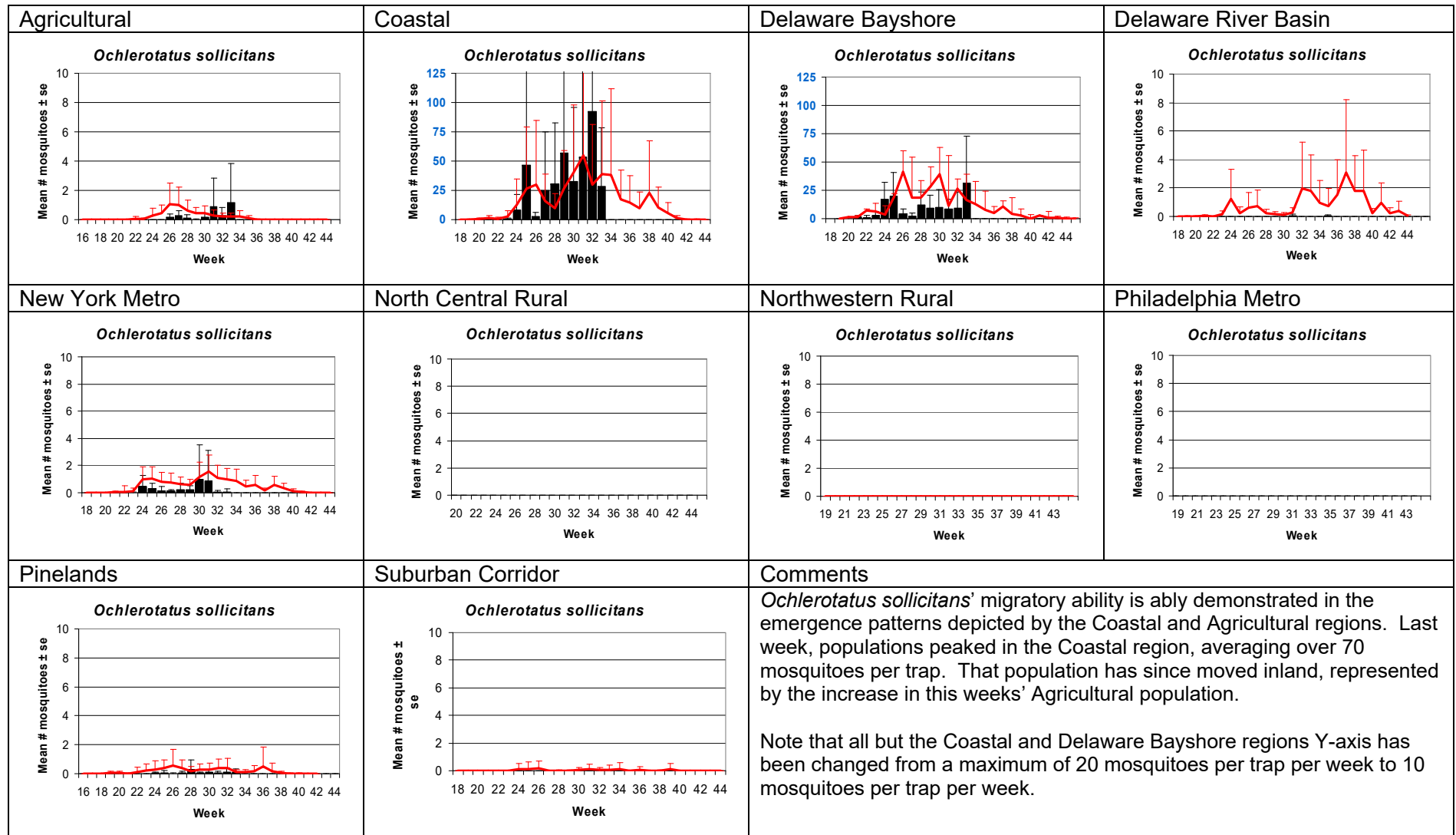
Aedes vexans - Fresh Floodwater Species



Culex Complex - Multivoltine Culex Species

Agricultural 	Coastal 	Delaware Bayshore 	Delaware River Basin 
New York Metro 	North Central Rural 	Northwestern Rural 	Philadelphia Metro 
Pinelands 	Suburban Corridor 	Comments The to-date 81 pools of West Nile positive mosquitoes continue to come from the <i>Culex</i> complex or <i>Culex pipiens/restuans</i> collections. At this point in time, there is no bridge vector involvement. However, West Nile virus is, undoubtedly, undergoing amplification in the vertebrate host. The <i>Culex</i> population levels should have either already peaked or will peak within the next week or two. Then, as the weather cools, mated females will enter hibernaculæ and spend the winter in quiescence. The gradual reduction in population levels represents these culvert- and cave-seeking females slowly decreasing their activity.	

Ochlerotatus sollicitans - Salt Marsh Floodwater Species



Culiseta melanura – Miscellaneous Group

