

NEW JERSEY STATE SURVEILLANCE

Weekly Report for Week 38, 16 – 22 September, 2003

Submitted by Lisa Reed and Wayne Crans

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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.



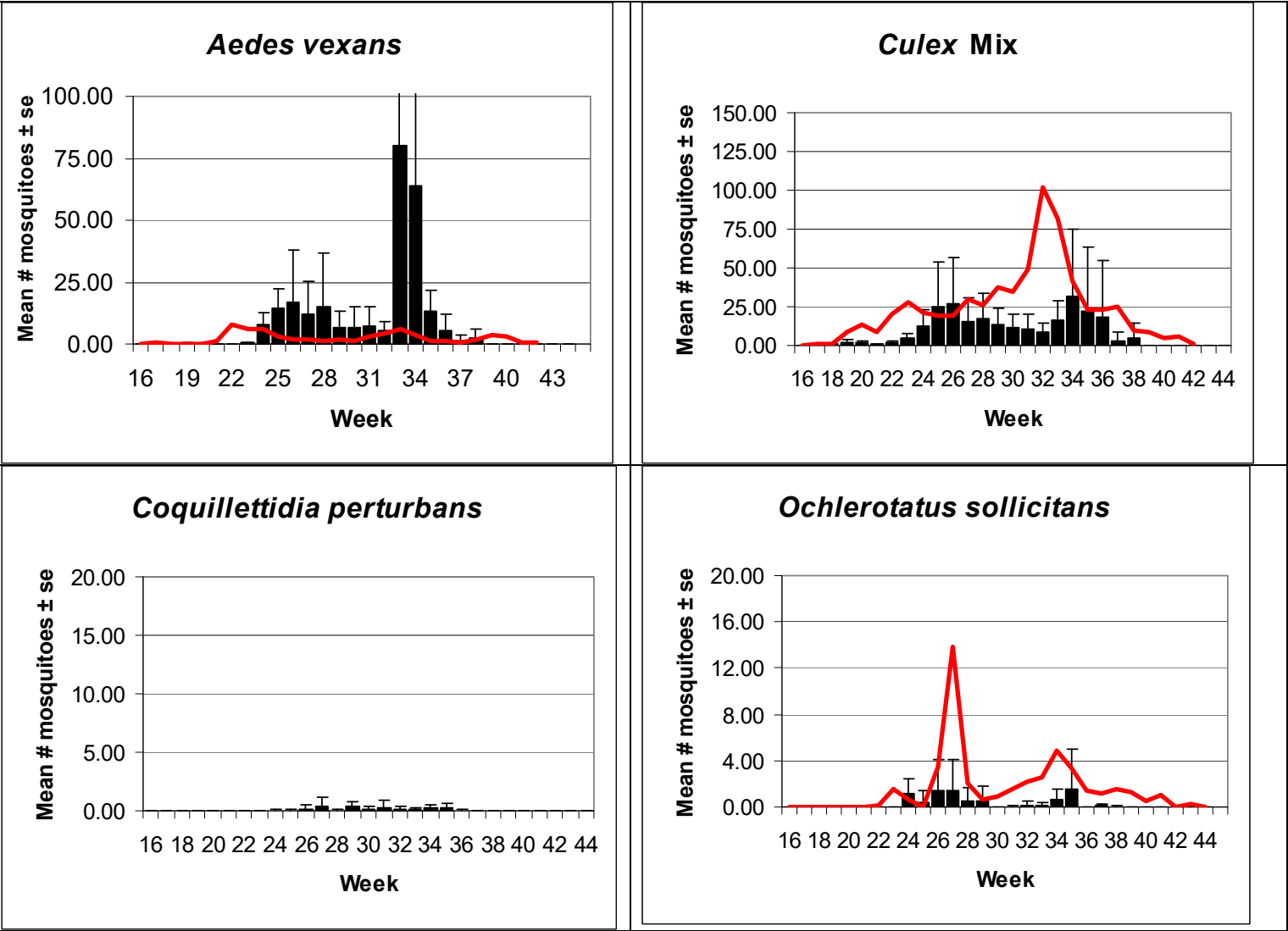
Summary table

	<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	2.55	1.36	4.83	22.88	0.00		0.02	1.55
Coastal	9.27	4.72	1.56	4.11	0.00		23.48	6.12
Delaware Bayshore	0.00		0.00		0.00		0.00	
Delaware River Basin	5.86	8.23	11.75	8.16	0.00		0.00	4.64
New York Metro	0.57	2.09	1.11	2.85	0.00		0.04	0.13
North Central Rural	0.51		0.69		0.00		0.00	
Northwest Rural	32.76		7.19		0.19		0.00	
Philadelphia Metro	2.40		0.02		0.00		0.00	
Pinelands	1.45	1.51	1.84	2.45	0.01		1.22	
Suburban Corridor	2.74	14.75	1.31	2.56	0.06		0.10	

- Complete data not yet available.

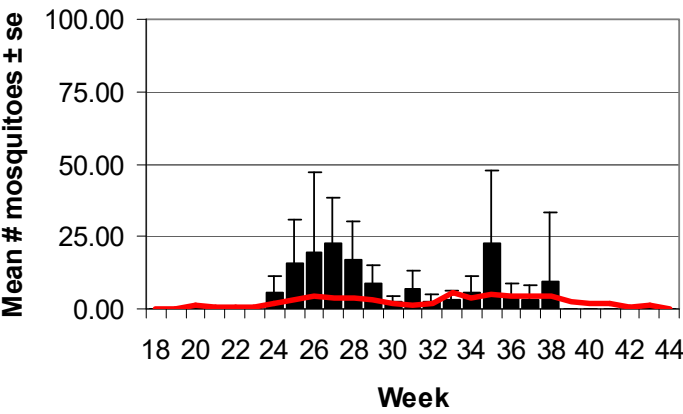
Please Note: Historical data is being entered and not yet complete. These values and graphics will change as more data is entered.

Agricultural

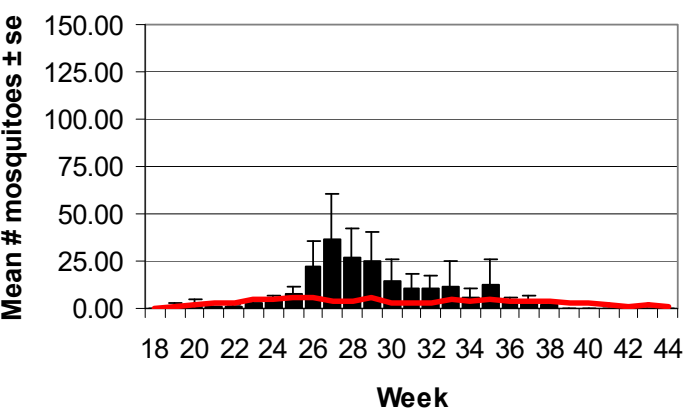


Coastal

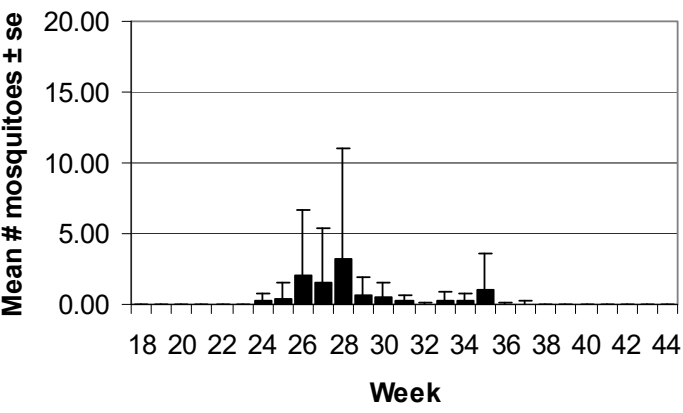
Aedes vexans



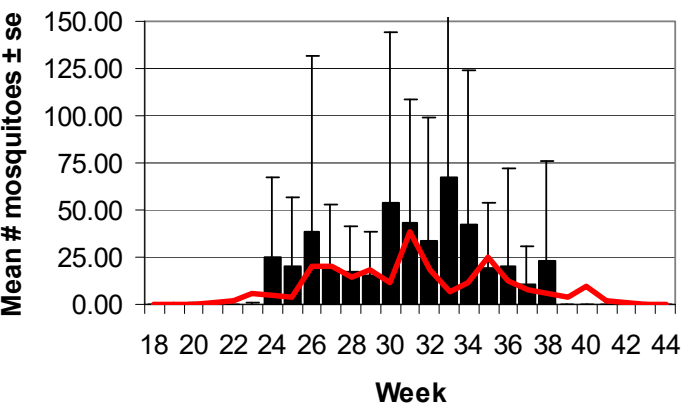
Culex Mix



Coquillettidia perturbans

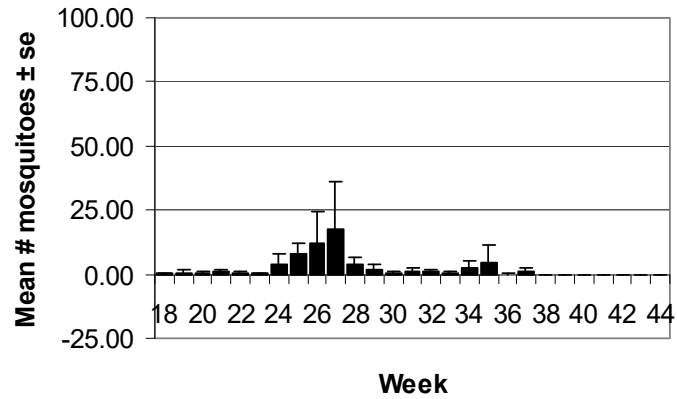


Ochlerotatus sollicitans

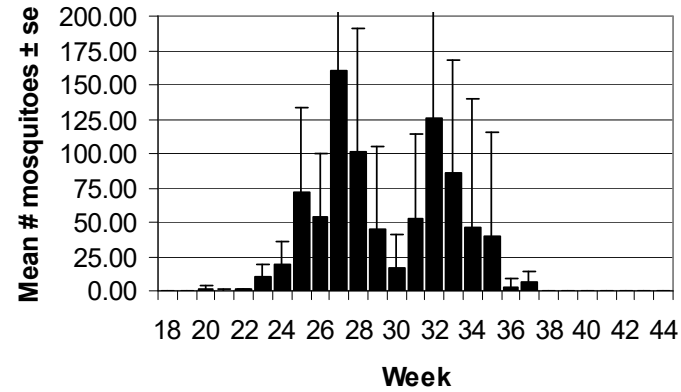


Delaware Bayshore

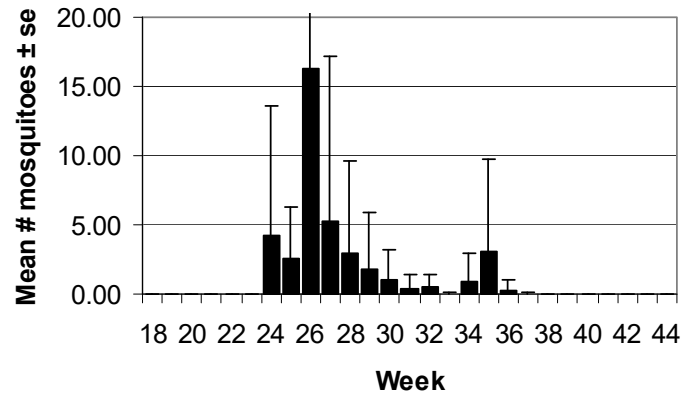
Aedes vexans



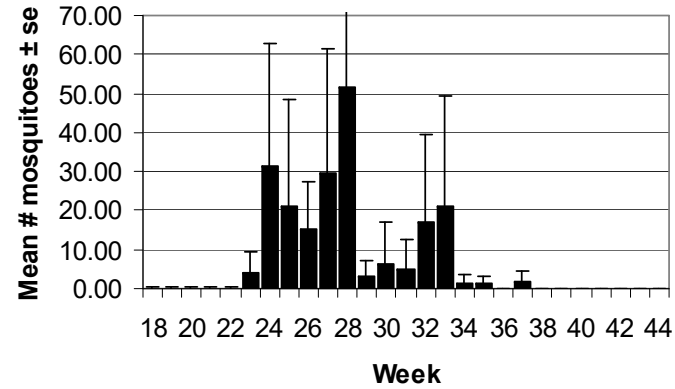
Culex Mix



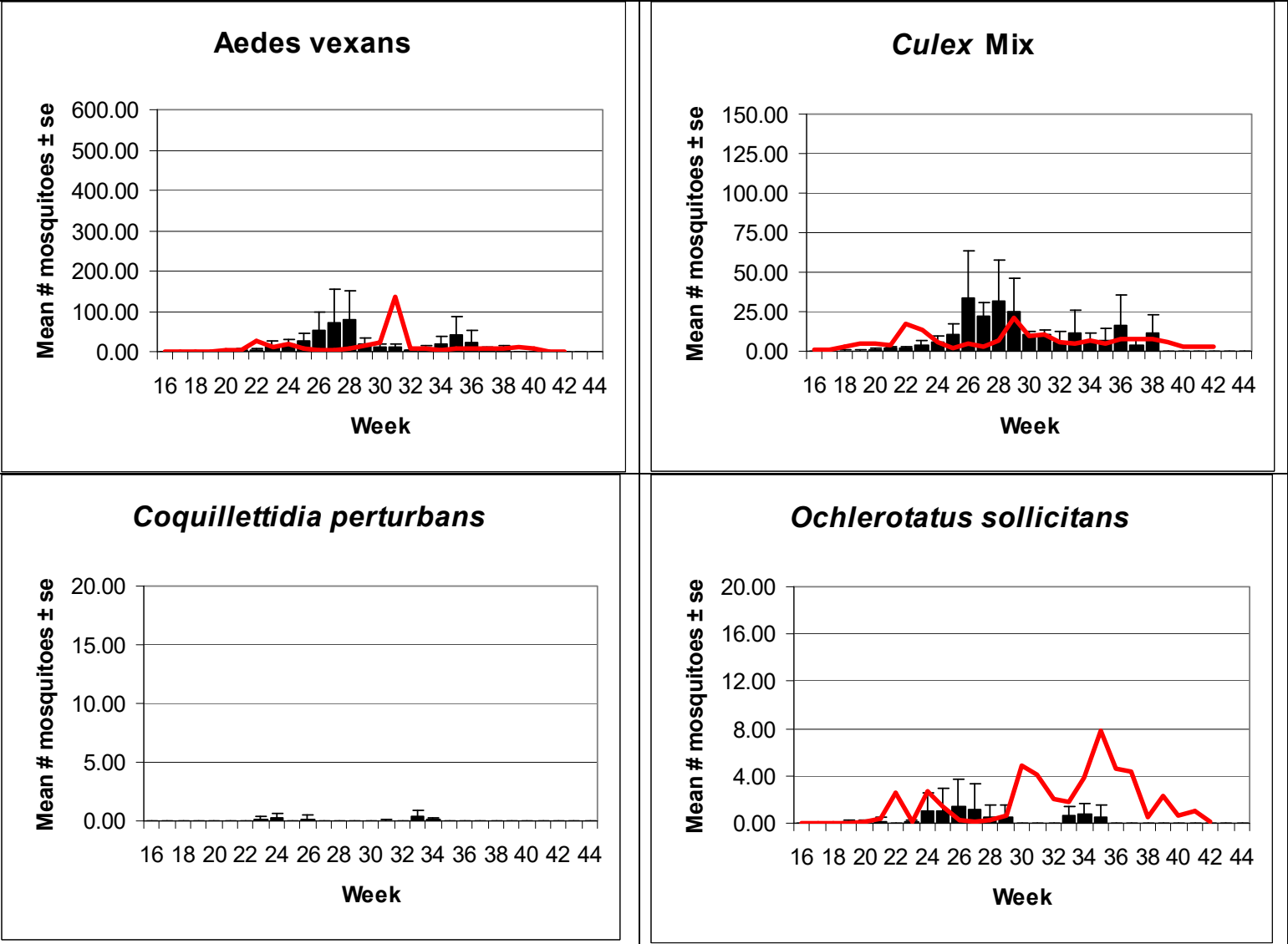
Coquillettidia perturbans



Ochlerotatus sollicitans

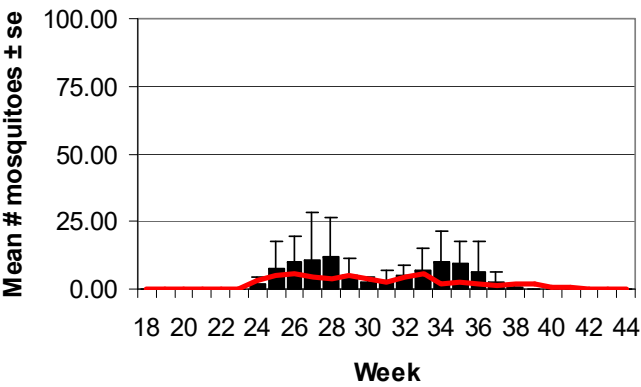


Delaware River Basin

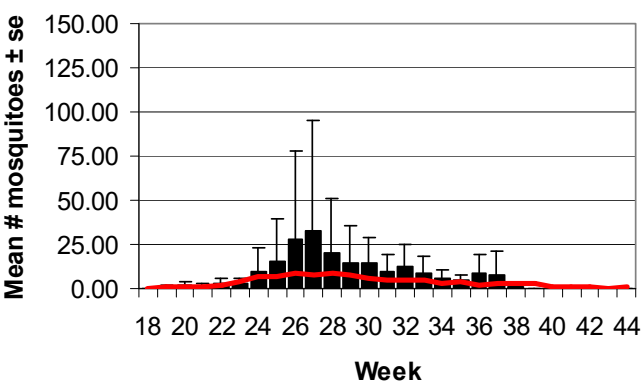


New York Metro

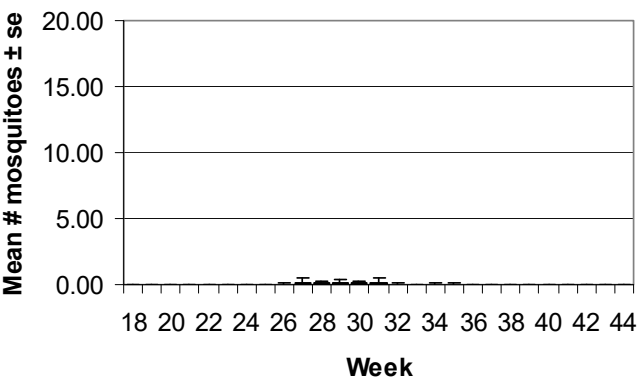
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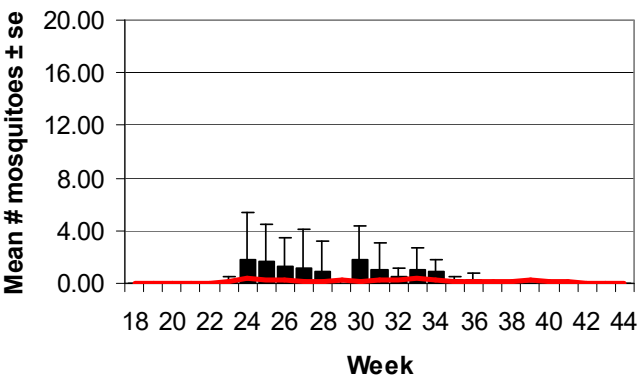
Culex Mix



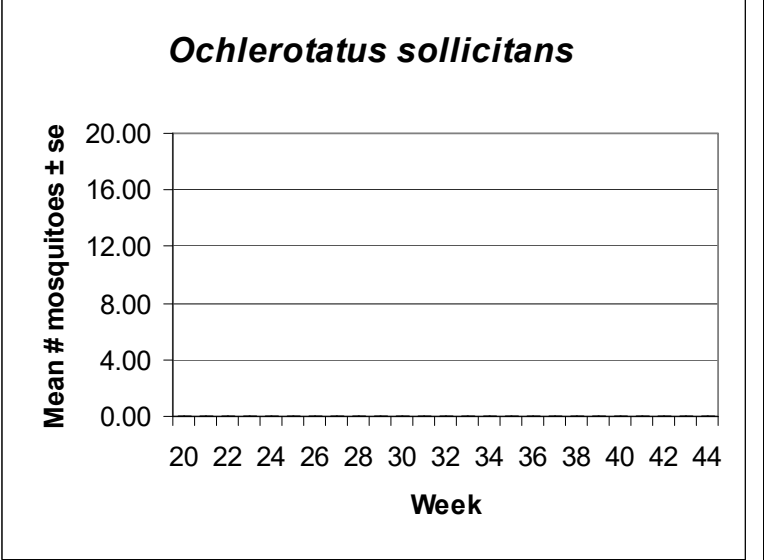
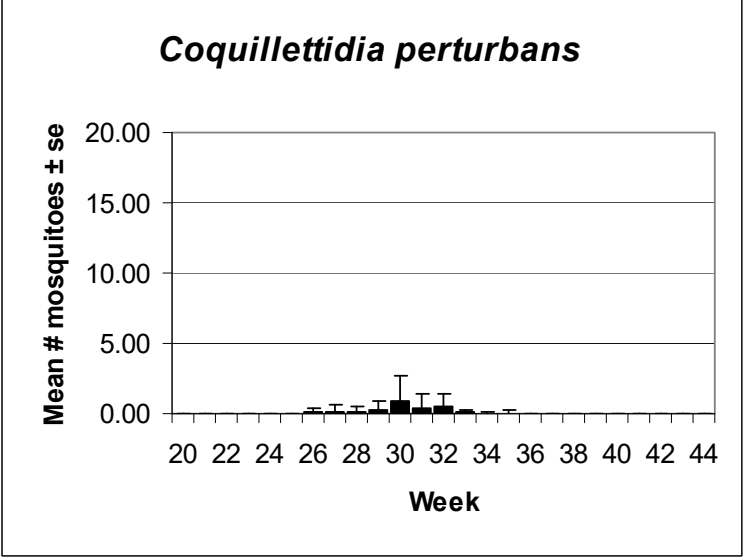
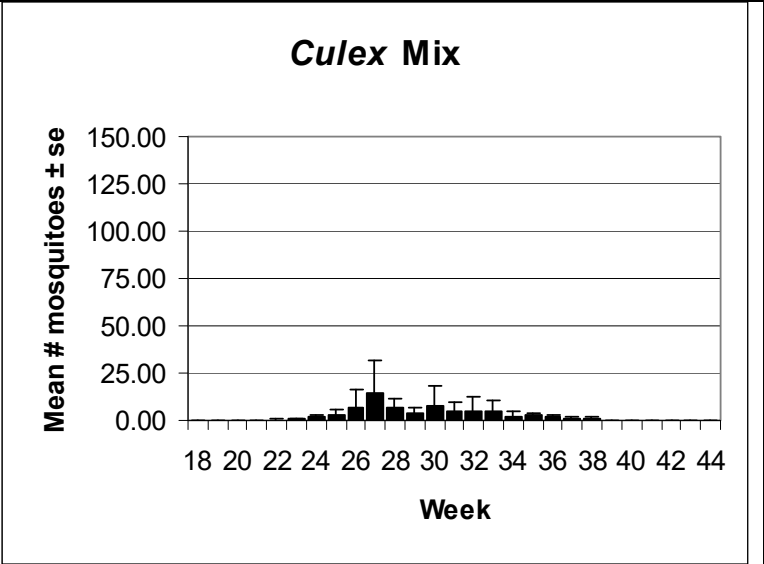
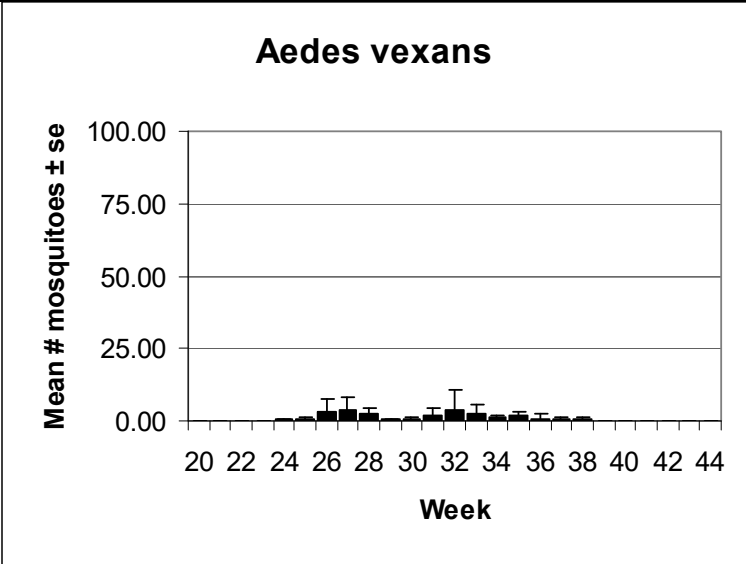
Coquillettidia perturbans



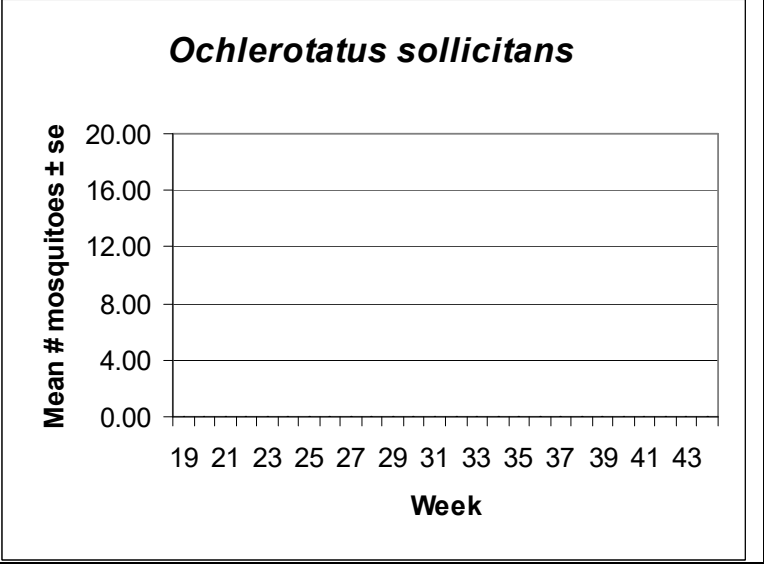
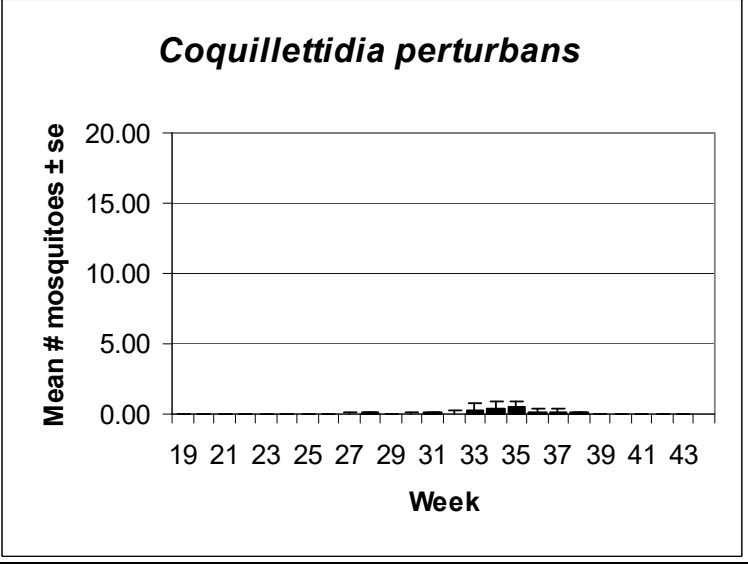
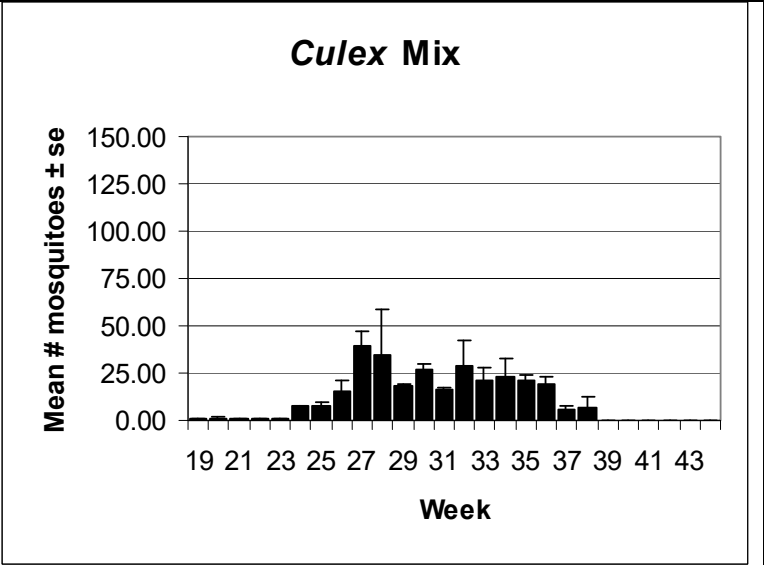
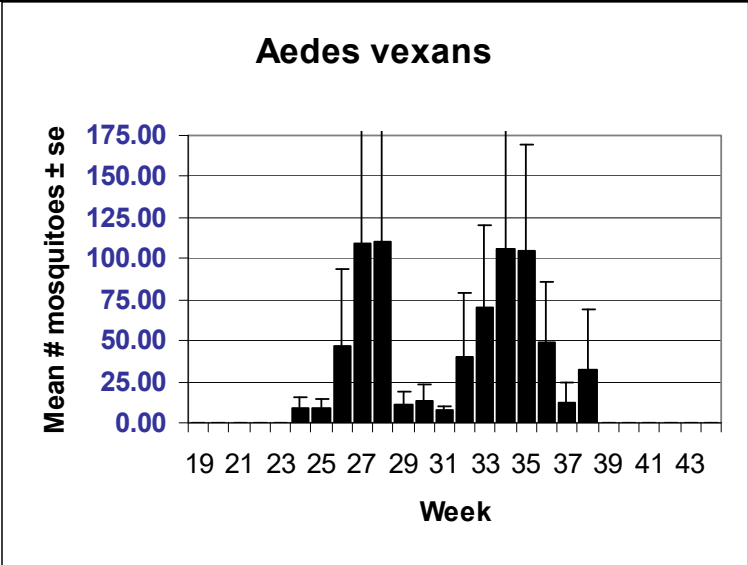
Ochlerotatus sollicitans



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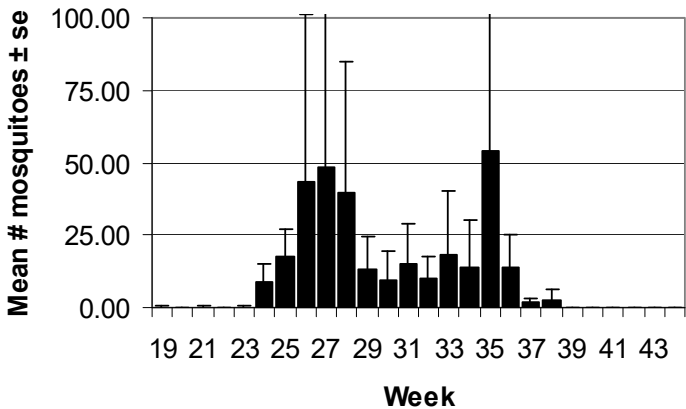


Northwestern Rural

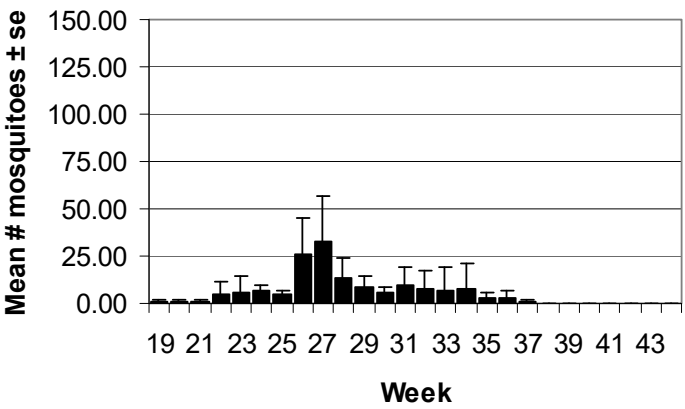


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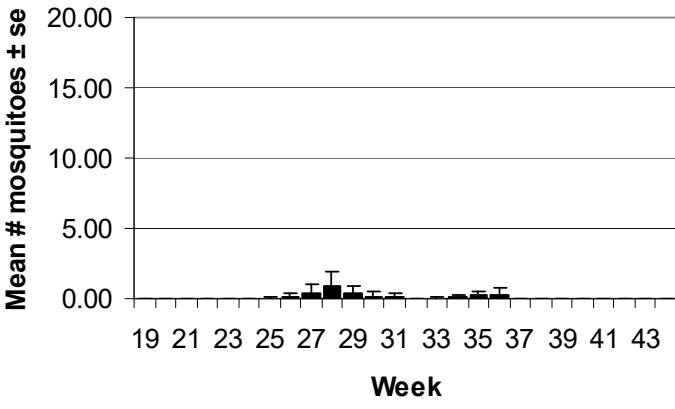
Aedes vexans



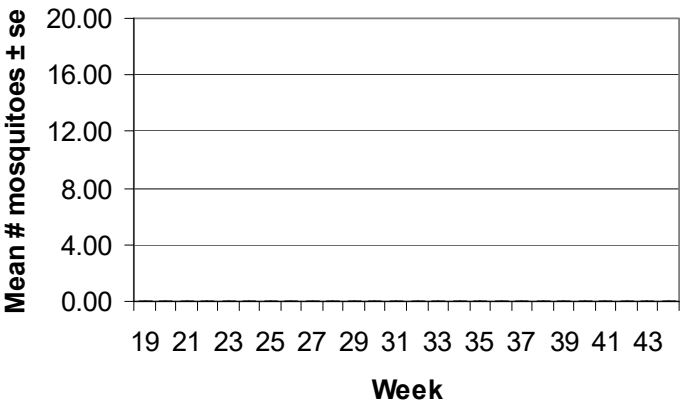
Culex Mix



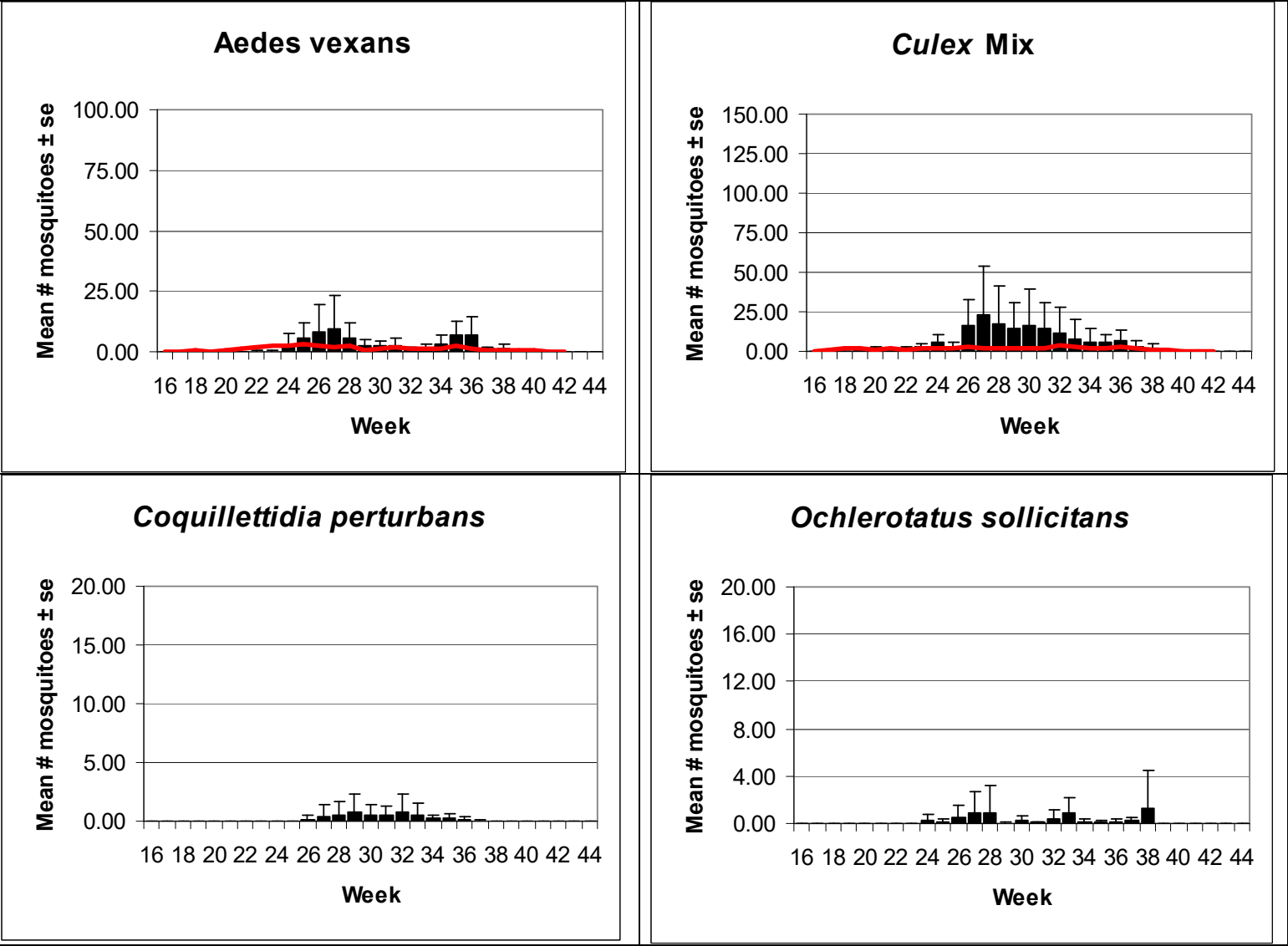
Coquillettidia perturbans



Ochlerotatus sollicitans

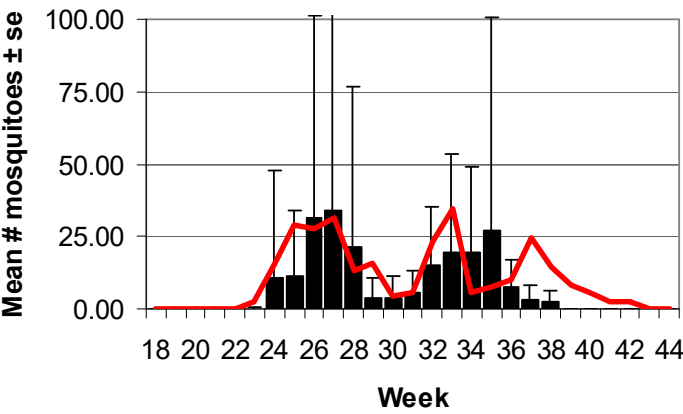


Pinelands

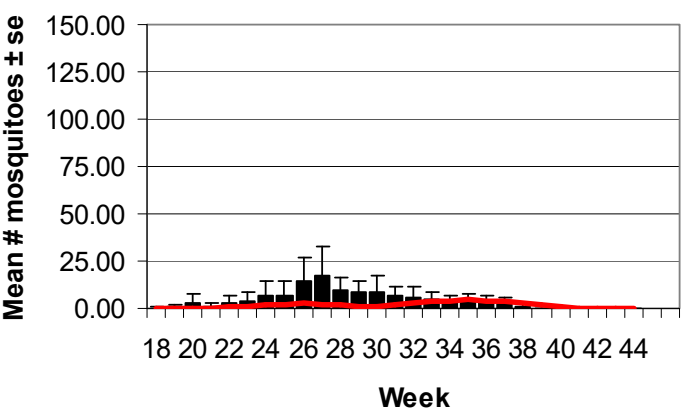


Suburban Corridor

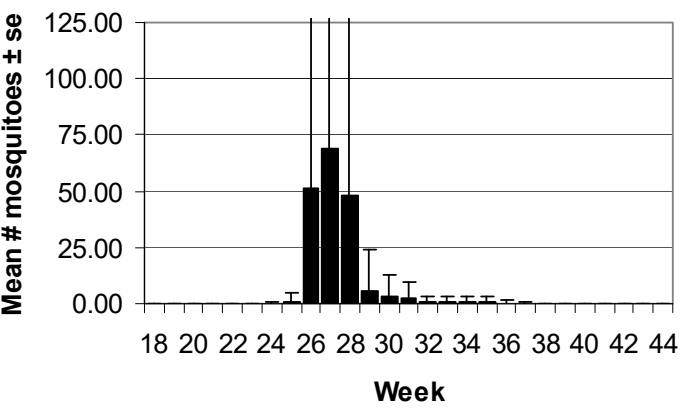
Aedes vexans



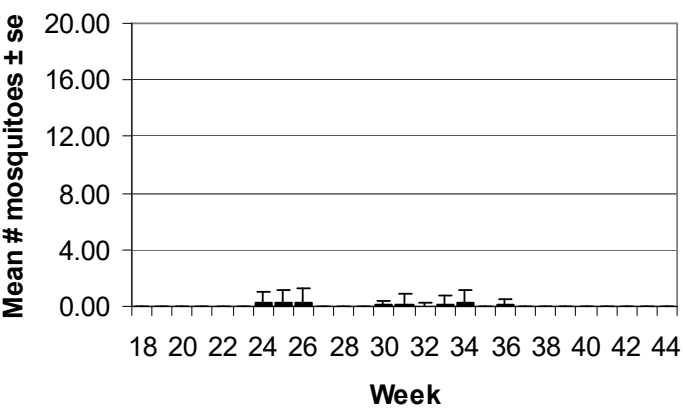
Culex Mix



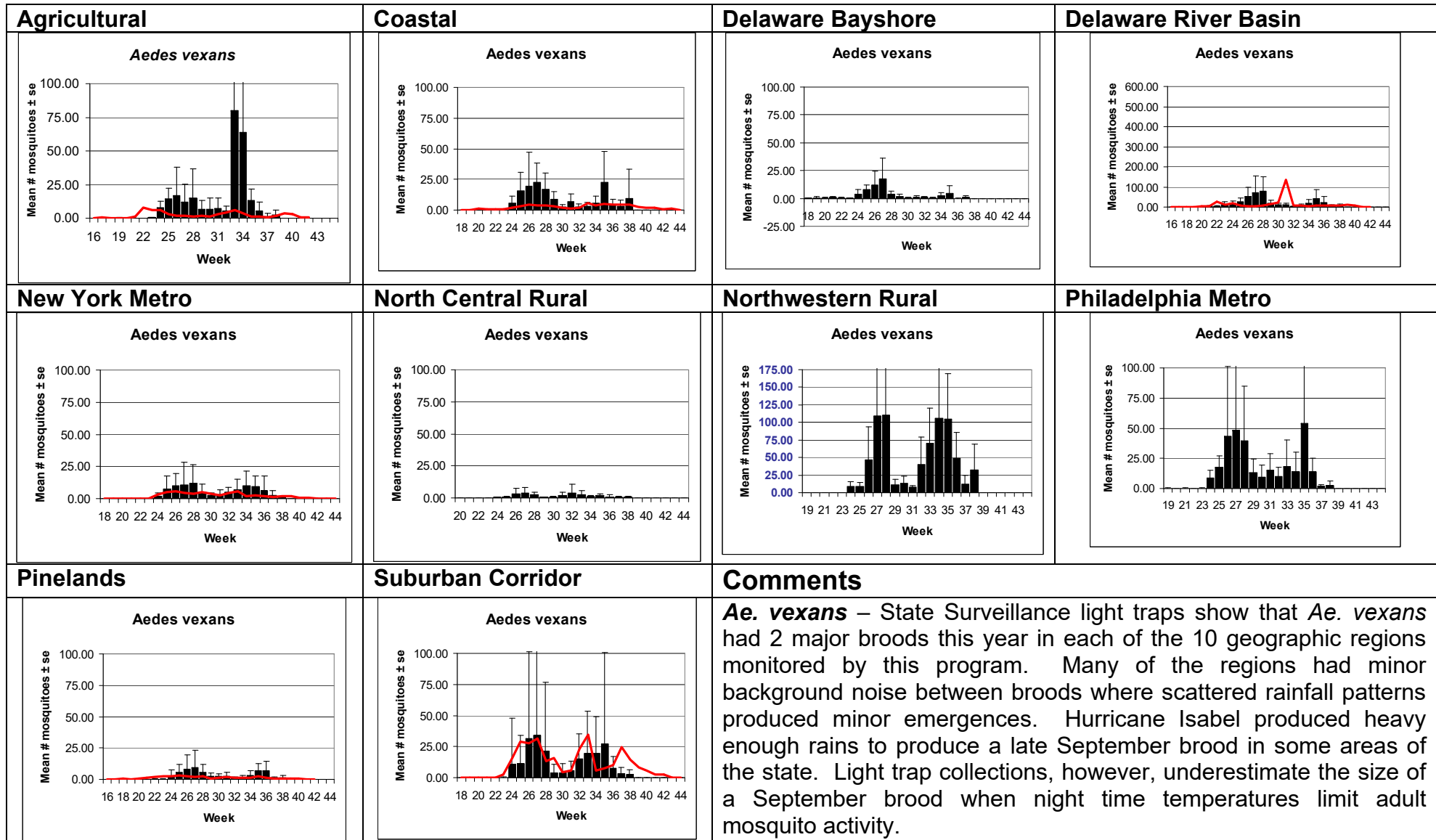
Coquillettidia perturbans



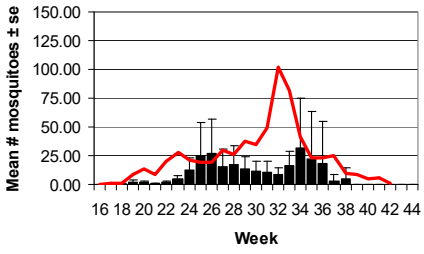
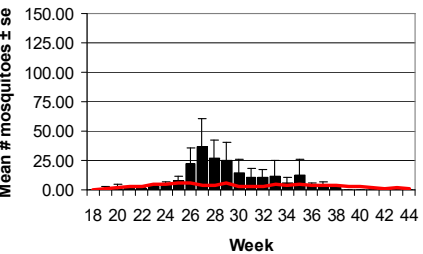
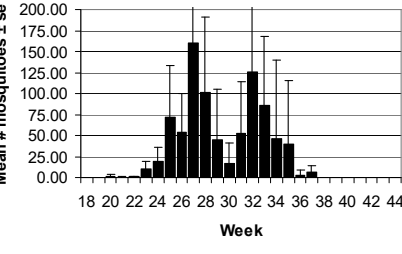
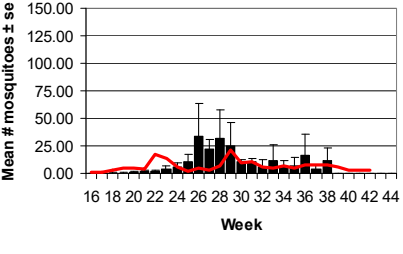
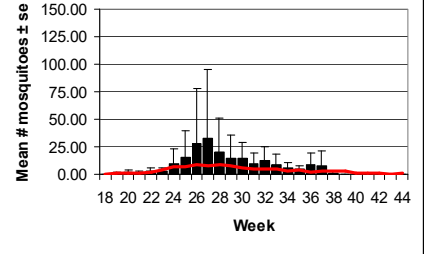
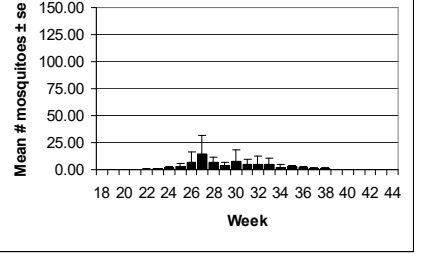
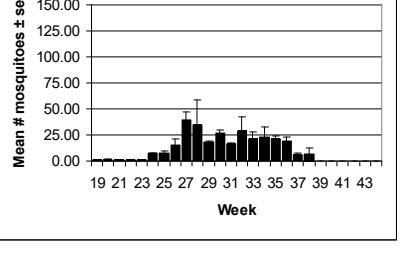
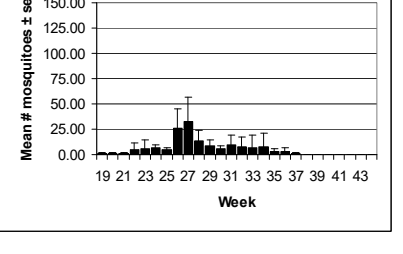
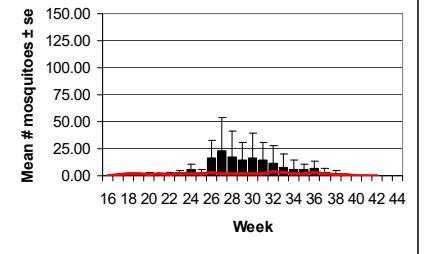
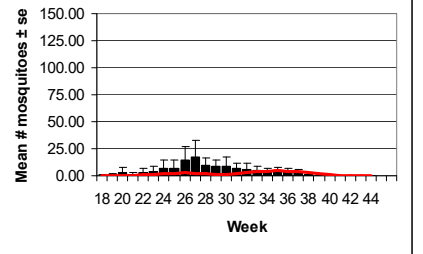
Ochlerotatus sollicitans



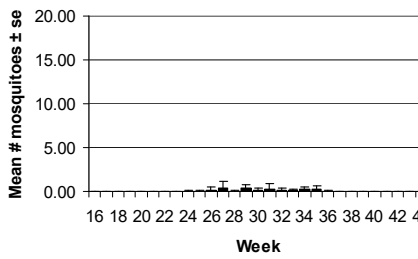
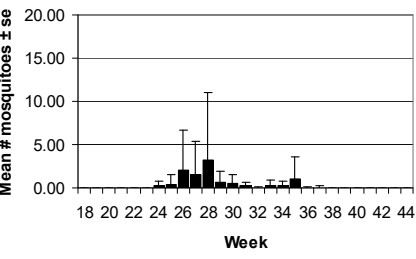
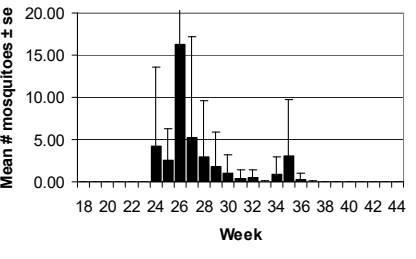
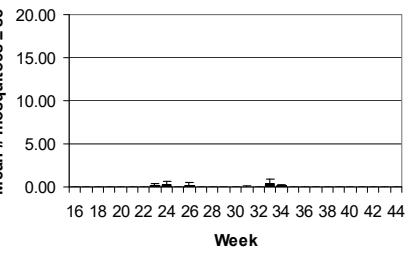
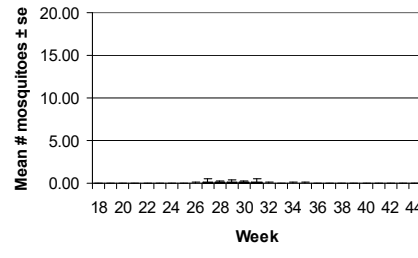
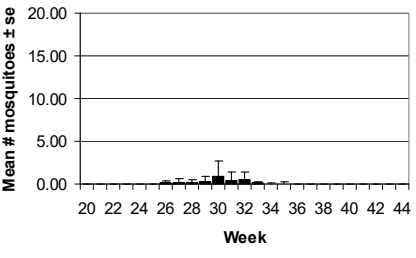
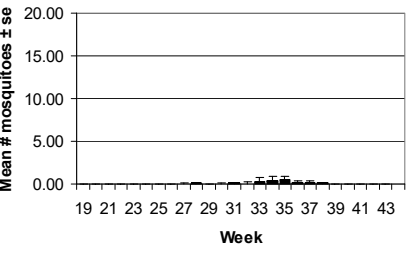
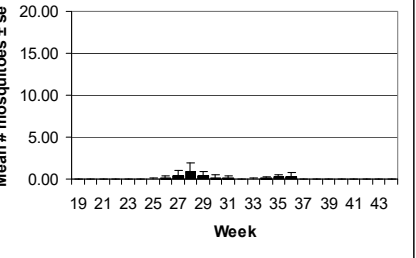
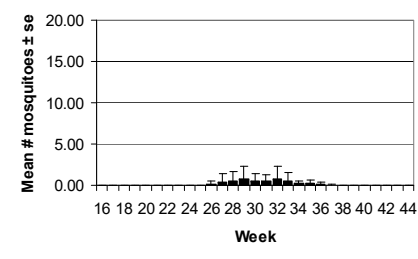
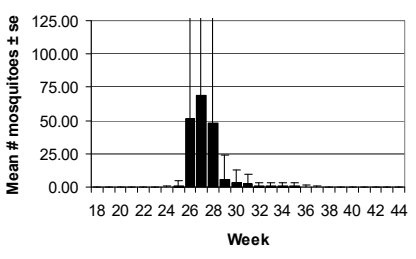
Aedes vexans



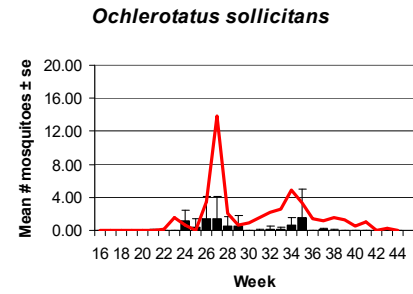
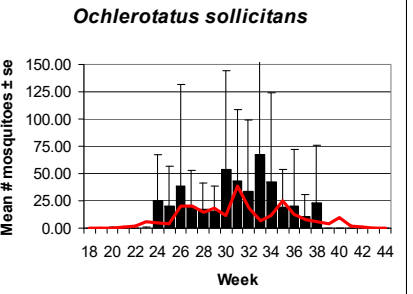
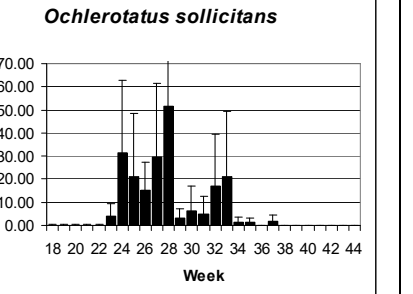
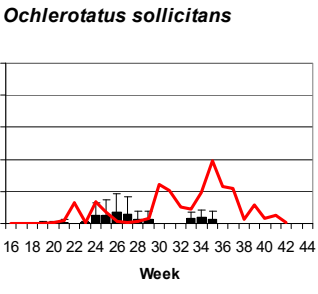
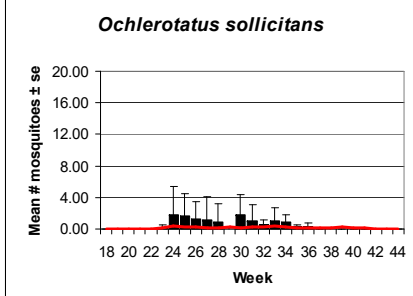
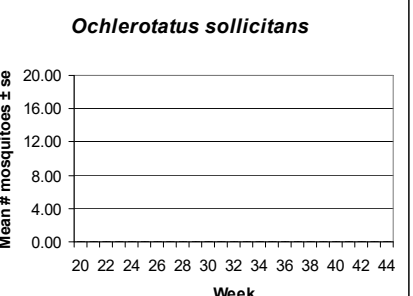
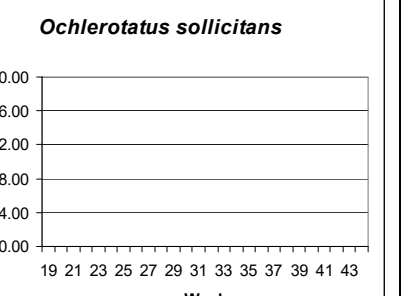
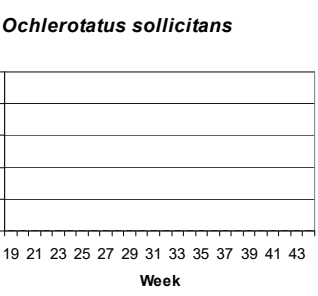
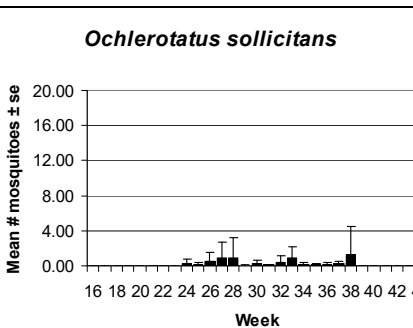
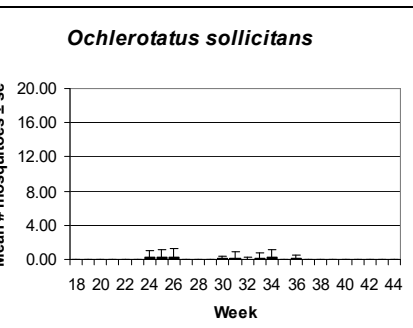
Culex Complex

Agricultural	Coastal	Delaware Bayshore	Delaware River Basin
Culex Mix 	Culex Mix 	Culex Mix 	Culex Mix 
New York Metro	North Central Rural	Northwestern Rural	Philadelphia Metro
Culex Mix 	Culex Mix 	Culex Mix 	Culex Mix 
Pinelands	Suburban Corridor	Comments	
Culex Mix 	Culex Mix 	Culex Complex –<i>Culex</i> populations are preparing to enter winter hibernaculae and light trap collections should continue to decline. Adult females that emerge from this point on are building fat body reserves by feeding on nectar sources. <i>Culex salinarius</i> is an exception and continues to host seek and enter light traps well into November	

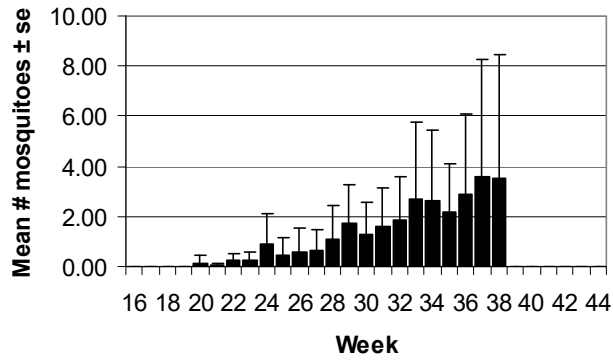
Coquillettidia perturbans

Agricultural	Coastal	Delaware Bayshore	Delaware River Basin
<i>Coquillettidia perturbans</i> 	<i>Coquillettidia perturbans</i> 	<i>Coquillettidia perturbans</i> 	<i>Coquillettidia perturbans</i> 
New York Metro	North Central Rural	Northwestern Rural	Philadelphia Metro
<i>Coquillettidia perturbans</i> 	<i>Coquillettidia perturbans</i> 	<i>Coquillettidia perturbans</i> 	<i>Coquillettidia perturbans</i> 
Pinelands	Suburban Corridor	Comments	
<i>Coquillettidia perturbans</i> 	<i>Coquillettidia perturbans</i> 	<i>Cq. perturbans</i> – <i>Coquillettidia perturbans</i> populations appear to have zeroed out for the season eliminating this species as a significant bridge vector for both WNV and EEE this fall.	

Ochlerotatus sollicitans

Agricultural	Coastal	Delaware Bayshore	Delaware River Basin
<i>Ochlerotatus sollicitans</i> 	<i>Ochlerotatus sollicitans</i> 	<i>Ochlerotatus sollicitans</i> 	<i>Ochlerotatus sollicitans</i> 
New York Metro	North Central Rural	Northwestern Rural	Philadelphia Metro
<i>Ochlerotatus sollicitans</i> 	<i>Ochlerotatus sollicitans</i> 	<i>Ochlerotatus sollicitans</i> 	<i>Ochlerotatus sollicitans</i> 
Pinelands	Suburban Corridor	Comments	
<i>Ochlerotatus sollicitans</i> 	<i>Ochlerotatus sollicitans</i> 	<i>Oc. sollicitans</i> – State Surveillance light trap data show a minor emergence of <i>Oc. sollicitans</i> in several of the regions. Emergence was highest in the Coastal Region where light trap collections reached 25 per trap night in week 38. In most years, late season <i>Oc. sollicitans</i> do not disperse far from coastal breeding habitat. Collections from the Pine Barrens Region indicate that this year's September brood did move far enough inland to show up in light trap collections.	

Culiseta melanura



Cs. melanura – *Culiseta melanura* populations have been increasing steadily over the course of the 2003 season. The trend is most evident in the Pinelands Region where acid water habitat produces the largest *Cs. melanura* populations in the state.

Pinelands Region