NEW JERSEY STATEWIDE SURVEILLANCE

Week 38 Report for 14 September to 20 September, 2004

Submitted by Lisa Reed and Wayne Crans
Mosquito Research and Control Unit
Rutgers University, New Brunswick, NJ 08901

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 boarders.

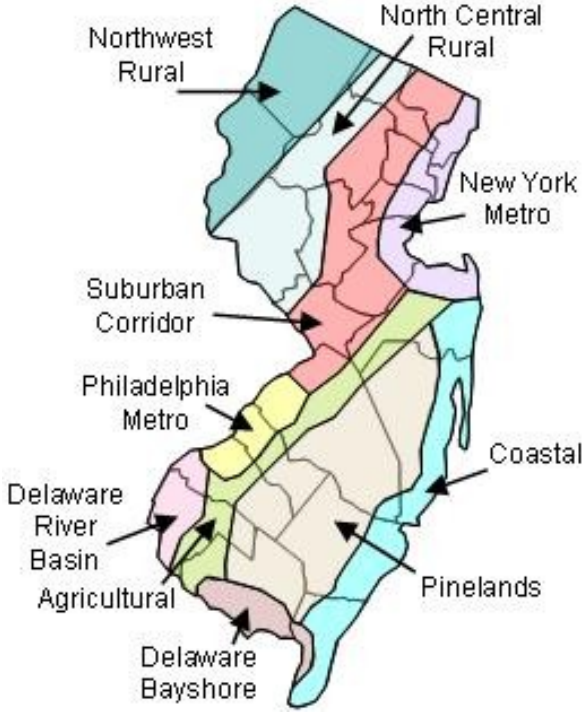


Figure 1b. Trap lat-long locations.

Summary table

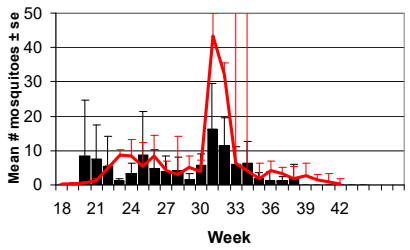
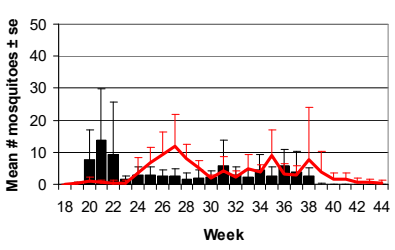
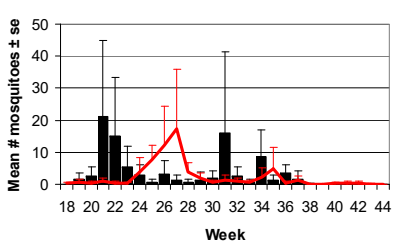
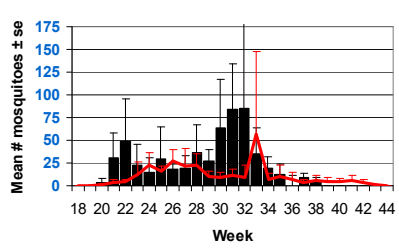
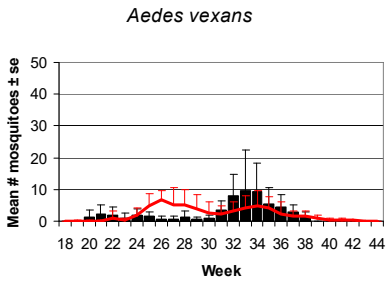
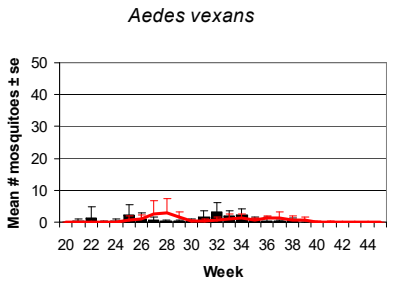
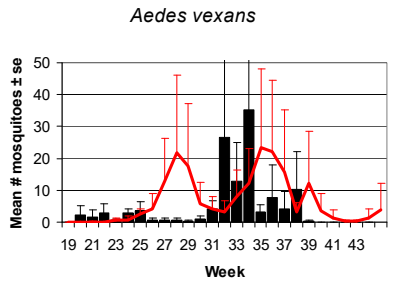
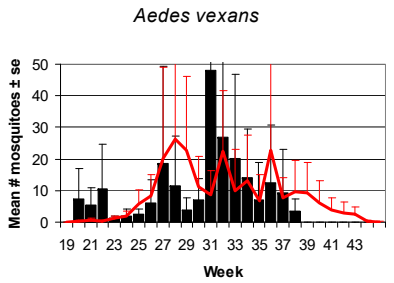
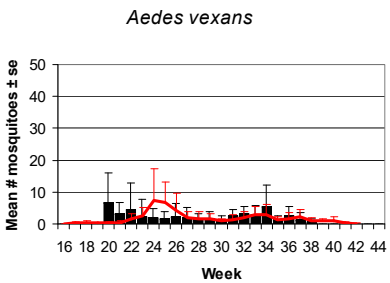
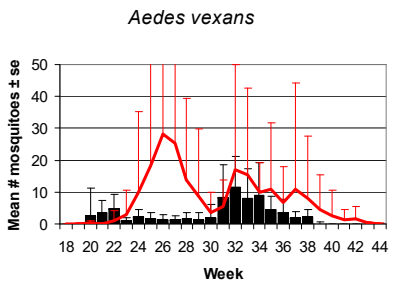
	Aedes vexans		*Culex complex*		*Coquillettidia perturbans*		*Ochlerotatus sollicitans*	
Region	This Week	Average*	This Week	Average*	This Week	Average*	This Week	Average*
Agricultural	2.21	4.25	2.64	10.24	0	0	0.52	0.54
Coastal	2.43	7.67	3.13	3.16	0.02	0	3.62	32.54
Delaware Bayshore	0.07	0	9.40	0	0	0	6.12	0
Delaware River Basin	4.18	5.32	3.32	6.04	0	0	0	1.89
New York Metro	1.19	1.74	4.37	3.38	0	0	0.06	0.93
North Central Rural	0.57	0.61	0.51	0.52	0	0	0	0
Northwest Rural	10.33	12.18	5.14	2.20	0.02	0.07	0	0
Philadelphia Metro	3.66	9.63	0.98	1.73	0.14	0	0	0
Pinelands	0.78	1.66	1.38	3.04	0.03	0.05	0.03	0.70
Suburban Corridor	2.25	7.88	3.15	2.49	0.15	0.06	0.03	0

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

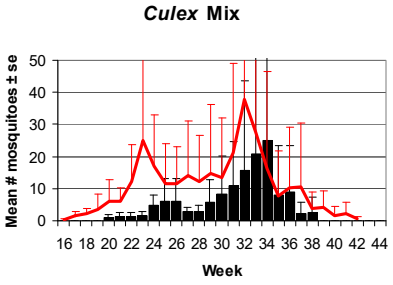
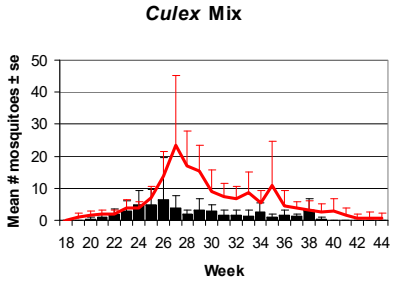
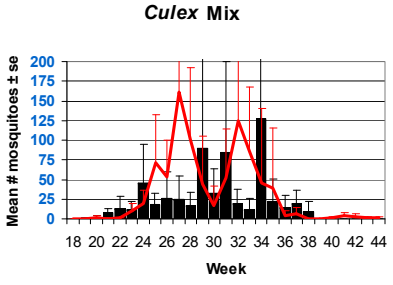
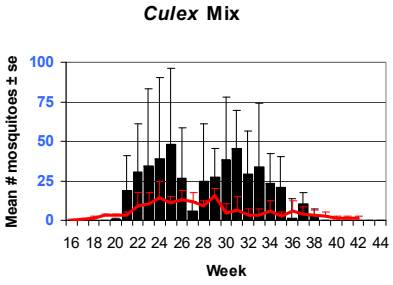
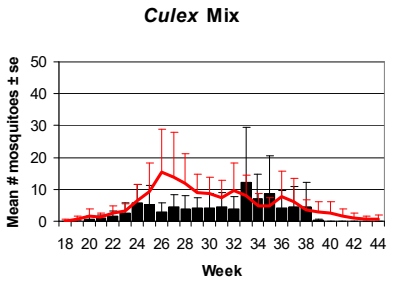
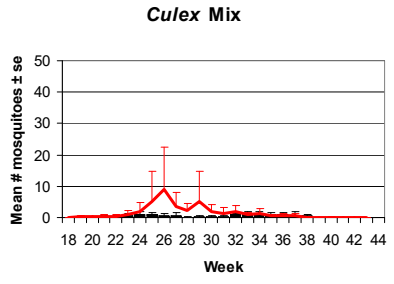
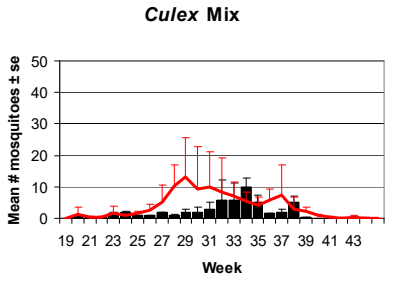
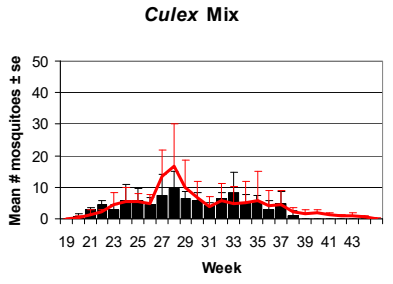
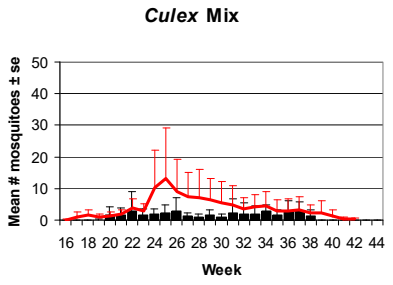
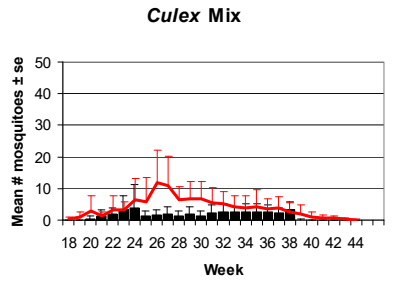
Additional Species, including *Ochlerotatus japonicus*

Note: 19 out of 21 counties reporting.

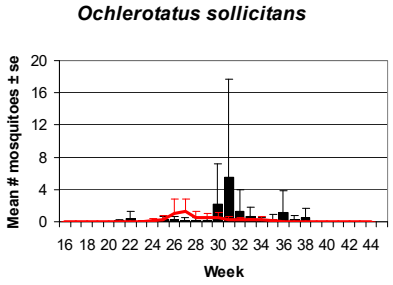
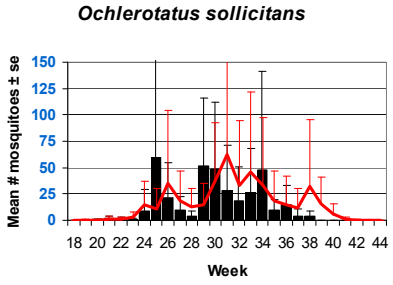
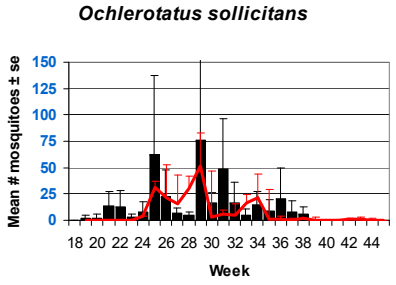
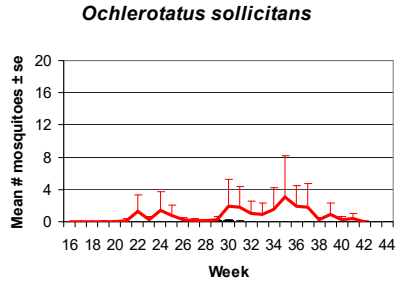
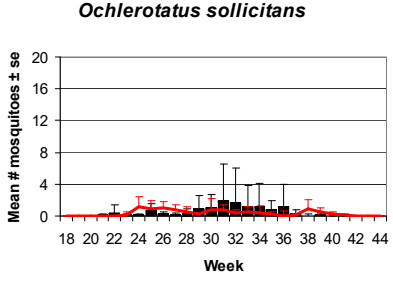
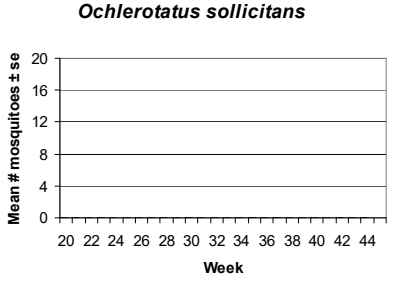
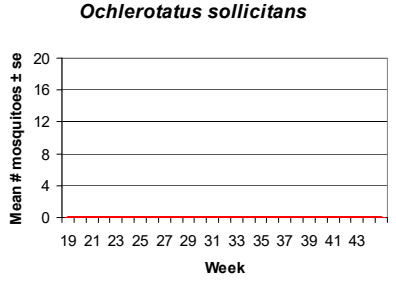
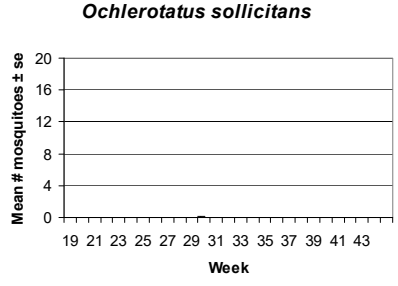
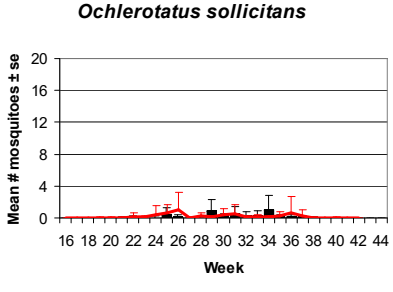
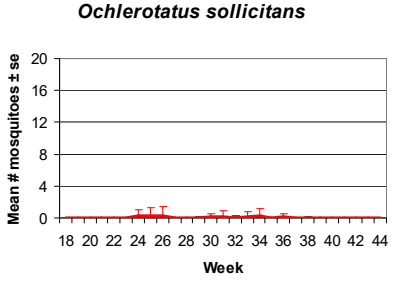
Aedes vexans - Fresh Floodwater Species

Agricultural	Coastal	Delaware Bayshore	Delaware River Basin
			
New York Metro	**North Central Rural**	**Northwestern Rural**	**Philadelphia Metro**
			
Pinelands	**Suburban Corridor**	**Comments**	
		Hurricane Ivan dropped a significant amount of rain onto the northern half of New Jersey. New highs for 7-day average stream flow were recorded for Mercer, Warren, and Sussex counties. Flooding was severe in areas of the Delaware River in Hunterdon and Mercer Counties. The Red Cross was called in to provide shelter for local residents. The potential for a significant emergence of *Ae. vexans* is questionable at this time of the year. With temperatures only expected in the mid-70's, it appears less likely that a significant brood will occur before the season's end.	

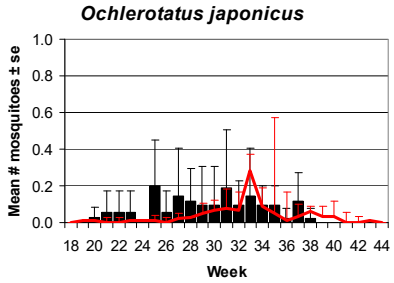
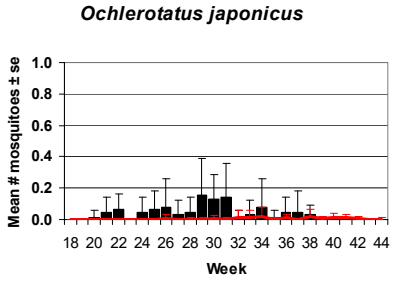
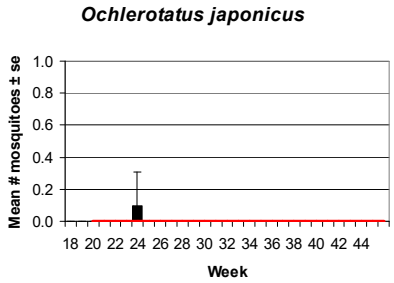
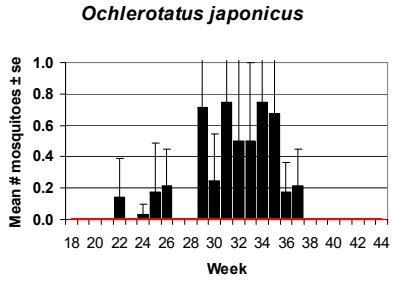
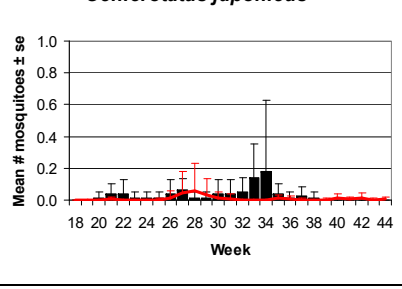
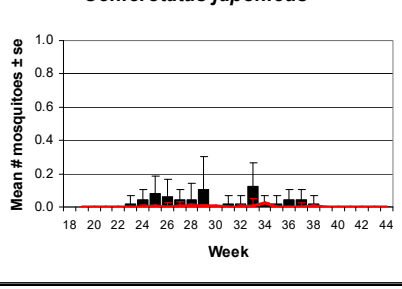
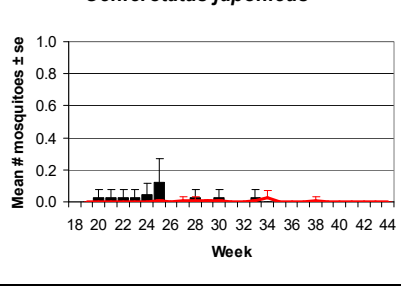
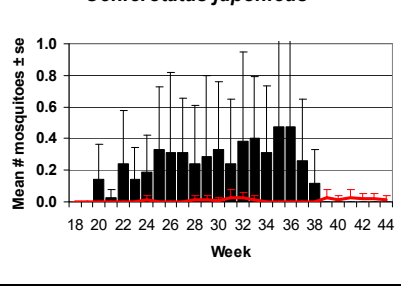
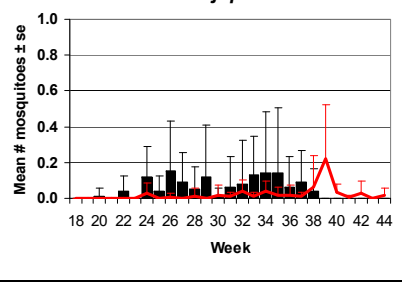
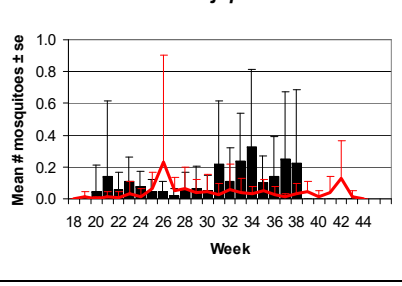
Culex Complex - Multivoltine *Culex* Species

Agricultural	Coastal	Delaware Bayshore	Delaware River Basin
			
New York Metro	**North Central Rural**	**Northwestern Rural**	**Philadelphia Metro**
			
Pinelands	**Suburban Corridor**	**Comments**	
		*Culex* populations in the Delaware River Basin region, as with the rest of the state, appear to be on the wane. Females that emerge now will mostly forage on nectar for fat body production necessary in overwintering. However, *Cx. salinarius*, the likely species represented in the Delaware Basin River region (and other coastal habitat), should bloodfeed well into the fall, and can still be a nuisance when numbers are substantial.	

Ochlerotatus sollicitans - Salt Marsh Floodwater Species

Agricultural	Coastal	Delaware Bayshore	Delaware River Basin
			
New York Metro	**North Central Rural**	**Northwestern Rural**	**Philadelphia Metro**
			
Pinelands	**Suburban Corridor**	**Comments**	
		This year's likely final brood of *Ochlerotatus sollicitans* appears to be considerably smaller than the three major broods that appeared between the weeks of the 34th through the 36th. Migration to inner and adjacent regions appear to be a mid-season phenomenon. Late-season broods tend to remain close to their breeding habitat, but can cause considerable nuisnance locally during the daylight fall hours.	

Ochlerotatus japonicus – Multivoltine Aedine

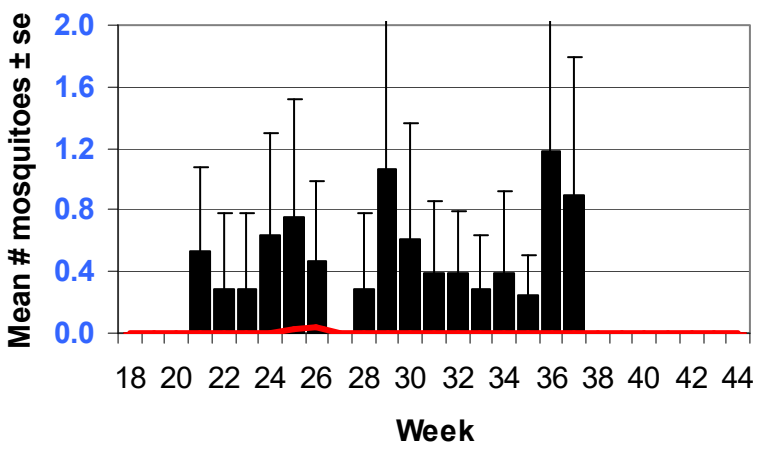
Agricultural	Coastal	Delaware Bayshore	Delaware River Basin
			
New York Metro	**North Central Rural**	**Northwestern Rural**	**Philadelphia Metro**
			
Pinelands	**Suburban Corridor**	**Comments**	
		*Ochlerotatus japonicus* appears to have decreased slightly in the Delaware River Basin and Philadelphia Metro regions over the past two weeks. This year's populations exceeded the long-tern mean by a considerable margin.	

Ochlerotatus triseriatus:

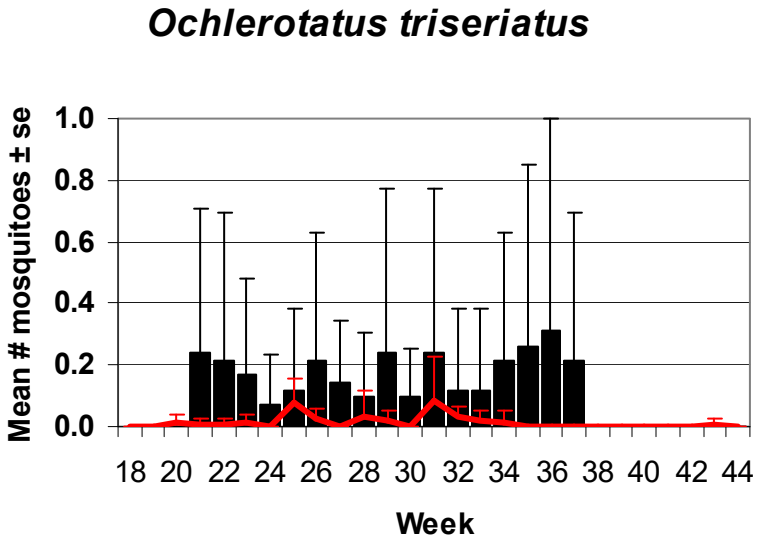
This mosquito appears to be making its presence known in two places: the Delaware River Basin and the adjacent Philadelphia Metro regions. This aggressive container-breeder can outcompete many others when larval food resources decline.

Oc. triseriatus is primarily a small mammal feeder that can deliver a painful bite when hostseeking on humans. *Oc. triseriatus* is a primary vector for La Crosse encephalitis, and is moderately competent for West Nile transmission. Since it is a daytime feeder, *Oc. triseriatus* does not readily enter light traps.

Delaware River Basin



Philadelphia Metro



With cooler weather, eggs recently laid will undergo diapause, and overwinter.