

VECTOR SURVEILLANCE IN NEW JERSEY
EEE, WNV and SLE
CDC WEEK 23: June 7 to June 13, 2009

Culiseta melanura and Eastern Equine Encephalitis

SITE	Inland / Coastal	Historic Mean	Current Weekly Mean	Total Collected to Date*	Total Pools Submitted	EEE Isolations	MFIR
Green Bank (Burlington County)	Coastal	1.1	0.1	28	9	0	0
Corbin City (Atlantic County)	Coastal	1.2	0	2	2	0	0
Dennisville (Cape May County)	Coastal	4.4	2.5	248	13	0	0
Waterford (Camden County)	Inland	2.0	0	9	2	0	0
Centerton (Salem County)	Inland	2.3	1.3	124	11	0	0
Turkey Swamp (Monmouth County)	Inland	0.6	0.1	18	6	0	0
Glassboro (Gloucester County)	Inland	0	0.9	98	12	0	0

*Including trial run last week in May.

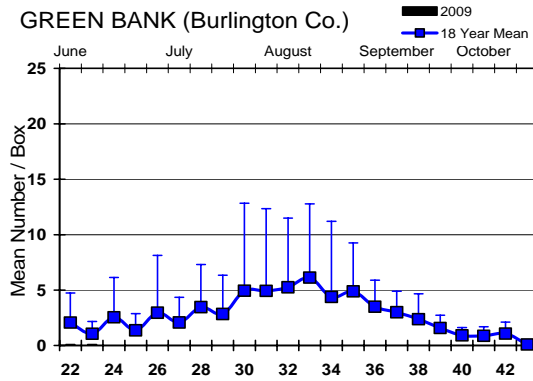
Remarks: *Culiseta melanura* populations have risen at three of the seven resting box site from the previous week (Centerton, Dennisville and Glassboro). The first two sites have often shown higher population numbers as compared to other sites. As of 15 June, there is no arboviral activity in New Jersey.

To date, 55 pools from 527 *Cs. melanura* mosquitoes have been sent for EEE testing from the seven resting box collections. Previously, Gloucester County has sampled five additional sites with resting boxes. Other species tested for EEE from resting boxes include: *Anopheles punctipennis*, *An. quadrimaculatus*, *Culex pipiens* and *Culex restuans*. All are reported negative for EEE virus.

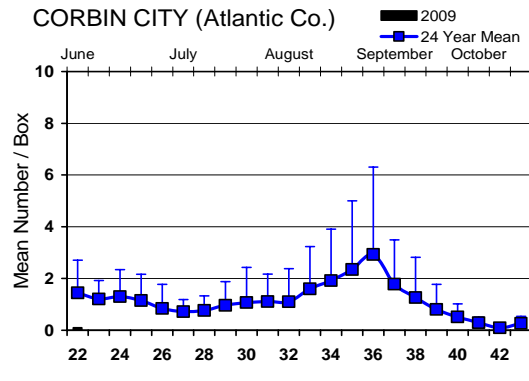
Culiseta melanura Population Graphs

Coastal

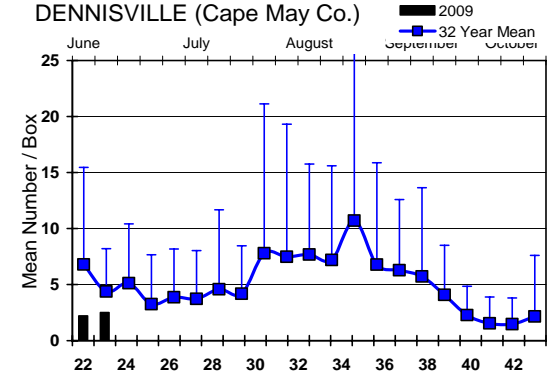
GREEN BANK (Burlington Co.)



CORBIN CITY (Atlantic Co.)

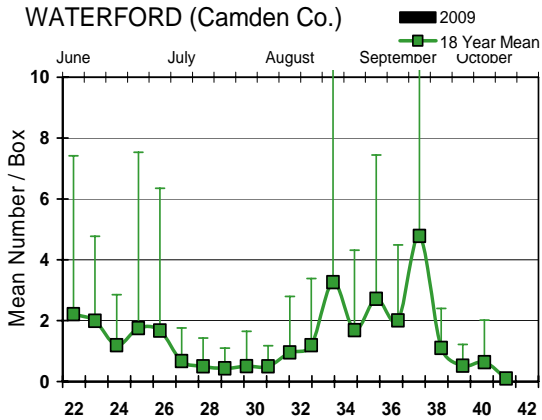


DENNISVILLE (Cape May Co.)

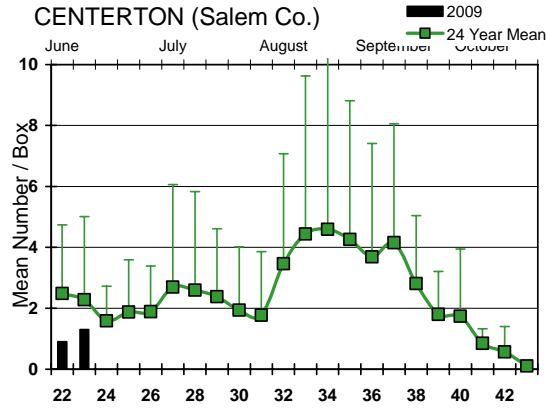


Inland

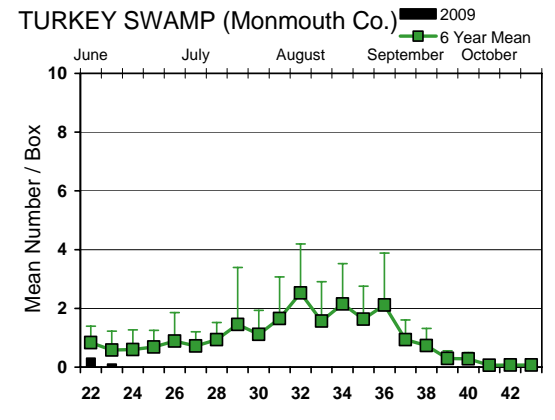
WATERFORD (Camden Co.)



CENTERTON (Salem Co.)

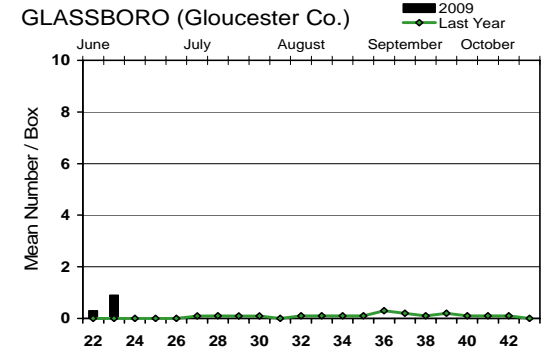


TURKEY SWAMP (Monmouth Co.)



Resting box populations of *Culiseta melanura* continue to be lower than historical trends at all sites except for Glassboro. At Dennisville, Centerton and Glassboro, Cs. *melanura* populations have increased from the previous week. It should be noted that the Waterford site has had some box tampering, most likely due to party revelers.

GLASSBORO (Gloucester Co.)



EEE in US (2009 cumulative cases): (Red = new reported cases occurring)

- equine: 4(AL) 13(FL) 2(GA)
- mosquito:
- sentinel: 16/31wild(FL)
- human:

West Nile Virus

West Nile in US (2009 cumulative cases): Single black values indicate no change from previous week. Black values / red values equals previous week/**New totals**.

	Birds	Mosquito Pools	Sentinels	Horses	Humans
Alabama					
Alaska					
Arizona	0	5	0	0	0
Arkansas					
California	23/38	49/56	3	0	0
Colorado					
Connecticut					
Delaware					
DC					
Florida	2	0	0	0	0
Georgia					
Hawaii					
Idaho					
Illinois	1/2	3	0	0	0
Indiana					
Iowa					
Kansas					
Kentucky					
Louisiana					
Maine					
Maryland					
Mass.					
Michigan					
Minnesota					
Mississippi					
Missouri					
Montana					
Nebraska					

	Birds	Mosquito Pools	Sentinels	Horses	Humans
Nevada					
New Hampshire					
New Jersey	0	0	0	0	0
New Mexico					
New York					
North Carolina					
North Dakota	0	0	0	0	0
Ohio	0	0	0	0	0
Oklahoma					
Oregon	0	0	0	0	0
Pennsylvania	1	0	0	0	0
Rhode Island					
South Carolina					
South Dakota	0	0	0	0	1
Tennessee	0	0	0	0	0
Texas	1	0	0	1	0
Utah					
Vermont					
Virginia	0	1+	0	0	0
Washington	0	1/3	0	0	0
West Virginia					
Wisconsin	0	0	0	0	0
Wyoming					

Note: Some data reported by states are provisional and are subject to change. Sources for this table can be found [here](#).

Protocol: New Jersey Department of Health and Senior Services (NJDHSS Public Health and Environmental Laboratories, PHEL) tests mosquito pools using RT-PCR Taqman techniques.

Mosquito Species Submitted for West Nile Virus Testing through 13 June 2009

Species	Pools	Mosquitoes	Positives	MFIR
<i>Aedes albopictus</i>	6	106		
<i>Aedes canadensis canadensis</i>	3	35		
<i>Aedes cantator</i>	1	2		
<i>Aedes grossbecki</i>	1	8		
<i>Aedes japonicus</i>	21	67		
<i>Aedes sticticus</i>	1	3		
<i>Aedes thibaulti</i>	1	1		
<i>Aedes trivittatus</i>	1	75		
<i>Aedes vexans</i>	3	16		
<i>Anopheles bradleyi</i>	2	3		
<i>Anopheles punctipennis</i>	11	28		
<i>Anopheles quadrimaculatus</i>	8	39		
<i>Coquillettidia perturbans</i>	2	2		
<i>Culex erraticus</i>	1	1		
<i>Culex pipiens</i>	101	2538		
<i>Culex restuans</i>	47	439		
<i>Culex salinarius</i>	2	2		
<i>Culex spp.</i>	32	1048		
<i>Culex territans</i>	4	4		
<i>Culiseta melanura</i>	45	329		
State Total	293	4746		

Remarks: Submitted pools (293) comprised of 4,746 individual mosquitoes produced no positive pools from 12 counties.

Humans, Horses and Wild Birds: No humans have been reported positive for WNV by PHEL. For more details plus information about WNV, see the PHEL's West Nile Virus Alert and FAQ Sheets: <http://www.state.nj.us/health/cd/westnile/enceph.htm>

No confirmed horse cases have occurred.

To date, there have been 15 dead birds submitted for West Nile virus testing with 0 positives. Last year, there were 0 positive birds from 28 submissions to this point in time.

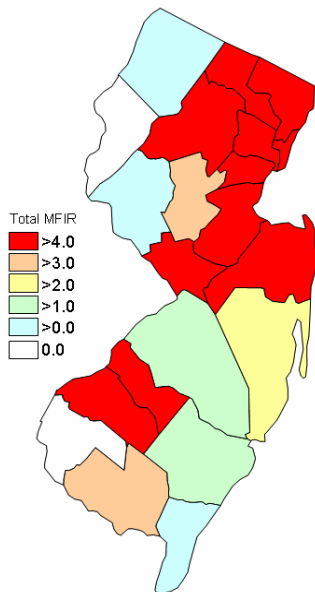
2009 Positive Mosquito pools to date / Total Mosquito Pools Submitted	This time last year
0 / 293	0 / 370

WNV Results by County through 13 Jun 2009

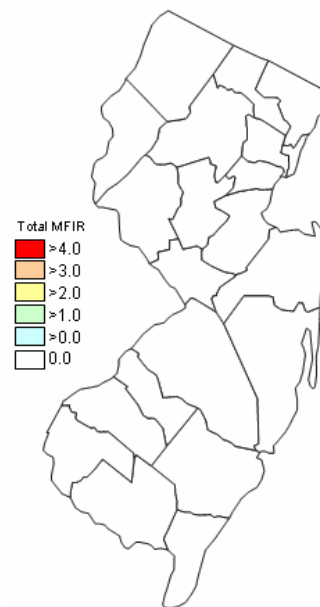
County	Species	Pools	Mosquitoes	Positives	MFIR
Atlantic		13	123		
	<i>Aedes canadensis canadensis</i>	2	29		
	<i>Aedes cantator</i>	1	2		
	<i>Aedes grossbecki</i>	1	8		
	<i>Aedes sticticus</i>	1	3		
	<i>Aedes thibaulti</i>	1	1		

<i>Aedes vexans</i>	1	3		
<i>Anopheles punctipennis</i>	1	1		
<i>Culex spp.</i>	3	74		
<i>Culiseta melanura</i>	2	2		
Bergen				
Burlington	7	22		
<i>Culiseta melanura</i>	7	22		
Camden	5	15		
<i>Anopheles punctipennis</i>	1	4		
<i>Anopheles quadrimaculatus</i>	1	1		
<i>Culex restuans</i>	1	1		
<i>Culiseta melanura</i>	2	9		
Cape May	38	306		
<i>Aedes canadensis canadensis</i>	1	6		
<i>Aedes japonicus</i>	4	10		
<i>Anopheles bradleyi</i>	2	3		
<i>Anopheles punctipennis</i>	1	3		
<i>Anopheles quadrimaculatus</i>	2	30		
<i>Culex pipiens</i>	4	18		
<i>Culex restuans</i>	14	110		
<i>Culex territans</i>	2	2		
<i>Culiseta melanura</i>	8	124		
Cumberland				
Essex				
Gloucester	137	2819		
<i>Aedes albopictus</i>	6	106		
<i>Aedes japonicus</i>	12	45		
<i>Aedes trivittatus</i>	1	75		
<i>Aedes vexans</i>	2	13		
<i>Anopheles punctipennis</i>	5	16		
<i>Anopheles quadrimaculatus</i>	5	8		
<i>Coquillettidia perturbans</i>	2	2		
<i>Culex pipiens</i>	79	2419		
<i>Culex restuans</i>	9	35		
<i>Culex territans</i>	1	1		
<i>Culiseta melanura</i>	15	99		
Hudson				
Hunterdon				
Mercer	54	562		
<i>Aedes japonicus</i>	4	4		
<i>Culex erraticus</i>	1	1		
<i>Culex pipiens</i>	18	101		
<i>Culex salinarius</i>	22	281		
<i>Culex spp.</i>	2	2		

Middlesex	23	809		
<i>Aedes japonicus</i>	1	8		
<i>Culex spp.</i>	22	801		
Monmouth	7	27		
<i>Anopheles punctipennis</i>	1	1		
<i>Culex restuans</i>	1	12		
<i>Culex territans</i>	1	1		
<i>Culiseta melanura</i>	4	13		
Morris				
Ocean				
Passaic				
Salem	9	63		
<i>Anopheles punctipennis</i>	2	3		
<i>Culiseta melanura</i>	7	60		
Somerset				
Sussex				
Union				
Warren				
Grand Total	293	4746		



Cumulative activity in 2008



Recent Activity to 13 June 2009

Saint Louis Encephalitis (SLE)

New Jersey will be selectively testing for SLE this year. SLE has had previous activity in New Jersey, most notably in 1964 and 1975 (CDC's SLE [website](#)), the latter prompting the surveillance reporting by Rutgers. SLE is a flavivirus and has a similar transmission pattern to West Nile, with *Culex* species as the predominant vectors.

County	Species	Pools	Mosquitoes	Positives	MFIR
Mercer		36	460		
	<i>Culex pipiens</i>	15	90		
	<i>Culex restuans</i>	18	238		
	<i>Culex spp.</i>	3	132		