

**VECTOR SURVEILLANCE IN NEW JERSEY**  
**EEE and WNV**  
CDC WEEK 22/23: May 31 to June 9, 2009

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Mosquito Control Commission.

*Culiseta melanura* and Eastern Equine Encephalitis

SITE	Inland / Coastal	Historic Mean	Current Weekly Mean	Total Collected to Date*	Total Pools Submitted	EEE Isolations	MFIR
<b>Green Bank</b> (Burlington County)	Coastal	2.1	0.1	22	7	0	0
<b>Corbin City</b> (Atlantic County)	Coastal	1.4	0.1	2	2	0	0
<b>Dennisville</b> (Cape May County)	Coastal	6.8	2.2	124	8	0	0
<b>Waterford</b> (Camden County)	Inland	2.2	0	9	2	0	0
<b>Centerton</b> (Salem County)	Inland	2.5	0.9	60	7	0	0
<b>Turkey Swamp</b> (Monmouth County)	Inland	0.8	0.3	13	4	0	0
<b>Glassboro</b> (Gloucester County)	Inland	0	0.3	51	8	0	0

\*Including trial run last week in May.

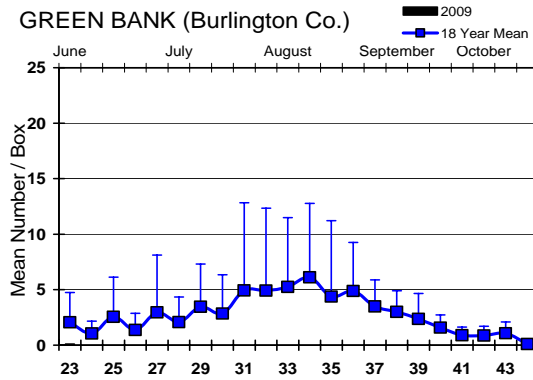
Remarks: The vector season begins when mosquitoes are on the wing. Cold-tolerant species such as *Aedes stimulans* has already been active for many weeks. But now *Culex* and *Culiseta* species are also active, and these enzootic vectors for West Nile virus and Eastern Equine encephalitis (respectively) are now being sampled for the presence of virus. As of 9 June, there is no arboviral activity in New Jersey.

To date, 38 pools from 281 *Cs. melanura* mosquitoes have been sent for EEE testing from the seven resting box collections. 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 have been negative for EEE virus.

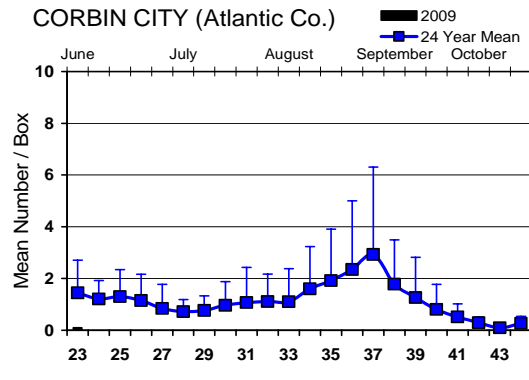
# Culiseta melanura Population Graphs

## Coastal

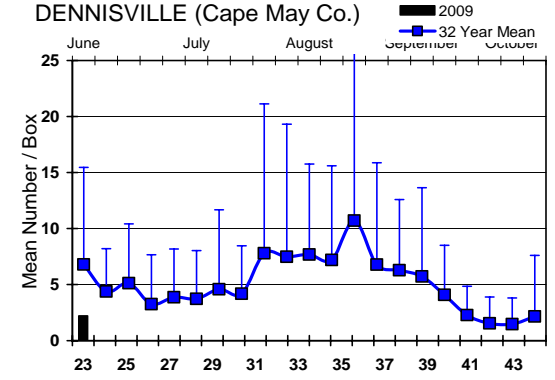
**GREEN BANK (Burlington Co.)**



**CORBIN CITY (Atlantic Co.)**

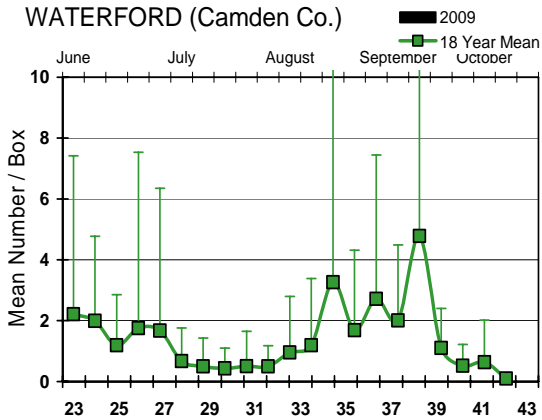


**DENNISVILLE (Cape May Co.)**

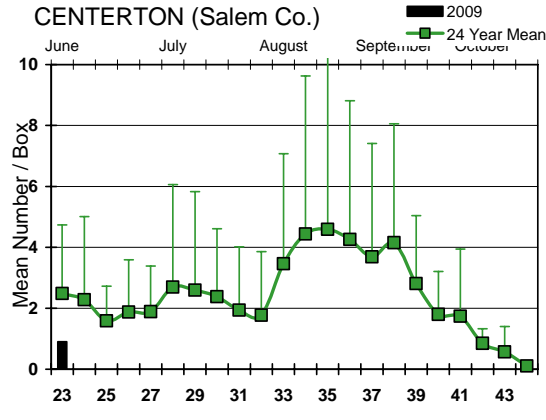


## Inland

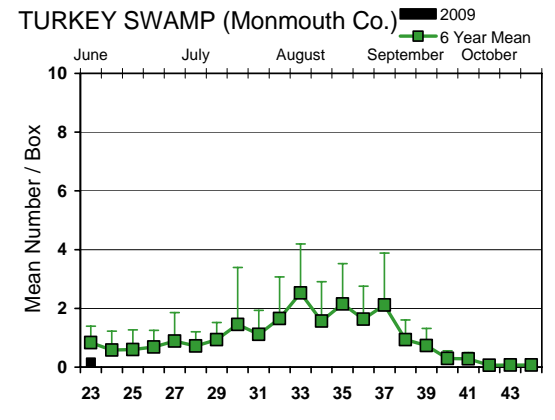
**WATERFORD (Camden Co.)**



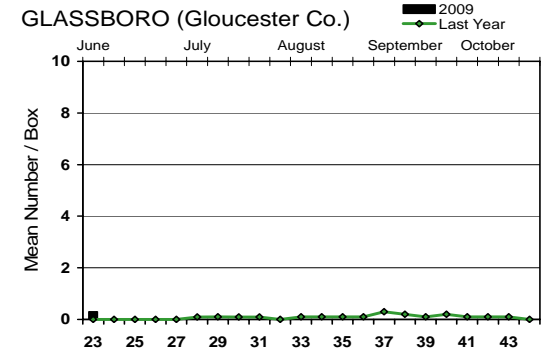
**CENTERTON (Salem Co.)**



**TURKEY SWAMP (Monmouth Co.)**



**GLASSBORO (Gloucester Co.)**



Resting box populations of *Culiseta melanura* were lower than historical trends at all sites except for Glassboro. However, most sites did have populations higher than last year's depauperate number at this time of year. The Adult Mosquito Surveillance program, climatic trends and reports from mosquito control agencies suggest that mosquito populations are more on track with normal trends and we anticipate greater abundances than were seen last year.

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

- equine: 13(FL)
- 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		5			
Arkansas					
California	23	49	3		
Colorado					
Connecticut					
Delaware					
DC					
Florida	2				
Georgia					
Hawaii					
Idaho					
Illinois	1	3			
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					
New Mexico					
New York					
North Carolina					
North Dakota					
Ohio					
Oklahoma					
Oregon					
Pennsylvania	1				
Rhode Island					
South Carolina					
South Dakota					1
Tennessee					
Texas	1			1	
Utah					
Vermont					
Virginia		1+			
Washington		1			
West Virginia					
Wisconsin					
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 9 June 2009**

Species	Pools	Mosquitoes	Positives	MFIR
<i>Aedes albopictus</i>	2	6		
<i>Aedes canadensis canadensis</i>	1	6		
<i>Aedes japonicus</i>	10	33		
<i>Aedes thibaulti</i>	1	1		
<i>Aedes trivittatus</i>	1	75		
<i>Aedes vexans</i>	1	6		
<i>Anopheles bradleyi</i>	2	3		
<i>Anopheles punctipennis</i>	9	24		
<i>Anopheles quadrimaculatus</i>	6	35		
<i>Coquillettidia perturbans</i>	1	1		
<i>Culex pipiens</i>	69	1818		
<i>Culex restuans</i>	17	81		
<i>Culex spp.</i>	22	801		
<i>Culex territans</i>	4	4		
<i>Culiseta melanura</i>	45	329		
<b>State Total</b>	191	3223		

**Remarks:** Submitted pools (191) comprised of 3,223 individual mosquitoes produced no positive pools from 10 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 13 dead birds submitted for West Nile virus testing with 0 positives. Last year, there were 0 positive birds from 24 submissions to this point in time.

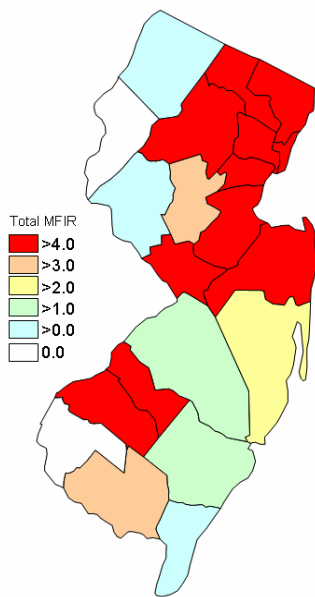
2009 Positive Mosquito pools to date / Total Mosquito Pools Submitted	This time last year
0 / 191	0 / 203

**WNV Results by County through 9 Jun 2009**

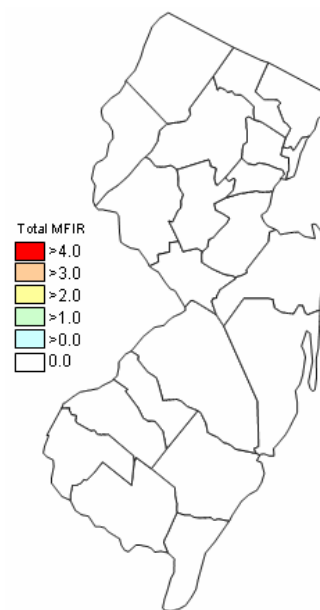
County	Species	Pools	Mosquitoes	Positives	MFIR
<b>Atlantic</b>		<b>3</b>	<b>3</b>		
	<i>Aedes thibaulti</i>	1	1		
	<i>Culiseta melanura</i>	2	2		
<b>Bergen</b>					
<b>Burlington</b>		<b>7</b>	<b>22</b>		
	<i>Culiseta melanura</i>	7	22		
<b>Camden</b>		<b>5</b>	<b>15</b>		
	<i>Anopheles punctipennis</i>	1	4		

<i>Anopheles quadrimaculatus</i>	1	1		
<i>Culex restuans</i>	1	1		
<i>Culiseta melanura</i>	2	9		
<b>Cape May</b>	<b>28</b>	<b>217</b>		
<i>Aedes canadensis canadensis</i>	1	6		
<i>Aedes japonicus</i>	2	5		
<i>Anopheles bradleyi</i>	2	3		
<i>Anopheles punctipennis</i>	1	3		
<i>Anopheles quadrimaculatus</i>	2	30		
<i>Culex pipiens</i>	3	10		
<i>Culex restuans</i>	7	34		
<i>Culex territans</i>	2	2		
<i>Culiseta melanura</i>	8	124		
<b>Cumberland</b>				
<b>Essex</b>				
<b>Gloucester</b>	<b>109</b>	<b>2067</b>		
<i>Aedes albopictus</i>	2	6		
<i>Aedes japonicus</i>	7	20		
<i>Aedes trivittatus</i>	1	75		
<i>Aedes vexans</i>	1	6		
<i>Anopheles punctipennis</i>	4	13		
<i>Anopheles quadrimaculatus</i>	3	4		
<i>Coquillettidia perturbans</i>	1	1		
<i>Culex pipiens</i>	66	1808		
<i>Culex restuans</i>	8	34		
<i>Culex territans</i>	1	1		
<i>Culiseta melanura</i>	15	99		
<b>Hudson</b>				
<b>Hunterdon</b>				
<b>Mercer</b>				
<b>Middlesex</b>	<b>23</b>	<b>809</b>		
<i>Aedes japonicus</i>	1	8		
<i>Culex spp.</i>	22	801		
<b>Monmouth</b>	<b>7</b>	<b>27</b>		
<i>Anopheles punctipennis</i>	1	1		
<i>Culex restuans</i>	1	12		
<i>Culex territans</i>	1	1		
<i>Culiseta melanura</i>	4	13		
<b>Morris</b>				
<b>Ocean</b>				
<b>Passaic</b>				

<b>Salem</b>	<b>9</b>	<b>63</b>		
<i>Anopheles punctipennis</i>	2	3		
<i>Culiseta melanura</i>	7	60		
<b>Somerset</b>				
<b>Sussex</b>				
<b>Union</b>				
<b>Warren</b>				
<b>Grand Total</b>	<b>191</b>	<b>3223</b>		



Cumulative activity in 2008



Recent Activity to 9 June 2009)