

**VECTOR SURVEILLANCE SUMMARY SHEET**  
**EEE and WNV in New Jersey**  
**WEEK 7: July 15 to 21, 2007**



*Culiseta melanura* and Eastern Equine Encephalitis

Coastal Resting Boxes						Inland Resting Boxes					
Sites	Mean From Previous Years	No. Per Box For This Collection	Total Collected to Date*	Total Pools Submitted to Date*	EEE Isolations To Date	Sites	Mean From Previous Years	No. Per Box For This Collection	Total Collected to Date*	Total Pools Submitted to Date*	EEE Isolations To Date
Green Bank (Burlington Co.)	3.9	0.7	199	24	-	Waterford (Camden Co.)	0.6	0.2	308	22	-
Corbin City (Atlantic Co.)	0.8	0.8	308	29	-	Centerton (Salem Co.)	2.8	0.4	338	26	-
Dennisville (Cape May Co.)	4.8	2.0	1017	38	-	Turkey Swamp (Monmouth Co.)	1.1	0.7	295	30	-

\*Including trial run last week in May.

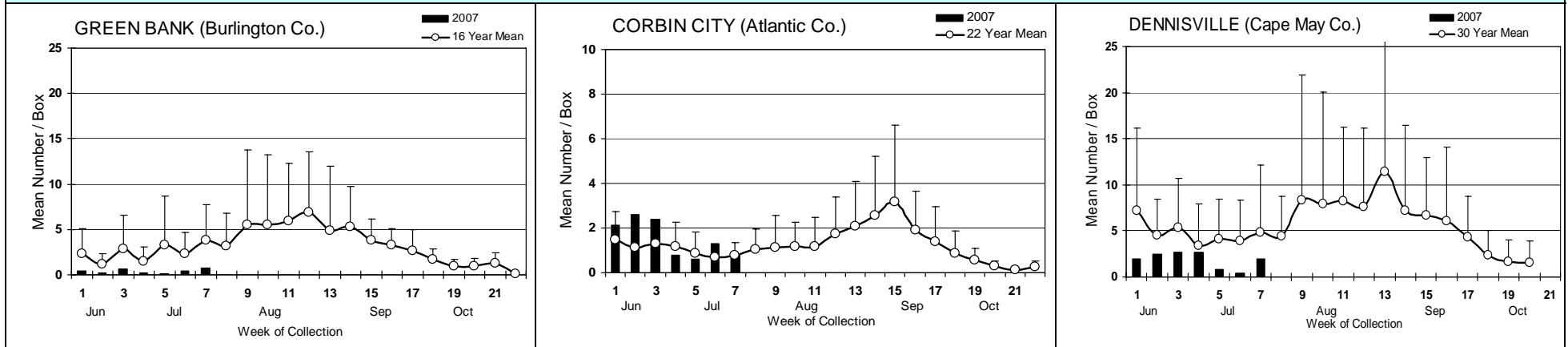
**Remarks:** *Culiseta melanura* populations continue to remain lower than the historical average at 5 out of 6 of the sites, yet all remain well within the range of the historical variation. Four sites (Green Bank, Dennisville, Centerton, and Turkey Swamp) out of the six increased from the previous week's even lower values. In the classic pattern for EEE development in New Jersey, one finds virus isolation in birds first (late May), then mosquitoes in July (recrudescence in the avian hosts and later picked up by mosquitoes) to inland horse cases (early August) followed by coastal involvement (and humans around Labor Day). Last year's pattern, however, was different with virus in mosquitoes being found later in the season with a horse case to quickly follow.

To date, 169 pools have been tested for EEE and there have been no positive results.

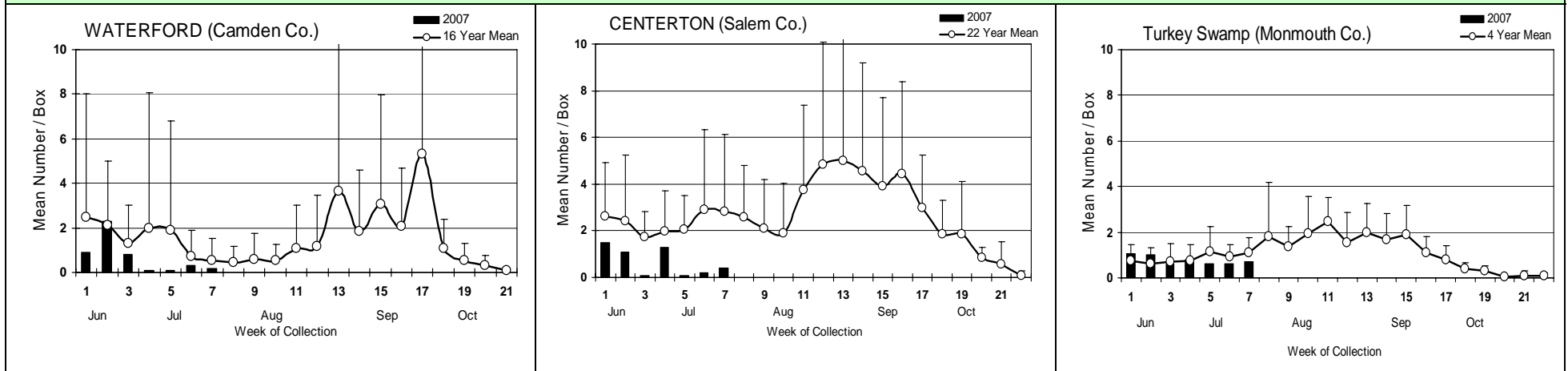
Supported by funding from the NJ State Mosquito Control Commission. Summary Prepared by Lisa M. Reed, Scott Crans and Dina Fonseca at the Center for Vector Biology, Rutgers University
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# Culiseta melanura Population Graphs

## Coastal



## Inland



Figures: Inland and coastal resting box sites showing current weekly population levels (in bars) against historical trends (lines with standard deviation). The number of years for historical population levels varies by site.

**EEE in US (2007 cumulative cases):** New Reports are in red.

- equine: 7(FL) 1(VA)
- mosquito: 2(LA) 1(MA)
- sentinel: 30(FL) 1(VA)
- human: 0

Mosquito Species Submitted for West Nile Virus Testing through 20 July 2007

<b>Species</b>	<b>Pools</b>	<b>Mosquitoes</b>	<b>Positives</b>
<i>Aedes albopictus</i>	79	386	
<i>Aedes cinereus</i>	3	18	
<i>Aedes vexans</i>	26	328	
<i>Anopheles barberi</i>	2	2	
<i>Anopheles bradleyi</i>	8	65	
<i>Anopheles punctipennis</i>	28	109	
<i>Anopheles quadrimaculatus</i>	41	1436	
<i>Anopheles walkeri</i>	2	2	
<i>Coquillettidia perturbans</i>	32	728	
<i>Culex erraticus</i>	1	26	
<i>Culex pipiens</i>	86	1332	
<i>Culex restuans</i>	75	1313	
<i>Culex salinarius</i>	21	95	
<i>Culex sp.</i>	511	20551	<b>2</b>
<i>Culex territans</i>	9	29	
<i>Culiseta melanura</i>	186	2562	
<i>Aedes atlanticus</i>	1	1	
<i>Aedes atropalpus</i>	1	2	
<i>Aedes canadensis canadensis</i>	25	671	
<i>Aedes cantator</i>	8	29	
<i>Aedes grossbecki</i>	1	1	
<i>Aedes japonicus</i>	93	502	
<i>Aedes sollicitans</i>	2	4	
<i>Aedes sticticus</i>	7	246	
<i>Aedes stimulans</i>	1	3	
<i>Aedes thibaulti</i>	3	4	
<i>Aedes triseriatus</i>	43	97	
<i>Aedes trivittatus</i>	2	2	
<i>Psorophora columbiae</i>	4	50	
<i>Psorophora ferox</i>	3	31	
<i>Uranotaenia sapphirina</i>	2	2	
<b>Grand Total</b>	<b>1306</b>	<b>30627</b>	<b>2</b>

**Remarks:** To date, there have been 30,627 mosquitoes submitted for testing in 1306 pools. Submissions are from 30 different species, including mixed *Culex* pools from 21 counties. No further positive pools have been found to date.

**West Nile in US (2007 cumulative cases): Old/New reports**

	Birds	Mosqs.	Sentinels	Horses	Humans
Alabama					
Alaska					
Arizona	1	7	3	1	7
Arkansas					1
California	99/230	72/143	6/13	3	1/9
Colorado					2
Connecticut		1			
Delaware					
Florida			6/7		
Georgia					
Hawaii					
Idaho		2/3			
Illinois		28/38			1/2
Indiana		15/18			
Iowa					1/2
Kansas					
Louisiana		36/38			
Maine					
Maryland					
Massachusetts					
Michigan					
Minnesota					
Mississippi	4				6/8
Missouri		36/40			
Montana					
Nebraska	1	2			2

	Birds	Mosqs.	Sentinels	Horses	Humans
Nevada					1
New Hampshire					
New Jersey	2	2			
New Mexico				1	
New York					
North Carolina					
North Dakota	1/4				1/8
Kentucky					
Ohio		8/9			
Oklahoma					
Oregon	1/2				
Pennsylvania		2			
Rhode Island					
South Carolina					
South Dakota		6		1	5/7
Tennessee	2			1	
Texas	3/5	16/22		2	
Utah		1	1		1
Vermont					
Virginia		1		1	1
Washington					
West Virginia					
Wisconsin	7				
Wyoming					1

**Protocol:** New Jersey Department of Health and Senior Services tests mosquito pools using RT-PCR Taqman techniques.

**Submission for West Nile Testing by County through 20 July 2007**

County	Species	Pools	Mosquitoes	Positives
<b>Atlantic</b>		<b>62</b>	<b>857</b>	<b>0</b>
	Aedes albopictus	5	42	
	Aedes vexans	2	31	
	Coquillettidia perturbans	2	7	
	Culex erraticus	1	26	
	Culex restuans	1	1	
	Culex sp.	10	368	
	Culex territans	2	2	
	Culiseta melanura	31	310	
	Aedes canadensis canadensis	1	26	
	Aedes cantator	1	6	
	Aedes grossbecki	1	1	
	Aedes japonicus	2	3	
	Aedes triseriatus	2	5	
	Psorophora ferox	1	29	
<b>Bergen</b>		<b>30</b>	<b>2177</b>	<b>0</b>
	Culex sp.	29	2175	
	Aedes japonicus	1	2	

<b>Burlington</b>	<b>91</b>	<b>687</b>	<b>0</b>
Aedes albopictus	10	56	
Aedes vexans	3	17	
Anopheles barberi	1	1	
Anopheles punctipennis	3	7	
Anopheles quadrimaculatus	1	1	
Coquillettidia perturbans	9	80	
Culex pipiens	5	34	
Culex restuans	4	131	
Culex salinarius	3	4	
Culex sp.	10	122	
Culiseta melanura	25	201	
Aedes atropalpus	1	2	
Aedes canadensis canadensis	3	8	
Aedes japonicus	6	9	
Aedes sticticus	1	1	
Aedes triseriatus	5	12	
Psorophora ferox	1	1	
<b>Camden</b>	<b>87</b>	<b>1272</b>	<b>1</b>
Aedes albopictus	11	46	
Anopheles punctipennis	6	36	
Anopheles quadrimaculatus	4	4	
Culex restuans	1	1	
Culex sp.	26	831	<b>1</b>
Culiseta melanura	22	308	
Aedes atlanticus	1	1	
Aedes canadensis canadensis	1	1	
Aedes japonicus	9	33	
Aedes triseriatus	4	9	
Aedes trivittatus	2	2	
<b>Cape_May</b>	<b>108</b>	<b>2692</b>	<b>0</b>
Anopheles bradleyi	5	41	
Anopheles punctipennis	1	1	
Anopheles quadrimaculatus	20	1348	
Coquillettidia perturbans	1	2	
Culex pipiens	8	46	
Culex restuans	10	42	
Culex salinarius	5	24	
Culex sp.	14	129	
Culex territans	3	12	
Culiseta melanura	40	1045	
Aedes cantator	1	2	
<b>Cumberland</b>	<b>5</b>	<b>41</b>	<b>0</b>
Culex pipiens	1	17	

	Culex restuans	2	17	
	Culiseta melanura	2	7	
<b>Essex</b>		<b>37</b>	<b>236</b>	<b>0</b>
	Aedes albopictus	4	12	
	Anopheles punctipennis	1	1	
	Anopheles quadrimaculatus	3	11	
	Coquillettidia perturbans	1	1	
	Culex sp.	15	180	
	Aedes canadensis canadensis	2	4	
	Aedes japonicus	4	18	
	Aedes stimulans	1	3	
	Aedes triseriatus	5	5	
	Psorophora ferox	1	1	
<b>Gloucester</b>		<b>31</b>	<b>552</b>	<b>0</b>
	Aedes albopictus	1	5	
	Anopheles walkeri	2	2	
	Culex pipiens	22	534	
	Aedes japonicus	6	11	
<b>Hudson</b>		<b>87</b>	<b>3498</b>	<b>0</b>
	Aedes albopictus	15	50	
	Culex sp.	71	3447	
	Aedes triseriatus	1	1	
<b>Hunterdon</b>		<b>36</b>	<b>1371</b>	<b>1</b>
	Anopheles punctipennis	1	2	
	Culex sp.	31	1295	<b>1</b>
	Aedes japonicus	3	66	
	Aedes triseriatus	1	8	
<b>Mercer</b>		<b>86</b>	<b>1488</b>	<b>0</b>
	Aedes albopictus	10	78	
	Culex pipiens	33	630	
	Culex restuans	22	383	
	Culex salinarius	3	7	
	Culex sp.	8	360	
	Aedes japonicus	7	27	
	Aedes triseriatus	3	3	
<b>Middlesex</b>		<b>89</b>	<b>3046</b>	<b>0</b>
	Aedes albopictus	2	9	
	Aedes vexans	3	64	
	Anopheles barberi	1	1	
	Anopheles bradleyi	2	22	
	Anopheles punctipennis	1	8	

Anopheles quadrimaculatus	2	6	
Coquillettidia perturbans	6	235	
Culex pipiens	3	6	
Culex restuans	7	300	
Culex salinarius	1	25	
Culex sp.	46	2298	
Culiseta melanura	3	11	
Aedes canadensis canadensis	5	35	
Aedes japonicus	6	24	
Aedes triseriatus	1	2	
<b>Monmouth</b>	<b>133</b>	<b>1147</b>	<b>0</b>
Aedes albopictus	6	12	
Aedes vexans	9	139	
Anopheles punctipennis	3	3	
Anopheles quadrimaculatus	2	2	
Coquillettidia perturbans	2	30	
Culex pipiens	5	14	
Culex restuans	11	109	
Culex salinarius	3	19	
Culex sp.	28	173	
Culex territans	3	14	
Culiseta melanura	32	319	
Aedes canadensis canadensis	4	240	
Aedes cantator	6	21	
Aedes japonicus	8	30	
Aedes sollicitans	2	4	
Aedes sticticus	1	7	
Aedes triseriatus	6	9	
Uranotaenia sapphirina	2	2	
<b>Morris</b>	<b>59</b>	<b>980</b>	<b>0</b>
Aedes cinereus	1	13	
Aedes vexans	1	1	
Anopheles punctipennis	1	1	
Anopheles quadrimaculatus	2	2	
Coquillettidia perturbans	1	2	
Culex pipiens	5	37	
Culex restuans	5	254	
Culex salinarius	2	7	
Culex sp.	24	562	
Aedes canadensis canadensis	2	14	
Aedes japonicus	9	34	
Aedes triseriatus	2	3	
Psorophora columbiae	4	50	
<b>Ocean</b>	<b>78</b>	<b>2318</b>	<b>0</b>

Aedes albopictus	8	47	
Aedes vexans	3	18	
Coquillettidia perturbans	1	2	
Culex pipiens	1	8	
Culex restuans	5	33	
Culex salinarius	3	7	
Culex sp.	32	1778	
Culiseta melanura	5	23	
Aedes canadensis canadensis	6	340	
Aedes japonicus	8	37	
Aedes sticticus	1	17	
Aedes triseriatus	5	8	
<b>Passaic</b>	<b>42</b>	<b>1612</b>	<b>0</b>
Aedes albopictus	1	14	
Culex sp.	39	1585	
Aedes japonicus	1	5	
Aedes triseriatus	1	8	
<b>Salem</b>	<b>44</b>	<b>443</b>	<b>0</b>
Anopheles bradleyi	1	2	
Anopheles punctipennis	6	34	
Anopheles quadrimaculatus	6	60	
Culex restuans	1	2	
Culiseta melanura	26	338	
Aedes canadensis canadensis	1	3	
Aedes thibaulti	3	4	
<b>Somerset</b>	<b>68</b>	<b>1502</b>	<b>0</b>
Aedes cinereus	2	5	
Aedes vexans	5	58	
Anopheles punctipennis	4	14	
Anopheles quadrimaculatus	1	2	
Coquillettidia perturbans	1	1	
Culex pipiens	1	3	
Culex restuans	3	21	
Culex salinarius	1	2	
Culex sp.	26	988	
Culex territans	1	1	
Aedes japonicus	14	165	
Aedes sticticus	4	221	
Aedes triseriatus	5	21	
<b>Sussex</b>	<b>41</b>	<b>1508</b>	<b>0</b>
Coquillettidia perturbans	7	367	
Culex sp.	33	1139	
Aedes japonicus	1	2	



<b>Union</b>	<b>39</b>	<b>915</b>	<b>0</b>
Aedes albopictus	6	15	
Culex sp.	23	861	
Aedes japonicus	8	36	
Aedes triseriatus	2	3	
<b>Warren</b>	<b>53</b>	<b>2285</b>	<b>0</b>
Anopheles punctipennis	1	2	
Coquillettidia perturbans	1	1	
Culex pipiens	2	3	
Culex restuans	3	19	
Culex sp.	46	2260	
<b>Grand Total</b>	<b>1306</b>	<b>30627</b>	<b>2</b>