

# VECTOR SURVEILLANCE SUMMARY SHEET

WEEK: 7

## *Culiseta melanura* Monitor July 12 - 18, 2004

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.)	4.0	6.8	1,017	39	0	Waterford (Camden Co.)	0.6	0.5	900	33	0
Corbin City (Atlantic Co.)	0.7	1.0	380	26	0	Centerton (Salem Co.)	2.9	5.3	1,084	38	0
Dennisville (Cape May Co.)	5.2	0.8	998	38	0	Turkey Swamp (Monmouth Co.)	0.3	1.3	263	25	0

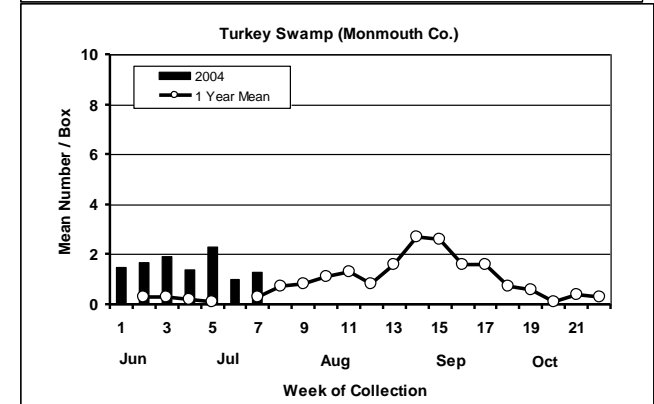
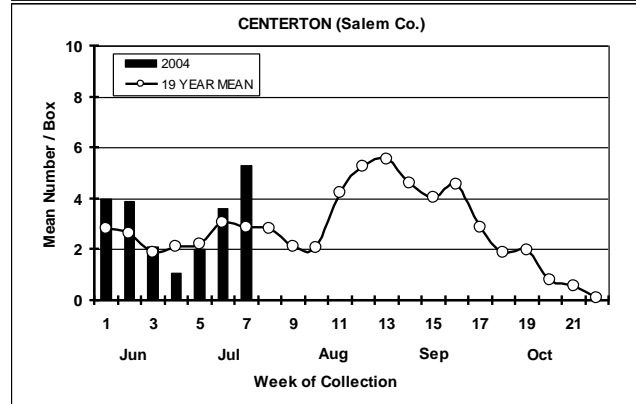
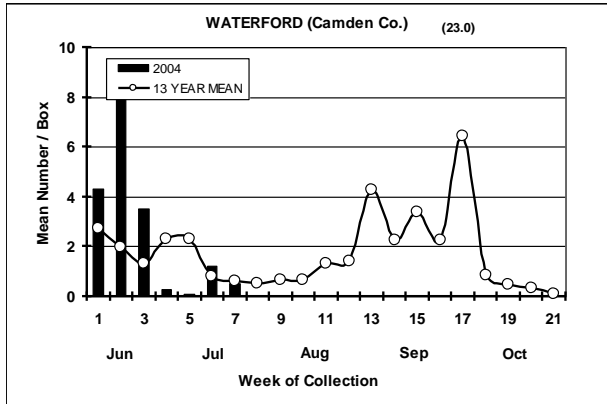
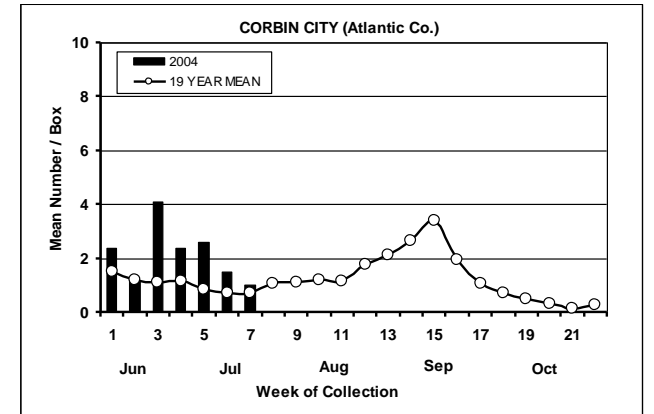
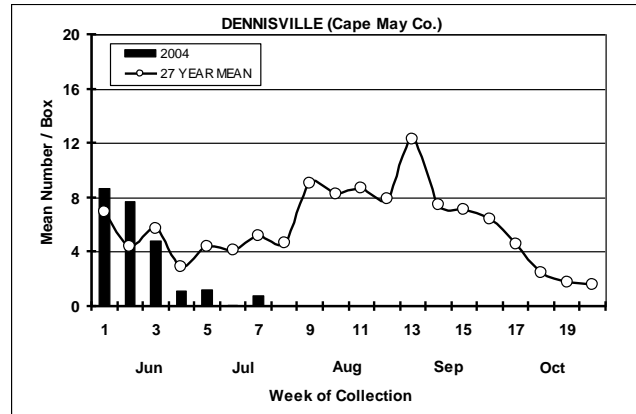
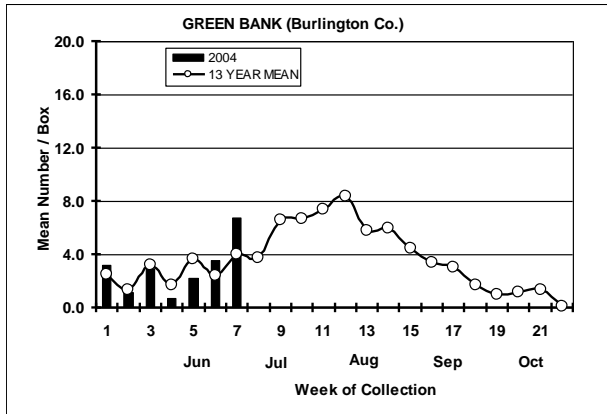
### Collections submitted to PHEL for West Nile Virus testing

Species	<i>Cx. pip</i>	<i>Cx. rest</i>	<i>Cx. sal</i>	<i>Cx. spp.</i>	<i>Cs. mel</i>	<i>Ae. vex</i>	<i>Oc. cana</i>	<i>Oc. triv</i>	<i>Oc. tris</i>	<i>Oc. soll.</i>	<i>Oc. jap</i>	<i>Ae. albo</i>	Other	TOTALS
No. Pools	81	106	32	404	269	68	65	8	61	14	144	16	230	1,498
Total Specimens	1,173	2,141	272	15,364	5,657	840	1,086	111	331	235	1,031	46	3,496	31,783
No. Positive Pools	0	1	0	5	1	0	0	0	0	0	0	0	0	7

**Remarks:** *Culiseta melanura* populations continue to increase at Green Bank, Centerton and Turkey Swamp. This suggests that nulliparous adults are continuing to emerge from egg boats that were deposited by the 1<sup>st</sup> generation of adults earlier this spring. Populations at Dennisville, Waterford and Corbin City were above average in June but clear signs of a 2<sup>nd</sup> generation are not yet evident at those sites. Recent rainfall events in southern NJ increase the likelihood that adequate breeding habitat will be available for this important amplification vector of EEE for the remainder of the season. WNV is beginning to appear in mosquitoes over a wider geographic area. A pool of *Cs. melanura* collected from the Green Bank study site on July 5 tested positive for WNV. Two pools of mixed *Culex* tested positive for WNV from collections made in Gloucester Co. during the same week. Although MIR values are low, WNV infection rates in mosquitoes are more than double the values seen at this time of year last season and about equal to those seen in 2002.

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## *Culiseta melanura* Population Graphs



*Cs. melanura* populations have increased progressively for 4 consecutive weeks at Green Bank and Centerton and are currently well above the long term mean at those two key study sites positioned on opposite sides of the state. Green Bank monitors the Mullica River drainage around Atlantic City where New Jersey's human cases have been concentrated over the years. Centerton monitors the inner coastal plain in an area where fairly large numbers of equine cases appear on a regular basis.

**Mosquito Species Submitted for West Nile Virus Testing through July 16, 2004**

<b>Species</b>	<b>Pools</b>	<b>Mosquitoes</b>	<b>Positives</b>
Aedes albopictus	16	46	
Aedes cinereus	5	59	
Aedes vexans	68	840	
Anopheles barberi	1	1	
Anopheles bradleyi	4	5	
Anopheles punctipennis	52	354	
Anopheles quadrimaculatus	33	1097	
Anopheles walkeri	5	115	
Coquilletidia perturbans	47	718	
Culex erraticus	1	1	
Culex pipiens	81	1173	
Culex restuans	106	2141	1
Culex salinarius	32	272	
Culex spp.	404	15364	5
Culex territans	15	46	
Culiseta melanura	269	5657	1
Ochlerotatus abserratus	1	9	
Ochlerotatus atropalpus	1	3	
Ochlerotatus canadensis	65	1086	
Ochlerotatus cantator	31	942	
Ochlerotatus excrucians	2	3	
Ochlerotatus grossbecki	6	18	
Ochlerotatus japonicus	144	1031	
Ochlerotatus mitchellae	1	1	
Ochlerotatus punctor	1	4	
Ochlerotatus sollicitans	14	235	
Ochlerotatus sticticus	4	58	
Ochlerotatus stimulans	5	30	
Ochlerotatus taeniorhynchus	1	3	
Ochlerotatus thibaulti	1	1	
Ochlerotatus triseriatus	61	331	
Ochlerotatus trivittatus	8	111	
Orthopodomyia signifera	2	6	
Psorophora columbiae	7	12	
Psorophora ferox	1	1	
Uranotaenia sapphirina	3	9	
<b>Grand Total</b>	<b>1,498</b>	<b>31,783</b>	<b>7</b>

Submissions by County through July 16, 2004

<b>County</b>	<b>Species</b>	<b>Pools</b>	<b>Mosquitoes</b>	<b>Positives</b>
<b>Atlantic</b>		<b>173</b>	<b>4776</b>	<b>1</b>
	Aedes albopictus	3	12	
	Aedes cinereus	1	35	
	Aedes vexans	12	357	
	Anopheles bradleyi	1	2	
	Anopheles punctipennis	2	5	
	Anopheles quadrimaculatus	1	2	
	Coquillettidia perturbans	5	59	
	Culex pipiens	2	5	
	Culex restuans	6	113	
	Culex salinarius	2	32	
	Culex spp.	49	2046	1
	Culiseta melanura	41	879	
	Ochlerotatus canadensis	14	322	
	Ochlerotatus cantator	19	787	
	Ochlerotatus japonicus	6	26	
	Ochlerotatus taeniorhynchus	1	3	
	Ochlerotatus triseriatus	6	86	
	Ochlerotatus trivittatus	1	1	
	Orthopodomyia signifera	1	4	
<b>Bergen</b>		<b>30</b>	<b>1435</b>	<b>0</b>
	Culex spp.	27	1350	
	Ochlerotatus japonicus	2	66	
	Ochlerotatus triseriatus	1	19	
<b>Burlington</b>		<b>98</b>	<b>1419</b>	<b>1</b>
	Aedes albopictus	1	5	
	Aedes cinereus	1	3	
	Aedes vexans	5	31	
	Anopheles punctipennis	4	19	
	Anopheles quadrimaculatus	1	14	
	Coquillettidia perturbans	5	31	
	Culex pipiens	2	21	
	Culex restuans	1	11	
	Culex salinarius	1	1	
	Culex spp.	11	149	
	Culex territans	2	8	
	Culiseta melanura	43	1042	1
	Ochlerotatus abserratus	1	9	
	Ochlerotatus atropalpus	1	3	
	Ochlerotatus canadensis	3	16	
	Ochlerotatus grossbecki	1	6	
	Ochlerotatus japonicus	7	20	

	Ochlerotatus mitchellae	1	1	
	Ochlerotatus sticticus	1	6	
	Ochlerotatus stimulans	1	4	
	Ochlerotatus triseriatus	2	10	
	Ochlerotatus trivittatus	1	1	
	Orthopodomyia signifera	1	2	
	Uranotaenia sapphirina	1	6	
<b>Camden</b>		<b>43</b>	<b>956</b>	<b>0</b>
	Aedes albopictus	1	3	
	Anopheles punctipennis	5	32	
	Anopheles quadrimaculatus	2	3	
	Culex restuans	1	2	
	Culex spp.	1	16	
	Culiseta melanura	33	900	
<b>Cape May</b>		<b>149</b>	<b>2837</b>	<b>1</b>
	Aedes albopictus	1	2	
	Aedes vexans	1	6	
	Anopheles bradleyi	1	1	
	Anopheles punctipennis	2	3	
	Anopheles quadrimaculatus	17	1021	
	Coquillettidia perturbans	2	22	
	Culex pipiens	30	414	
	Culex restuans	28	197	1
	Culex salinarius	3	13	
	Culex territans	4	19	
	Culiseta melanura	50	1108	
	Ochlerotatus cantator	4	17	
	Ochlerotatus japonicus	3	8	
	Ochlerotatus sollicitans	1	1	
	Ochlerotatus triseriatus	2	5	
<b>Cumberland</b>		<b>72</b>	<b>278</b>	<b>0</b>
	Aedes vexans	14	40	
	Anopheles punctipennis	1	2	
	Culex pipiens	7	33	
	Culex restuans	5	26	
	Culex salinarius	7	82	
	Culex spp.	4	10	
	Culiseta melanura	4	6	
	Ochlerotatus canadensis	13	45	
	Ochlerotatus cantator	4	4	
	Ochlerotatus japonicus	6	17	
	Ochlerotatus triseriatus	2	3	
	Ochlerotatus trivittatus	1	1	
	Psorophora columbiae	4	9	

<b>Essex</b>	<b>44</b>	<b>551</b>	<b>0</b>
Aedes albopictus	2	3	
Aedes vexans	3	7	
Anopheles punctipennis	1	1	
Coquillettidia perturbans	3	50	
Culex spp.	25	446	
Ochlerotatus japonicus	5	28	
Ochlerotatus sticticus	1	9	
Ochlerotatus triseriatus	4	7	
<b>Gloucester</b>	<b>55</b>	<b>1461</b>	<b>2</b>
Aedes albopictus	1	1	
Aedes vexans	2	7	
Culex pipiens	5	224	
Culex restuans	1	37	
Culex salinarius	1	20	
Culex spp.	30	1109	<b>2</b>
Ochlerotatus japonicus	11	58	
Ochlerotatus triseriatus	3	4	
Psorophora ferox	1	1	
<b>Hudson</b>	<b>4</b>	<b>110</b>	<b>0</b>
Culex spp.	4	110	
<b>Hunterdon</b>	<b>50</b>	<b>2343</b>	<b>0</b>
Culex spp.	48	2337	
Ochlerotatus japonicus	2	6	
<b>Mercer</b>	<b>94</b>	<b>2092</b>	<b>0</b>
Aedes albopictus	3	5	
Aedes vexans	4	119	
Anopheles punctipennis	4	47	
Coquillettidia perturbans	1	7	
Culex pipiens	16	194	
Culex restuans	20	555	
Culex salinarius	2	6	
Culex spp.	14	694	
Ochlerotatus canadensis	8	354	
Ochlerotatus excrucians	2	3	
Ochlerotatus japonicus	11	48	
Ochlerotatus sticticus	1	40	
Ochlerotatus triseriatus	6	13	
Ochlerotatus trivittatus	2	7	

<b>Monmouth</b>	<b>130</b>	<b>1247</b>	<b>0</b>
Aedes albopictus	2	2	
Aedes vexans	8	89	
Anopheles barberi	1	1	
Anopheles punctipennis	7	45	
Anopheles quadrimaculatus	3	8	
Coquillettidia perturbans	7	16	
Culex pipiens	7	149	
Culex restuans	10	196	
Culex salinarius	4	39	
Culex spp.	14	113	
Culex territans	1	1	
Culiseta melanura	32	271	
Ochlerotatus canadensis	7	77	
Ochlerotatus cantator	1	8	
Ochlerotatus grossbecki	1	2	
Ochlerotatus japonicus	12	70	
Ochlerotatus sollicitans	3	66	
Ochlerotatus sticticus	1	3	
Ochlerotatus triseriatus	8	90	
Psorophora columbiae	1	1	
<b>Morris</b>	<b>67</b>	<b>2958</b>	<b>1</b>
Aedes cinereus	1	10	
Aedes vexans	1	1	
Anopheles punctipennis	2	5	
Coquillettidia perturbans	3	30	
Culex pipiens	2	6	
Culex restuans	1	1	
Culex spp.	46	2836	1
Ochlerotatus canadensis	1	11	
Ochlerotatus japonicus	7	47	
Ochlerotatus triseriatus	3	11	
<b>Ocean</b>	<b>142</b>	<b>1928</b>	<b>0</b>
Aedes albopictus	2	13	
Aedes vexans	9	121	
Anopheles punctipennis	6	57	
Anopheles quadrimaculatus	2	2	
Coquillettidia perturbans	9	235	
Culex pipiens	6	82	
Culex restuans	7	121	
Culex salinarius	10	76	
Culex spp.	21	370	
Culex territans	2	5	
Culiseta melanura	24	362	
Ochlerotatus canadensis	9	184	

	Ochlerotatus cantator	1	50	
	Ochlerotatus grossbecki	4	10	
	Ochlerotatus japonicus	11	51	
	Ochlerotatus sollicitans	10	168	
	Ochlerotatus thibaulti	1	1	
	Ochlerotatus triseriatus	7	19	
	Ochlerotatus trivittatus	1	1	
<b>Passaic</b>		<b>26</b>	<b>633</b>	<b>1</b>
	Anopheles punctipennis	2	4	
	Culex spp.	13	493	<b>1</b>
	Ochlerotatus japonicus	10	127	
	Ochlerotatus triseriatus	1	9	
<b>Salem</b>		<b>80</b>	<b>1886</b>	<b>0</b>
	Aedes vexans	1	2	
	Anopheles bradleyi	2	2	
	Anopheles punctipennis	5	33	
	Anopheles quadrimaculatus	5	32	
	Anopheles walkeri	1	13	
	Coquillettidia perturbans	2	4	
	Culex erraticus	1	1	
	Culex restuans	14	592	
	Culex territans	2	4	
	Culiseta melanura	38	1084	
	Ochlerotatus cantator	1	26	
	Ochlerotatus japonicus	6	91	
	Psorophora columbiae	2	2	
<b>Somerset</b>		<b>75</b>	<b>1386</b>	<b>0</b>
	Aedes vexans	3	24	
	Anopheles punctipennis	4	8	
	Coquillettidia perturbans	2	6	
	Culex pipiens	2	43	
	Culex restuans	6	222	
	Culex salinarius	1	2	
	Culex spp.	31	879	
	Culiseta melanura	1	1	
	Ochlerotatus canadensis	4	54	
	Ochlerotatus japonicus	15	129	
	Ochlerotatus triseriatus	6	18	



<b>Sussex</b>	<b>88</b>	<b>1149</b>	<b>0</b>
Aedes cinereus	2	11	
Aedes vexans	4	33	
Anopheles punctipennis	7	93	
Anopheles quadrimaculatus	2	15	
Anopheles walkeri	4	102	
Coquillettidia perturbans	8	258	
Culex pipiens	2	2	
Culex restuans	6	68	
Culex salinarius	1	1	
Culex spp.	11	256	
Culex territans	4	9	
Culiseta melanura	3	4	
Ochlerotatus canadensis	6	23	
Ochlerotatus japonicus	14	113	
Ochlerotatus stimulans	4	26	
Ochlerotatus triseriatus	6	32	
Ochlerotatus trivittatus	2	100	
Uranotaenia sapphirina	2	3	
<b>Warren</b>	<b>78</b>	<b>2338</b>	<b>0</b>
Aedes vexans	1	3	
Culex spp.	55	2150	
Ochlerotatus cantator	1	50	
Ochlerotatus japonicus	16	126	
Ochlerotatus punctor	1	4	
Ochlerotatus triseriatus	4	5	
<b>Grand Total</b>	<b>1498</b>	<b>31783</b>	<b>7</b>