

# VECTOR SURVEILLANCE SUMMARY SHEET

WEEK: 6

## *Culiseta melanura* Monitor

July 5 - 11, 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.)	2.4	3.6	678	30	0	Waterford (Camden Co.)	0.8	1.2	873	29	0
Corbin City (Atlantic Co.)	0.7	1.5	354	22	0	Centerton (Salem Co.)	3.0	3.6	831	31	0
Dennisville (Cape May Co.)	4.1	0.1	960	34	0	Turkey Swamp (Monmouth Co.)	-	1.0	232	21	0

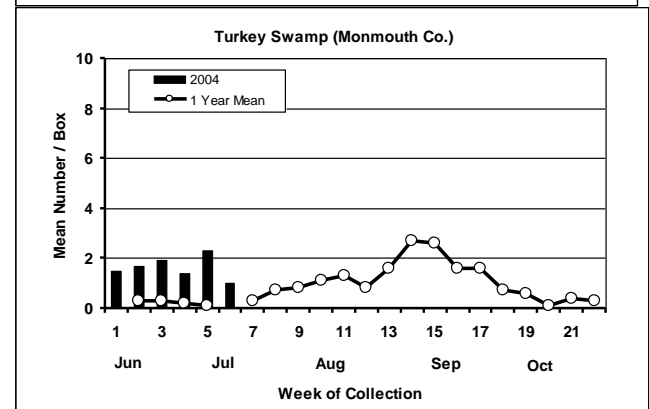
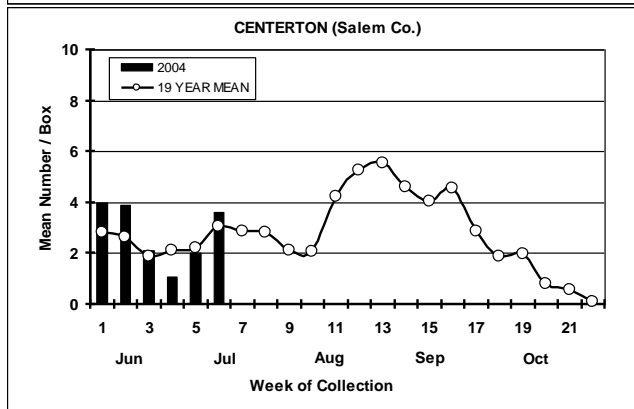
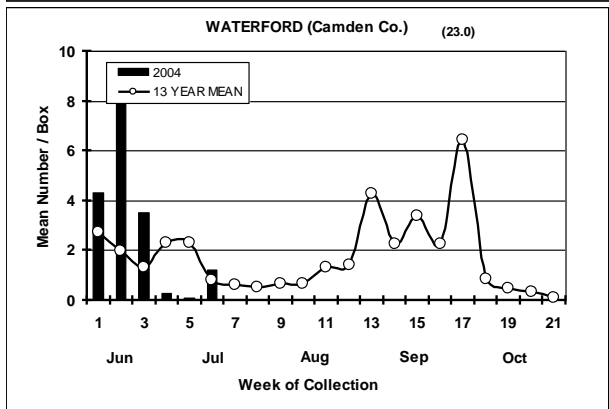
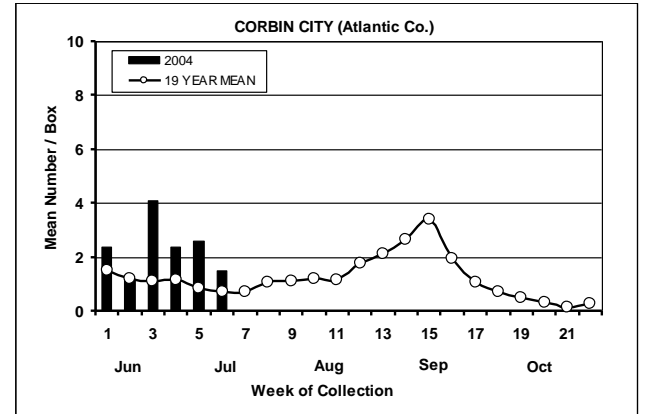
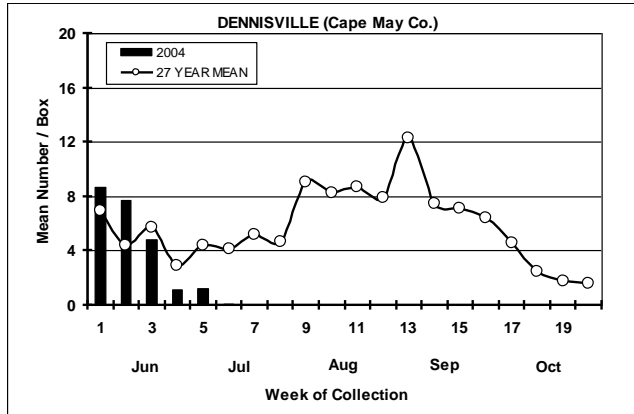
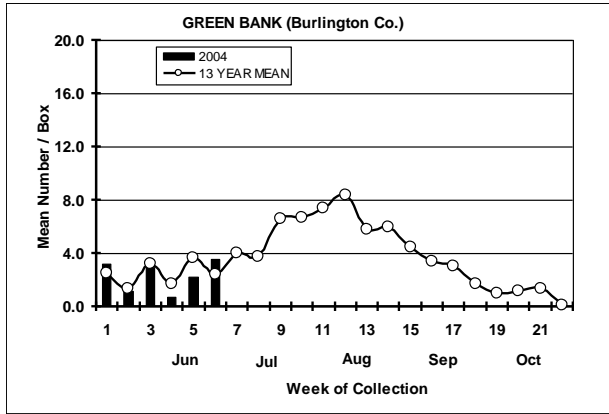
### Collections submitted to PHEL for West Nile Virus testing

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	61	92	27	286	231	55	49	6	42	6	101	10	183	1,149
Total Specimens	836	1,837	234	11,161	4,906	771	1,054	11	190	150	723	35	2,891	24,799
No. Positive Pools	0	1	0	1	0	0	0	0	0	0	0	0	0	2

**Remarks:** *Culiseta melanura* populations have rebounded at most of the study sites where the species is being monitored with resting boxes. This suggests that adults are beginning to emerge from egg boats deposited earlier this spring. An influx of nullipars at this time of year favors amplification of EEE in local bird populations in southern New Jersey. Hatch year birds, which remain close to their nest sites during the month of July, lack immunity to this important mosquito-borne virus and function as the primary amplification reservoirs of this mosquito-borne pathogen. West Nile virus was recently detected in a pool of mixed *Culex* collected from Somer's Point in Atlantic Co. This year's surveillance effort has identified two early season hotspots where WNV is currently being amplified in mosquitoes and birds. The coastal area of Atlantic Co. has 4 confirmed crows, to date, as well as a pool of positive mosquitoes. Upper Township in Cape May Co. had the first positive mosquito pool quickly followed by a confirmed crow death from the same area. Past surveillance data from the NJ program suggest that WNV activity frequently begins at specific early season foci but spreads to most areas of the state as the season advances.

<p style="margin: 0;">New Jersey Agricultural Experiment Station Publication No. PT-08-40500-06-04 Supported by State funds and funding by the NJ State Mosquito Control Commission. Summary Prepared by: Wayne J. Crans, Rutgers University</p>
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# Culiseta melanura Population Graphs



Mosquito Species Submitted for West Nile Virus Testing through July 9, 2004

Species	Pools	Mosquitoes	Positives
<i>Aedes albopictus</i>	10	35	
<i>Aedes cinereus</i>	4	57	
<i>Aedes vexans</i>	55	771	
<i>Anopheles bradleyi</i>	2	3	
<i>Anopheles punctipennis</i>	42	294	
<i>Anopheles quadrimaculatus</i>	24	811	
<i>Anopheles walkeri</i>	4	112	
<i>Coquillettidia perturbans</i>	40	576	
<i>Culex erraticus</i>	1	1	
<i>Culex pipiens</i>	61	836	
<i>Culex restuans</i>	92	1837	1
<i>Culex salinarius</i>	27	234	
<i>Culex spp.</i>	286	11161	1
<i>Culex territans</i>	11	34	
<i>Culiseta melanura</i>	231	4906	
<i>Ochlerotatus abserratus</i>	1	9	
<i>Ochlerotatus canadensis</i>	49	1054	
<i>Ochlerotatus cantator</i>	28	883	
<i>Ochlerotatus excrucians</i>	2	3	
<i>Ochlerotatus grossbecki</i>	5	16	
<i>Ochlerotatus japonicus</i>	101	723	
<i>Ochlerotatus mitchellae</i>	1	1	
<i>Ochlerotatus sollicitans</i>	6	150	
<i>Ochlerotatus sticticus</i>	4	58	
<i>Ochlerotatus stimulans</i>	4	16	
<i>Ochlerotatus thibaulti</i>	1	1	
<i>Ochlerotatus triseriatus</i>	42	190	
<i>Ochlerotatus trivittatus</i>	6	11	
<i>Orthopodomyia signifera</i>	1	2	
<i>Psorophora columbiae</i>	6	11	
<i>Psorophora ferox</i>	1	1	
<i>Uranotaenia sapphirina</i>	1	2	
<b>Grand Total</b>	<b>1149</b>	<b>24799</b>	<b>2</b>

Submissions by County through July 9, 2004

County	Species	Pools	Mosquitoes	Positives
<b>Atlantic</b>		<b>155</b>	<b>4263</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.	39	1571	<b>1</b>
	Culiseta melanura	37	853	
	Ochlerotatus canadensis	14	322	
	Ochlerotatus cantator	19	787	
	Ochlerotatus japonicus	5	23	
	Ochlerotatus triseriatus	5	84	
	Ochlerotatus trivittatus	1	1	
<b>Bergen</b>		<b>14</b>	<b>669</b>	<b>0</b>
	Culex spp.	12	600	
	Ochlerotatus japonicus	1	50	
	Ochlerotatus triseriatus	1	19	
<b>Burlington</b>		<b>74</b>	<b>959</b>	<b>0</b>
	Aedes cinereus	1	3	
	Aedes vexans	5	31	
	Anopheles punctipennis	2	4	
	Coquillettidia perturbans	5	31	
	Culex pipiens	1	1	
	Culex salinarius	1	1	
	Culex spp.	10	132	
	Culiseta melanura	34	703	
	Ochlerotatus abserratus	1	9	
	Ochlerotatus canadensis	2	15	
	Ochlerotatus grossbecki	1	6	
	Ochlerotatus japonicus	5	8	
	Ochlerotatus mitchellae	1	1	
	Ochlerotatus sticticus	1	6	
	Ochlerotatus stimulans	1	4	
	Ochlerotatus triseriatus	1	1	
	Ochlerotatus trivittatus	1	1	
	Orthopodomyia signifera	1	2	

<b>Camden</b>	<b>38</b>	<b>927</b>	<b>0</b>
Aedes albopictus	1	3	
Anopheles punctipennis	5	32	
Anopheles quadrimaculatus	1	1	
Culex restuans	1	2	
Culex spp.	1	16	
Culiseta melanura	29	873	
<b>Cape May</b>	<b>122</b>	<b>2320</b>	<b>1</b>
Aedes albopictus	1	2	
Anopheles punctipennis	1	2	
Anopheles quadrimaculatus	13	780	
Coquillettidia perturbans	1	1	
Culex pipiens	21	226	
Culex restuans	25	190	<b>1</b>
Culex salinarius	2	11	
Culex territans	4	19	
Culiseta melanura	46	1070	
Ochlerotatus cantator	3	9	
Ochlerotatus japonicus	2	4	
Ochlerotatus sollicitans	1	1	
Ochlerotatus triseriatus	2	5	
<b>Cumberland</b>	<b>54</b>	<b>218</b>	<b>0</b>
Aedes vexans	9	33	
Anopheles punctipennis	1	2	
Culex pipiens	6	31	
Culex restuans	5	26	
Culex salinarius	6	65	
Culex spp.	3	9	
Culiseta melanura	4	6	
Ochlerotatus canadensis	5	14	
Ochlerotatus cantator	3	3	
Ochlerotatus japonicus	6	17	
Ochlerotatus triseriatus	2	3	
Ochlerotatus trivittatus	1	1	
Psorophora columbiae	3	8	
<b>Essex</b>	<b>29</b>	<b>422</b>	<b>0</b>
Aedes vexans	2	3	
Anopheles punctipennis	1	1	
Coquillettidia perturbans	3	50	
Culex spp.	16	333	
Ochlerotatus japonicus	3	21	
Ochlerotatus sticticus	1	9	
Ochlerotatus triseriatus	3	5	

<b>Gloucester</b>	<b>40</b>	<b>1001</b>	<b>0</b>
Aedes albopictus	1	1	
Aedes vexans	2	7	
Culex pipiens	5	224	
Culex restuans	1	37	
Culex salinarius	1	20	
Culex spp.	17	655	
Ochlerotatus japonicus	9	52	
Ochlerotatus triseriatus	3	4	
Psorophora ferox	1	1	
<b>Hunterdon</b>	<b>45</b>	<b>2104</b>	<b>0</b>
Culex spp.	43	2098	
Ochlerotatus japonicus	2	6	
<b>Mercer</b>	<b>55</b>	<b>1018</b>	<b>0</b>
Aedes albopictus	2	4	
Aedes vexans	4	119	
Anopheles punctipennis	3	44	
Coquillettidia perturbans	1	7	
Culex pipiens	10	94	
Culex restuans	14	337	
Culex salinarius	1	2	
Culex spp.	1	12	
Ochlerotatus canadensis	6	331	
Ochlerotatus excrucians	2	3	
Ochlerotatus japonicus	6	13	
Ochlerotatus sticticus	1	40	
Ochlerotatus triseriatus	2	5	
Ochlerotatus trivittatus	2	7	
<b>Monmouth</b>	<b>78</b>	<b>774</b>	<b>0</b>
Aedes vexans	6	73	
Anopheles punctipennis	5	37	
Anopheles quadrimaculatus	3	8	
Coquillettidia perturbans	4	9	
Culex pipiens	5	107	
Culex restuans	8	154	
Culex salinarius	3	31	
Culex spp.	3	30	
Culiseta melanura	25	236	
Ochlerotatus canadensis	3	57	
Ochlerotatus cantator	1	8	
Ochlerotatus japonicus	6	11	
Ochlerotatus sticticus	1	3	
Ochlerotatus triseriatus	4	9	

	<i>Psorophora columbiae</i>	1	1	
<b>Morris</b>		<b>55</b>	<b>2445</b>	<b>0</b>
	<i>Aedes cinereus</i>	1	10	
	<i>Aedes vexans</i>	1	1	
	<i>Anopheles punctipennis</i>	2	5	
	<i>Coquillettidia perturbans</i>	3	30	
	<i>Culex pipiens</i>	2	6	
	<i>Culex restuans</i>	1	1	
	<i>Culex</i> spp.	37	2335	
	<i>Ochlerotatus canadensis</i>	1	11	
	<i>Ochlerotatus japonicus</i>	4	35	
	<i>Ochlerotatus triseriatus</i>	3	11	
<b>Ocean</b>		<b>123</b>	<b>1825</b>	<b>0</b>
	<i>Aedes albopictus</i>	2	13	
	<i>Aedes vexans</i>	7	114	
	<i>Anopheles punctipennis</i>	6	64	
	<i>Anopheles quadrimaculatus</i>	1	1	
	<i>Coquillettidia perturbans</i>	8	212	
	<i>Culex pipiens</i>	6	98	
	<i>Culex restuans</i>	6	109	
	<i>Culex salinarius</i>	9	69	
	<i>Culex</i> spp.	19	358	
	<i>Culex territans</i>	3	7	
	<i>Culiseta melanura</i>	21	329	
	<i>Ochlerotatus canadensis</i>	9	232	
	<i>Ochlerotatus grossbecki</i>	4	10	
	<i>Ochlerotatus japonicus</i>	9	41	
	<i>Ochlerotatus sollicitans</i>	5	149	
	<i>Ochlerotatus thibaulti</i>	1	1	
	<i>Ochlerotatus triseriatus</i>	6	17	
	<i>Ochlerotatus trivittatus</i>	1	1	
<b>Passaic</b>		<b>15</b>	<b>434</b>	<b>0</b>
	<i>Anopheles punctipennis</i>	2	4	
	<i>Culex</i> spp.	8	342	
	<i>Ochlerotatus japonicus</i>	5	88	
<b>Salem</b>		<b>69</b>	<b>1597</b>	<b>0</b>
	<i>Aedes vexans</i>	1	2	
	<i>Anopheles bradleyi</i>	1	1	
	<i>Anopheles punctipennis</i>	4	18	
	<i>Anopheles quadrimaculatus</i>	4	14	
	<i>Anopheles walkeri</i>	1	13	
	<i>Coquillettidia perturbans</i>	2	4	
	<i>Culex erraticus</i>	1	1	

	Culex restuans	14	592	
	Culex territans	1	2	
	Culiseta melanura	31	831	
	Ochlerotatus cantator	1	26	
	Ochlerotatus japonicus	6	91	
	Psorophora columbiae	2	2	
<b>Somerset</b>		<b>61</b>	<b>1231</b>	<b>0</b>
	Aedes vexans	3	24	
	Anopheles punctipennis	2	5	
	Coquillettidia perturbans	2	6	
	Culex pipiens	2	43	
	Culex restuans	6	222	
	Culex salinarius	1	2	
	Culex spp.	25	765	
	Culiseta melanura	1	1	
	Ochlerotatus canadensis	4	54	
	Ochlerotatus japonicus	10	95	
	Ochlerotatus triseriatus	5	14	
<b>Sussex</b>		<b>59</b>	<b>740</b>	<b>0</b>
	Aedes cinereus	1	9	
	Aedes vexans	2	4	
	Anopheles punctipennis	6	71	
	Anopheles quadrimaculatus	1	5	
	Anopheles walkeri	3	99	
	Coquillettidia perturbans	6	167	
	Culex pipiens	1	1	
	Culex restuans	5	54	
	Culex salinarius	1	1	
	Culex spp.	7	199	
	Culex territans	3	6	
	Culiseta melanura	3	4	
	Ochlerotatus canadensis	5	18	
	Ochlerotatus japonicus	9	79	
	Ochlerotatus stimulans	3	12	
	Ochlerotatus triseriatus	2	9	
	Uranotaenia sapphirina	1	2	
<b>Warren</b>		<b>63</b>	<b>1852</b>	<b>0</b>
	Aedes vexans	1	3	
	Culex spp.	45	1706	
	Ochlerotatus cantator	1	50	
	Ochlerotatus japonicus	13	89	
	Ochlerotatus triseriatus	3	4	
<b>Grand Total</b>		<b>1149</b>	<b>24799</b>	<b>2</b>



