

VECTOR SURVEILLANCE SUMMARY SHEET

WEEK: 10

Culiseta melanura Monitor August 2 - 8, 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.)	6.7	1.7	1,212	50	1	Waterford (Camden Co.)	0.7	0.2	954	42	0
Corbin City (Atlantic Co.)	1.1	0.4	429	37	0	Centerton (Salem Co.)	2.1	2.2	1,504	54	2
Dennisville (Cape May Co.)	8.3	0.3	1,037	48	0	Turkey Swamp (Monmouth Co.)	0.8	1.7	328	36	0

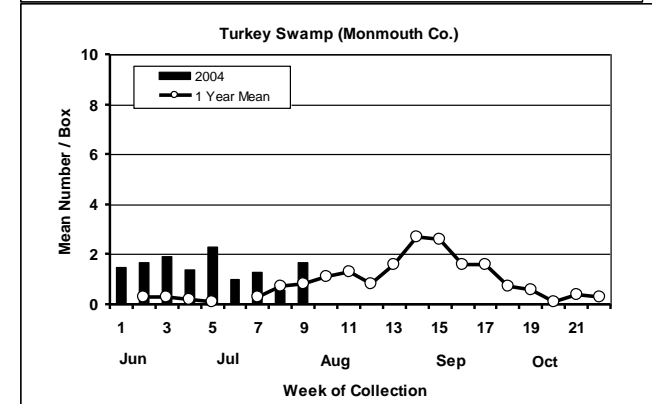
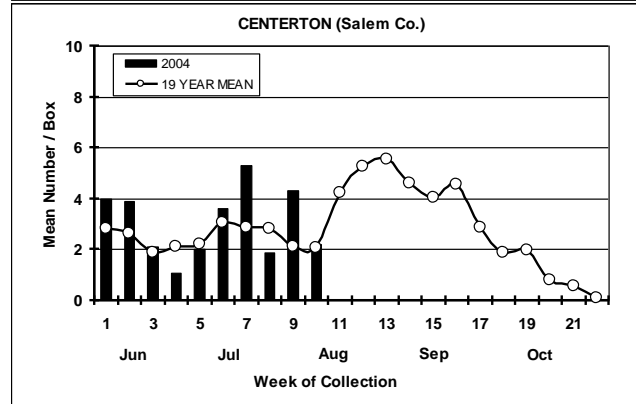
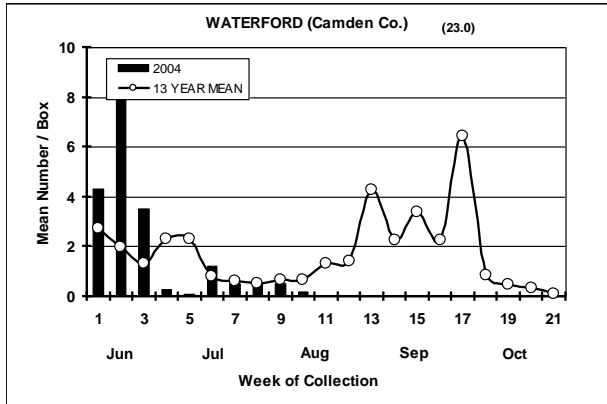
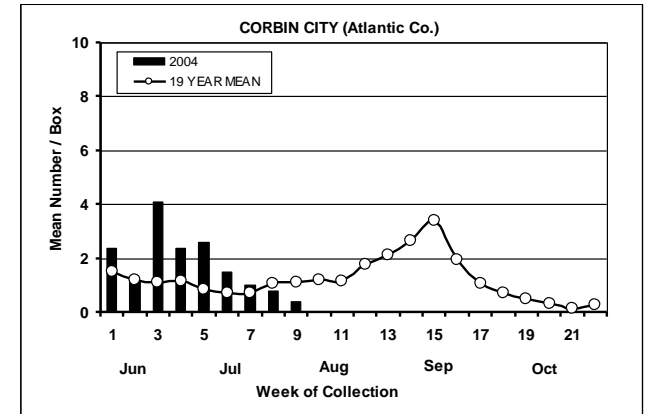
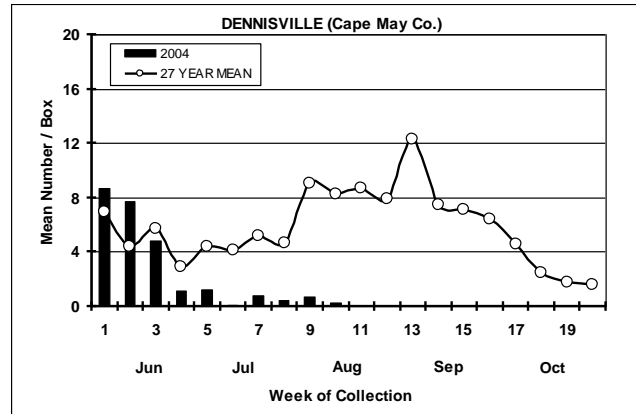
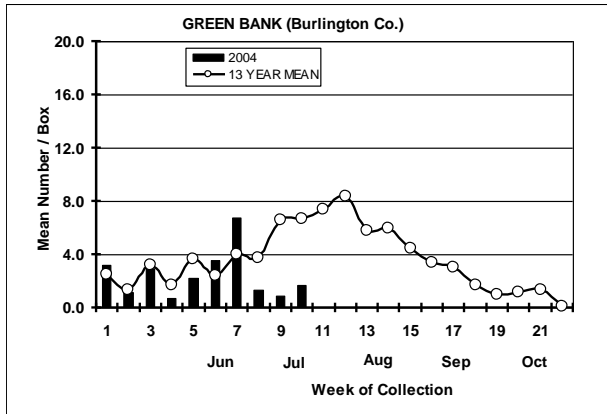
Collections submitted to PHEL for West Nile Virus testing

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	152	143	73	810	372	130	91	24	105	50	270	44	444	2,708
Total Specimens	3,490	2,612	1,109	27,799	6,808	1,748	1,201	272	528	708	1,786	198	6,352	54,611
No. Positive Pools	6	1	0	32	2	0	0	0	0	0	0	0	0	41

Remarks: EEE has appeared at the Centerton study site in Salem County with positive pools of *Cs. melanura* from the July 19 and July 27 resting box collections. This year's vector surveillance data suggest that amplification of EEE in local birds was accomplished over a wide geographic area of southern NJ during the month of July. Although *Culiseta melanura* populations have declined in recent weeks, sufficient time remains for bridge vectors to acquire and transmit the virus to mammalian hosts. WNV is also being amplified at an accelerated rate, which is typical for the month of August. The early season foci in Atlantic and Gloucester counties that were evident for more than a month, have now expanded to include 12 different counties. WNV positive pools have been limited to bird feeding mosquito species to date even though recent rains have produced sizeable floodwater populations in most areas of the state. Two of the WNV positive pools were obtained from *Cs. melanura* collected from the Green Bank resting boxes.

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Culiseta melanura Population Graphs



EEE first appeared in *Cs. melanura* at Green Bank in Burlington County during Week 7 of this year's collection season. Positive pools quickly followed from the Week 8 & 9 collections at the Centerton site in Salem County. In 2003, EEE was confined to the Atlantic coast for most of the season before it appeared at any of the other study sites. Our preliminary data suggest that early season amplification is occurring over a wider geographic area this year.

Mosquito Species Submitted for West Nile Virus Testing through August 6, 2004

Species	Pools	Mosquitoes	Positives
Aedes albopictus	44	198	
Aedes cinereus	5	59	
Aedes vexans	130	1748	
Anopheles barberi	4	5	
Anopheles bradleyi	11	17	
Anopheles punctipennis	88	484	
Anopheles quadrimaculatus	65	1900	
Anopheles walkeri	8	167	
Coquillettidia perturbans	74	1158	
Culex erraticus	10	249	
Culex pipiens	152	3490	6
Culex restuans	143	2612	1
Culex salinarius	73	1109	
Culex spp.	810	27799	32
Culex territans	19	51	
Culiseta melanura	372	6808	2
Culiseta morsitans	1	1	
Ochlerotatus abserratus	1	9	
Ochlerotatus atlanticus	1	2	
Ochlerotatus atropalpus	2	11	
Ochlerotatus canadensis	91	1201	
Ochlerotatus cantator	40	962	
Ochlerotatus excrucians	2	3	
Ochlerotatus grossbecki	8	21	
Ochlerotatus japonicus	270	1786	
Ochlerotatus mitchellae	1	1	
Ochlerotatus punctor	1	4	
Ochlerotatus sollicitans	50	708	
Ochlerotatus sticticus	5	65	
Ochlerotatus stimulans	6	33	
Ochlerotatus taeniorhynchus	9	119	
Ochlerotatus thibaulti	1	1	
Ochlerotatus triseriatus	105	528	
Ochlerotatus trivittatus	24	272	
Orthopodomyia signifera	4	8	
Psorophora ciliata	15	209	
Psorophora columbiae	23	186	
Psorophora discolor	1	1	
Psorophora ferox	23	460	
Psorophora howardii	4	15	
Uranotaenia sapphirina	12	151	
Grand Total	2708	54611	41

Submissions by County through August 6, 2004

County	Species	Pools	Mosquitoes	Positives
Atlantic		257	6101	6
	Aedes albopictus	9	47	
	Aedes cinereus	1	35	
	Aedes vexans	17	380	
	Anopheles bradleyi	4	6	
	Anopheles punctipennis	2	5	
	Anopheles quadrimaculatus	2	4	
	Coquillettidia perturbans	7	66	
	Culex erraticus	4	59	
	Culex pipiens	7	191	1
	Culex restuans	10	120	
	Culex salinarius	4	41	
	Culex spp.	69	2785	5
	Culex territans	1	1	
	Culiseta melanura	52	922	
	Ochlerotatus canadensis	15	325	
	Ochlerotatus cantator	20	788	
	Ochlerotatus japonicus	9	35	
	Ochlerotatus sollicitans	8	135	
	Ochlerotatus taeniorhynchus	4	22	
	Ochlerotatus triseriatus	9	96	
	Ochlerotatus trivittatus	1	1	
	Orthopodomyia signifera	1	4	
	Psorophora ferox	1	33	
Bergen		90	4209	8
	Aedes albopictus	1	14	
	Aedes vexans	3	104	
	Culex pipiens	6	331	
	Culex restuans	1	15	
	Culex salinarius	4	172	
	Culex spp.	70	3485	8
	Culiseta melanura	1	1	
	Ochlerotatus japonicus	2	66	
	Ochlerotatus triseriatus	2	21	
Burlington		160	2322	2
	Aedes albopictus	4	12	
	Aedes cinereus	1	3	
	Aedes vexans	12	166	
	Anopheles bradleyi	1	5	
	Anopheles punctipennis	6	29	
	Anopheles quadrimaculatus	4	28	

Coquillettidia perturbans	6	48	
Culex erraticus	1	2	
Culex pipiens	2	21	
Culex restuans	1	11	
Culex salinarius	2	2	
Culex spp.	17	350	
Culex territans	2	8	
Culiseta melanura	58	1389	2
Ochlerotatus abserratus	1	9	
Ochlerotatus atlanticus	1	2	
Ochlerotatus atropalpus	1	3	
Ochlerotatus canadensis	4	17	
Ochlerotatus cantator	1	2	
Ochlerotatus grossbecki	1	6	
Ochlerotatus japonicus	10	27	
Ochlerotatus mitchellae	1	1	
Ochlerotatus sollicitans	3	16	
Ochlerotatus sticticus	2	13	
Ochlerotatus stimulans	1	4	
Ochlerotatus taeniorhynchus	1	7	
Ochlerotatus triseriatus	4	25	
Ochlerotatus trivittatus	2	2	
Orthopodomyia signifera	1	2	
Psorophora ciliata	2	18	
Psorophora columbiae	2	59	
Psorophora ferox	2	10	
Psorophora howardii	1	7	
Uranotaenia sapphirina	2	18	
Camden	60	1085	0
Aedes albopictus	4	32	
Anopheles punctipennis	6	34	
Anopheles quadrimaculatus	2	3	
Culex restuans	1	2	
Culex spp.	2	20	
Culiseta melanura	42	954	
Ochlerotatus trivittatus	1	1	
Psorophora ferox	2	39	
Cape May	224	4485	1
Aedes albopictus	3	6	
Aedes vexans	1	6	
Anopheles bradleyi	2	2	
Anopheles punctipennis	2	3	
Anopheles quadrimaculatus	29	1700	
Coquillettidia perturbans	6	120	
Culex erraticus	4	187	

	<i>Culex pipiens</i>	44	640	1	
	<i>Culex restuans</i>	32	216		
	<i>Culex salinarius</i>	12	181		
	<i>Culex territans</i>	4	19		
	<i>Culiseta melanura</i>	66	1222		
	<i>Ochlerotatus cantator</i>	4	17		
	<i>Ochlerotatus japonicus</i>	5	14		
	<i>Ochlerotatus sollicitans</i>	5	58		
	<i>Ochlerotatus taeniorhynchus</i>	3	89		
	<i>Ochlerotatus triseriatus</i>	2	5		
Cumberland		148	862		0
	<i>Aedes vexans</i>	30	275		
	<i>Anopheles punctipennis</i>	3	6		
	<i>Coquillettidia perturbans</i>	1	1		
	<i>Culex pipiens</i>	11	151		
	<i>Culex restuans</i>	8	34		
	<i>Culex salinarius</i>	11	129		
	<i>Culex spp.</i>	9	23		
	<i>Culiseta melanura</i>	9	13		
	<i>Ochlerotatus canadensis</i>	29	90		
	<i>Ochlerotatus cantator</i>	6	8		
	<i>Ochlerotatus grossbecki</i>	2	3		
	<i>Ochlerotatus japonicus</i>	10	35		
	<i>Ochlerotatus sollicitans</i>	4	9		
	<i>Ochlerotatus triseriatus</i>	3	4		
	<i>Ochlerotatus trivittatus</i>	2	2		
	<i>Psorophora ciliata</i>	1	4		
	<i>Psorophora columbiae</i>	9	75		
Essex		87	1116		0
	<i>Aedes albopictus</i>	3	4		
	<i>Aedes vexans</i>	4	9		
	<i>Anopheles punctipennis</i>	1	1		
	<i>Coquillettidia perturbans</i>	7	60		
	<i>Culex spp.</i>	41	595		
	<i>Ochlerotatus canadensis</i>	1	4		
	<i>Ochlerotatus japonicus</i>	10	53		
	<i>Ochlerotatus sticticus</i>	1	9		
	<i>Ochlerotatus triseriatus</i>	5	8		
	<i>Ochlerotatus trivittatus</i>	1	12		
	<i>Psorophora ferox</i>	13	361		
Gloucester		118	2761	11	
	<i>Aedes albopictus</i>	5	12		
	<i>Aedes vexans</i>	4	16		
	<i>Anopheles bradleyi</i>	1	1		

	Anopheles punctipennis	2	6	
	Culex pipiens	7	300	
	Culex restuans	3	54	
	Culex salinarius	3	68	
	Culex spp.	68	2184	11
	Culiseta melanura	1	3	
	Ochlerotatus japonicus	16	87	
	Ochlerotatus sollicitans	1	1	
	Ochlerotatus triseriatus	4	14	
	Psorophora columbiae	2	14	
	Psorophora ferox	1	1	
Hudson		60	1888	1
	Culex spp.	60	1888	1
Hunterdon		95	3993	2
	Aedes vexans	1	37	
	Culex spp.	85	3850	2
	Ochlerotatus japonicus	6	35	
	Ochlerotatus trivittatus	1	50	
	Psorophora ciliata	2	21	
Mercer		164	3758	6
	Aedes albopictus	4	7	
	Aedes vexans	10	300	
	Anopheles punctipennis	7	71	
	Anopheles quadrimaculatus	2	6	
	Coquillettidia perturbans	4	105	
	Culex pipiens	35	990	5
	Culex restuans	26	640	
	Culex salinarius	5	38	
	Culex spp.	18	806	1
	Culiseta melanura	2	6	
	Ochlerotatus atropalpus	1	8	
	Ochlerotatus canadensis	9	397	
	Ochlerotatus excrucians	2	3	
	Ochlerotatus japonicus	20	74	
	Ochlerotatus sticticus	1	40	
	Ochlerotatus triseriatus	6	13	
	Ochlerotatus trivittatus	4	92	
	Psorophora ciliata	1	8	
	Psorophora columbiae	1	23	
	Psorophora ferox	1	7	
	Psorophora howardii	2	7	
	Uranotaenia sapphirina	3	117	
Middlesex		42	626	0

	<i>Aedes albopictus</i>	1	1	
	<i>Aedes vexans</i>	4	35	
	<i>Anopheles punctipennis</i>	3	6	
	<i>Culex pipiens</i>	7	300	
	<i>Culex restuans</i>	3	24	
	<i>Culex spp.</i>	8	181	
	<i>Ochlerotatus japonicus</i>	3	18	
	<i>Ochlerotatus sollicitans</i>	4	50	
	<i>Ochlerotatus triseriatus</i>	4	5	
	<i>Ochlerotatus trivittatus</i>	2	3	
	<i>Orthopodomyia signifera</i>	1	1	
	<i>Psorophora columbiae</i>	2	2	
Monmouth		225	2296	0
	<i>Aedes albopictus</i>	2	2	
	<i>Aedes vexans</i>	11	133	
	<i>Anopheles barberi</i>	2	2	
	<i>Anopheles punctipennis</i>	11	63	
	<i>Anopheles quadrimaculatus</i>	6	13	
	<i>Coquillettidia perturbans</i>	7	16	
	<i>Culex pipiens</i>	12	296	
	<i>Culex restuans</i>	13	257	
	<i>Culex salinarius</i>	10	367	
	<i>Culex spp.</i>	27	147	
	<i>Culex territans</i>	2	2	
	<i>Culiseta melanura</i>	44	337	
	<i>Ochlerotatus canadensis</i>	11	91	
	<i>Ochlerotatus cantator</i>	3	10	
	<i>Ochlerotatus grossbecki</i>	1	2	
	<i>Ochlerotatus japonicus</i>	24	185	
	<i>Ochlerotatus sollicitans</i>	7	131	
	<i>Ochlerotatus sticticus</i>	1	3	
	<i>Ochlerotatus taeniorhynchus</i>	1	1	
	<i>Ochlerotatus triseriatus</i>	21	187	
	<i>Ochlerotatus trivittatus</i>	3	3	
	<i>Psorophora ciliata</i>	2	37	
	<i>Psorophora columbiae</i>	3	7	
	<i>Psorophora ferox</i>	1	4	
Morris		109	4161	1
	<i>Aedes cinereus</i>	1	10	
	<i>Aedes vexans</i>	1	1	
	<i>Anopheles punctipennis</i>	3	6	
	<i>Coquillettidia perturbans</i>	3	30	
	<i>Culex pipiens</i>	2	6	
	<i>Culex restuans</i>	1	1	
	<i>Culex spp.</i>	70	3961	1

	Ochlerotatus canadensis	1	11	
	Ochlerotatus japonicus	22	121	
	Ochlerotatus triseriatus	5	14	
Ocean		230	2830	1
	Aedes albopictus	7	58	
	Aedes vexans	13	206	
	Anopheles bradleyi	1	1	
	Anopheles punctipennis	9	64	
	Anopheles quadrimaculatus	4	6	
	Coquillettidia perturbans	13	296	
	Culex pipiens	10	153	
	Culex restuans	10	157	
	Culex salinarius	17	103	
	Culex spp.	29	545	1
	Culex territans	2	5	
	Culiseta melanura	39	451	
	Ochlerotatus canadensis	10	185	
	Ochlerotatus cantator	1	50	
	Ochlerotatus grossbecki	4	10	
	Ochlerotatus japonicus	17	69	
	Ochlerotatus sollicitans	18	308	
	Ochlerotatus thibaulti	1	1	
	Ochlerotatus triseriatus	10	22	
	Ochlerotatus trivittatus	1	1	
	Orthopodomyia signifera	1	1	
	Psorophora ciliata	6	120	
	Psorophora columbiae	1	2	
	Psorophora ferox	2	5	
	Psorophora howardii	1	1	
	Uranotaenia sapphirina	3	10	
Passaic		56	1223	1
	Anopheles punctipennis	2	4	
	Culex spp.	35	1031	1
	Ochlerotatus japonicus	18	179	
	Ochlerotatus triseriatus	1	9	
Salem		148	2676	0
	Aedes vexans	4	6	
	Anopheles bradleyi	2	2	
	Anopheles punctipennis	9	58	
	Anopheles quadrimaculatus	11	106	
	Anopheles walkeri	3	15	
	Coquillettidia perturbans	3	5	
	Culex erraticus	1	1	
	Culex restuans	14	592	

	Culex spp.	27	243	
	Culex territans	3	6	
	Culiseta melanura	54	1505	
	Ochlerotatus cantator	4	37	
	Ochlerotatus japonicus	10	96	
	Psorophora columbiae	3	4	
Somerset		131	2280	0
	Aedes vexans	5	26	
	Anopheles punctipennis	5	10	
	Coquillettidia perturbans	2	6	
	Culex pipiens	5	104	
	Culex restuans	10	291	
	Culex salinarius	1	2	
	Culex spp.	55	1462	
	Culex territans	1	1	
	Culiseta melanura	1	1	
	Ochlerotatus canadensis	4	54	
	Ochlerotatus japonicus	29	276	
	Ochlerotatus triseriatus	11	44	
	Ochlerotatus trivittatus	1	2	
	Psorophora ciliata	1	1	
Sussex		160	1812	0
	Aedes cinereus	2	11	
	Aedes vexans	6	40	
	Anopheles barberi	1	1	
	Anopheles punctipennis	13	114	
	Anopheles quadrimaculatus	5	34	
	Anopheles walkeri	5	152	
	Coquillettidia perturbans	15	405	
	Culex pipiens	4	7	
	Culex restuans	9	195	
	Culex salinarius	4	6	
	Culex spp.	28	437	
	Culex territans	4	9	
	Culiseta melanura	3	4	
	Culiseta morsitans	1	1	
	Ochlerotatus canadensis	7	27	
	Ochlerotatus japonicus	31	186	
	Ochlerotatus stimulans	5	29	
	Ochlerotatus triseriatus	10	47	
	Ochlerotatus trivittatus	3	101	
	Uranotaenia sapphirina	4	6	
Union		28	939	1
	Aedes albopictus	1	3	

	Culex spp.	21	923	1
	Ochlerotatus japonicus	3	10	
	Ochlerotatus triseriatus	1	1	
	Ochlerotatus trivittatus	1	1	
	Psorophora discolor	1	1	
Warren		116	3188	0
	Aedes vexans	4	8	
	Anopheles barberi	1	2	
	Anopheles punctipennis	4	4	
	Culex restuans	1	3	
	Culex spp.	71	2883	
	Ochlerotatus cantator	1	50	
	Ochlerotatus japonicus	25	220	
	Ochlerotatus punctor	1	4	
	Ochlerotatus triseriatus	7	13	
	Ochlerotatus trivittatus	1	1	
Grand Total		2708	54611	41