

VECTOR SURVEILLANCE SUMMARY SHEET

WEEK: 11

Culiseta melanura Monitor August 11-15, 2003

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.)	6.8	7.8	1,527	63	7	Waterford (Camden Co.)	1.4	0.8	208	29	0
Corbin City (Atlantic Co.)	1.1	2.6	380	50	0	Centerton (Salem Co.)	4.0	8.0	1,745	62	0
Dennisville (Cape May Co.)	8.9	2.4	942	40	0	Turkey Swamp (Monmouth Co.)	NA	1.3	60	25	0

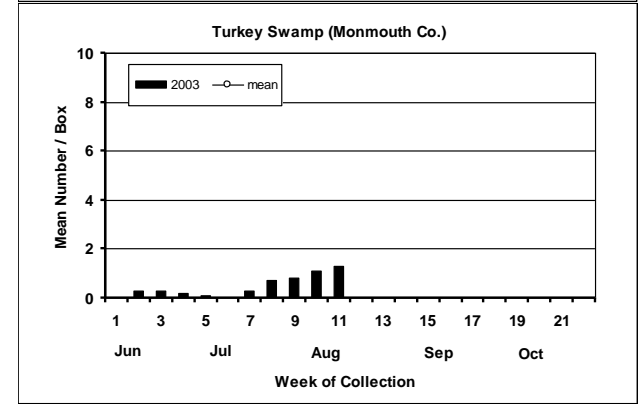
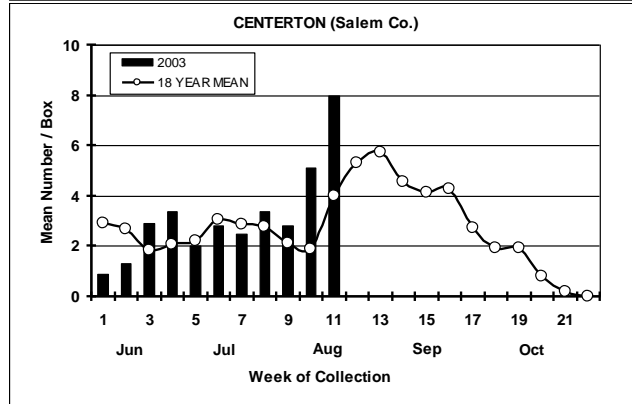
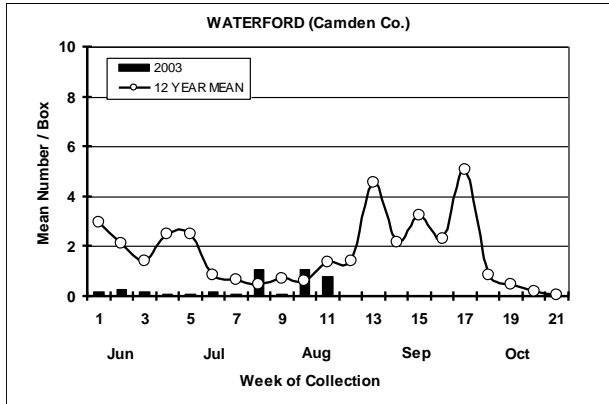
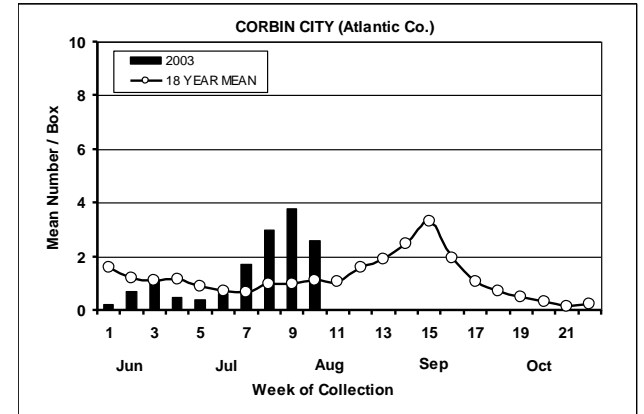
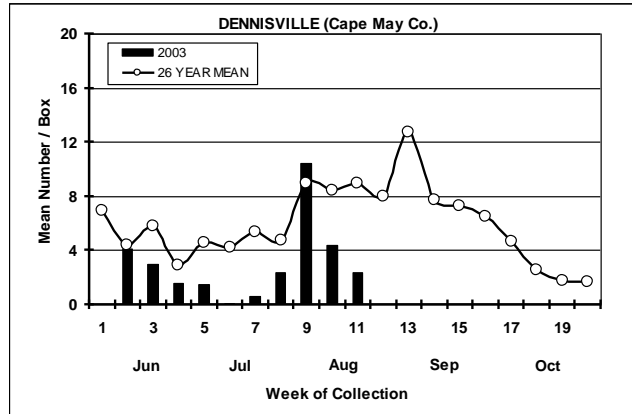
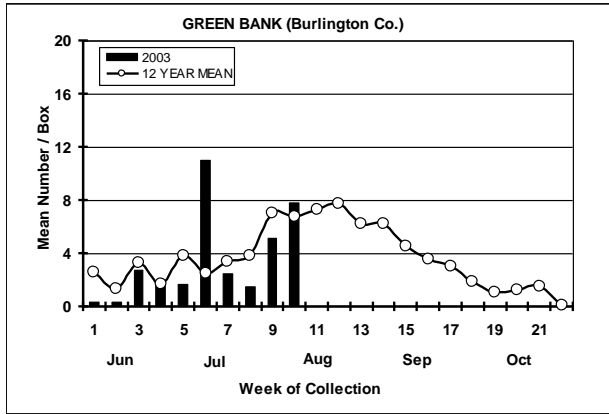
Collections submitted to PHEL for West Nile Virus testing

Species	<i>Cx. pip</i>	<i>Cx. rest</i>	<i>Cx. sal</i>	<i>Cx. spp.</i>	<i>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	143	365	119	1,818	214	311	84	213	72	253	52	1,147	4,791
Total Specimens	3,048	9,827	3,275	55,980	4,408	7,583	1,637	1,478	1,711	1,737	194	17,151	108,029
No. Positive Pools	7	10	0	49	3	1	1	0	0	0	1	3	75

Remarks: EEE activity in the Mullica River drainage continues to escalate. Seven (7) pools of *Cs. melanura* from the Green Bank site have tested positive yielding a season MFIR of 5.9 isolations per 1000 tested. Five (5) additional positives were obtained from *Cs. melanura* collected from CO₂ baited traps set at nearby sites in Atlantic Co. The 1st equine case of EEE was confirmed in a horse stabled near Mays Landing in Atlantic Co., underscoring that EEE has reached epizootic proportions in that region of the state. The graphs attached to this report show that *Cs. melanura* populations are building at Corbin City (Egg Harbor drainage south of Atlantic City) and Centerton (Salem Co. farm country). Both of these resting box sites have a history of epizootic/epidemic EEE. WNV has also gone beyond amplification for the first time this season. Prior reports indicated that WNV had been confined largely to bird feeding species. Equine cases have now been confirmed from 2 horses in Gloucester Co. and 1 in Camden Co. The first human case of WNV was confirmed in a 33 yr-old male resident of Cumberland Co. with onset in late July. The latest surveillance data point toward *Ae. vexans* as a likely bridge vector of WNV this year with recent positives from Monmouth, Middlesex and Warren counties. *Oc. trivittatus*, another floodwater mosquito, has also been implicated. An *Oc. stimulan* positive from Warren Co. provides interesting epidemiological data. *Oc. stimulan* is a univoltine species that emerges very early in May. The positive came from specimens collected August 5, indicating that some of the *Oc. stimulan* we collect as larvae in April live as long as of 3 months in their adult stage.

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Culiseta melanura Population Graphs



Mosquito Species Submitted for WNV Testing through August 18, 2003

Species	Pools	Mosquitoes	Positives
Ae. albopictus	52	194	1
Ae. cinereus	15	67	
Ae. vexans	214	4408	3
Aedes/Ochleratus sp.	2	3	
An. barberi	3	3	
An. bradleyi	11	84	
An. crucians	1	3	
An. punctipennis	155	1265	
An. quadrimaculatus	110	2324	
An. walkeri	6	149	
Cq. perturbans	74	1659	
Cs. inornata	2	3	
Cs. melanura	314	5737	2
Cx. erraticus	8	87	
Cx. mix	1818	55980	49
Cx. pipiens	143	3048	7
Cx. restuans	365	9827	10
Cx. salinarius	119	3275	
Cx. territans	47	337	
Oc. abserratus	3	9	
Oc. atlanticus	6	7	
Oc. atropalpus	2	7	
Oc. aurifer	8	176	
Oc. canadensis	311	7583	1
Oc. cantator	109	1814	
Oc. excrucians	10	73	
Oc. grossbecki	55	572	
Oc. hendersoni	1	1	
Oc. japonicus	253	1737	
Oc. mitchellae	1	1	
Oc. sollicitans	72	1711	
Oc. sticticus	85	1481	
Oc. stimulans	27	279	1
Oc. taeniorhynchus	7	47	
Oc. thibaulti	6	128	
Oc. triseriatus	213	1478	
Oc. trivittatus	84	1637	1
Or. signifera	3	17	
Ps. ciliata	2	24	
Ps. columbiae	20	170	
Ps. ferox	49	604	
Ps. howardii	4	17	
Ur. sapphirina	1	3	
Grand Total	4791	108029	75

Submissions by County through August 8, 2003

County	Species	Pools	Mosquitoes	Positives
Atlantic		335	11038	4
	Ae. albopictus	4	25	
	Ae. vexans	15	585	
	An. punctipennis	1	1	
	Cq. perturbans	8	280	
	Cs. melanura	66	1583	
	Cx. mix	90	3961	3
	Cx. restuans	9	150	
	Cx. salinarius	10	386	
	Cx. territans	4	21	
	Oc. canadensis	42	1624	1
	Oc. cantator	29	1135	
	Oc. grossbecki	4	59	
	Oc. japonicus	7	44	
	Oc. sollicitans	13	473	
	Oc. sticticus	5	124	
	Oc. triseriatus	14	235	
	Oc. trivittatus	3	119	
	Oc. thibaulti	5	127	
	Or. signifera	1	15	
	Ps. ferox	2	40	
	An. bradleyi	2	45	
	Oc. atropalpus	1	6	
Bergen		288	11102	6
	Ae. albopictus	2	11	
	Ae. cinereus	1	10	
	Ae. vexans	10	411	
	An. punctipennis	2	8	
	An. quadrimaculatus	4	4	
	Cx. mix	180	8562	6
	Cx. pipiens	9	152	
	Cx. restuans	10	275	
	Cx. salinarius	18	839	
	Cx. territans	1	2	
	Oc. canadensis	5	156	
	Oc. grossbecki	1	19	
	Oc. japonicus	27	483	
	Oc. sticticus	1	15	
	Oc. triseriatus	16	135	
	Oc. trivittatus	1	20	

Burlington	274	4030	2
Ae. albopictus	11	50	1
Ae. cinereus	4	4	
Ae. vexans	17	216	
An. punctipennis	15	129	
An. quadrimaculatus	5	13	
Cq. perturbans	1	45	
Cs. melanura	57	1174	
Cx. mix	73	1478	1
Cx. restuans	7	34	
Cx. salinarius	4	8	
Cx. territans	1	6	
Oc. canadensis	29	604	
Oc. cantator	6	34	
Oc. grossbecki	8	31	
Oc. japonicus	5	21	
Oc. sollicitans	4	70	
Oc. sticticus	3	19	
Oc. stimulans	2	10	
Oc. triseriatus	8	17	
Oc. trivittatus	2	3	
Ps. columbiae	1	5	
An. barberi	1	1	
Or. signifera	1	1	
An. crucians	1	3	
Ps. ferox	2	33	
An. bradleyi	1	1	
Oc. mitchellae	1	1	
Ur. sapphirina	1	3	
Ps. howardii	3	16	
Camden	124	1525	1
Ae. albopictus	6	9	
Ae. vexans	5	8	
An. punctipennis	19	448	
An. quadrimaculatus	3	5	
Cq. perturbans	5	93	
Cs. melanura	29	210	1
Cx. mix	21	515	
Cx. restuans	10	80	
Cx. salinarius	3	31	
Cx. territans	5	63	
Oc. canadensis	4	13	
Oc. grossbecki	2	6	
Oc. sollicitans	1	1	
Oc. sticticus	1	1	

	Oc. triseriatus	6	17	
	An. bradleyi	3	24	
	Oc. atropalpus	1	1	
Cape May		314	7306	0
	An. punctipennis	5	16	
	An. quadrimaculatus	46	2045	
	Cs. melanura	51	1157	
	Cx. erraticus	1	9	
	Cx. mix	151	2642	
	Cx. pipiens	2	23	
	Cx. restuans	11	348	
	Cx. salinarius	4	9	
	Cx. territans	9	97	
	Oc. canadensis	15	599	
	Oc. cantator	7	110	
	Oc. grossbecki	6	222	
	Oc. triseriatus	3	18	
	An. bradleyi	3	11	
Cumberland		161	1587	2
	Ae. vexans	9	36	
	An. punctipennis	4	6	
	An. quadrimaculatus	1	1	
	Cs. melanura	3	5	
	Cx. mix	17	62	
	Cx. pipiens	8	205	1
	Cx. restuans	12	243	1
	Cx. salinarius	14	663	
	Cx. territans	2	3	
	Oc. canadensis	27	99	
	Oc. cantator	2	3	
	Oc. grossbecki	7	10	
	Oc. japonicus	3	4	
	Oc. sollicitans	6	16	
	Oc. sticticus	10	75	
	Oc. triseriatus	9	17	
	Oc. trivittatus	4	11	
	Ps. columbiae	4	31	
	Oc. taeniorhynchus	6	46	
	Ps. ferox	10	48	
	Oc. atlanticus	3	3	
Essex		133	2034	0
	Ae. vexans	19	489	
	An. punctipennis	3	4	
	An. quadrimaculatus	1	1	

	Cx. mix	42	621	
	Oc. canadensis	6	23	
	Oc. japonicus	3	4	
	Oc. sticticus	28	434	
	Oc. stimulans	7	30	
	Oc. triseriatus	3	3	
	Oc. trivittatus	11	228	
	Ps. ferox	10	197	
Gloucester		224	5750	10
	Ae. albopictus	18	31	
	Ae. vexans	6	107	
	An. punctipennis	6	9	
	An. quadrimaculatus	1	3	
	Cx. mix	139	5064	10
	Cx. pipiens	2	3	
	Cx. restuans	6	160	
	Cx. salinarius	5	149	
	Cx. territans	1	4	
	Oc. canadensis	2	17	
	Oc. excrucians	2	3	
	Oc. japonicus	18	53	
	Oc. sticticus	2	5	
	Oc. triseriatus	11	35	
	Oc. trivittatus	1	4	
	Ps. ferox	3	101	
	An. bradleyi	1	2	
Hudson		104	2174	0
	Ae. albopictus	3	23	
	Ae. vexans	5	170	
	Cq. perturbans	4	151	
	Cx. mix	53	467	
	Cx. pipiens	12	413	
	Cx. restuans	10	404	
	Cx. salinarius	10	488	
	Oc. sollicitans	1	7	
	Oc. triseriatus	3	4	
	Oc. trivittatus	1	44	
	Aedes/Ochleratus sp.	2	3	
Hunterdon		160	6633	5
	Ae. vexans	1	4	
	An. punctipennis	3	24	
	Cx. mix	129	6241	5
	Oc. japonicus	11	96	
	Oc. triseriatus	9	31	

	Oc. trivittatus	6	214	
	Ps. ciliata	1	23	
Mercer		375	8510	5
	Ae. cinereus	2	4	
	Ae. vexans	21	595	
	An. punctipennis	17	119	
	An. quadrimaculatus	2	2	
	Cq. perturbans	11	488	
	Cs. inornata	1	1	
	Cs. melanura	3	3	
	Cx. mix	22	664	
	Cx. pipiens	34	810	4
	Cx. restuans	142	4067	1
	Cx. salinarius	14	110	
	Cx. territans	3	6	
	Oc. canadensis	46	1254	
	Oc. cantator	1	2	
	Oc. excrucians	3	7	
	Oc. grossbecki	17	195	
	Oc. japonicus	15	43	
	Oc. sticticus	4	8	
	Oc. triseriatus	5	28	
	Oc. trivittatus	2	12	
	Ps. columbiae	1	2	
	Ps. ferox	7	88	
	Oc. atlanticus	2	2	
Middlesex		151	2017	7
	Ae. albopictus	1	1	
	Ae. vexans	13	137	1
	An. punctipennis	4	4	
	An. quadrimaculatus	3	3	
	Cq. perturbans	2	8	
	Cx. mix	91	1526	6
	Oc. canadensis	5	47	
	Oc. cantator	2	18	
	Oc. excrucians	1	2	
	Oc. grossbecki	1	1	
	Oc. japonicus	3	13	
	Oc. sollicitans	12	165	
	Oc. triseriatus	4	8	
	Oc. trivittatus	5	50	
	Ps. columbiae	2	8	
	Ps. ferox	2	26	

Monmouth	438	6369	5
Ae. albopictus	3	7	
Ae. vexans	21	430	1
An. punctipennis	12	71	
An. quadrimaculatus	6	19	
Cq. perturbans	4	8	
Cs. melanura	26	102	
Cx. mix	147	2094	
Cx. pipiens	32	805	1
Cx. restuans	28	683	3
Cx. salinarius	9	124	
Cx. territans	3	10	
Oc. abserratus	2	6	
Oc. canadensis	33	570	
Oc. cantator	20	86	
Oc. excrucians	1	3	
Oc. japonicus	28	75	
Oc. sollicitans	20	615	
Oc. sticticus	1	6	
Oc. triseriatus	25	550	
Oc. trivittatus	5	8	
Oc. thibaulti	1	1	
Ps. columbiae	4	87	
An. barberi	2	2	
Oc. taeniorhynchus	1	1	
Ps. ferox	2	4	
Ps. ciliata	1	1	
Oc. hendersoni	1	1	
Morris	167	3613	5
Ae. cinereus	2	17	
Ae. vexans	8	110	
An. punctipennis	7	34	
An. quadrimaculatus	2	6	
An. walkeri	1	2	
Cq. perturbans	6	208	
Cx. mix	51	2156	5
Cx. pipiens	9	137	
Cx. restuans	15	418	
Cx. salinarius	2	7	
Cx. territans	1	3	
Oc. aurifer	3	20	
Oc. canadensis	11	274	
Oc. grossbecki	2	5	
Oc. japonicus	20	81	
Oc. sticticus	2	6	

	Oc. stimulans	1	2	
	Oc. triseriatus	19	104	
	Oc. trivittatus	4	18	
	Ps. ferox	1	5	
Ocean		337	6707	2
	Ae. albopictus	2	24	
	Ae. vexans	19	366	
	An. punctipennis	7	57	
	An. quadrimaculatus	3	87	
	Cq. perturbans	15	93	
	Cs. inornata	1	2	
	Cs. melanura	22	142	
	Cx. mix	81	2680	
	Cx. pipiens	4	43	
	Cx. restuans	40	1267	2
	Cx. salinarius	14	390	
	Cx. territans	8	54	
	Oc. canadensis	28	580	
	Oc. cantator	19	249	
	Oc. grossbecki	2	3	
	Oc. japonicus	21	112	
	Oc. sollicitans	13	356	
	Oc. sticticus	2	6	
	Oc. triseriatus	26	141	
	Oc. trivittatus	2	5	
	Ps. columbiae	1	1	
	Or. signifera	1	1	
	Ps. ferox	5	46	
	Oc. atlanticus	1	2	
Passaic		129	4427	4
	An. punctipennis	2	5	
	Cx. mix	79	3601	4
	Cx. pipiens	6	33	
	Cx. restuans	16	558	
	Cx. salinarius	1	1	
	Oc. canadensis	2	20	
	Oc. japonicus	16	184	
	Oc. sticticus	3	8	
	Oc. triseriatus	4	17	
Salem		328	5174	1
	Ae. albopictus	2	13	
	Ae. vexans	12	78	
	An. punctipennis	11	74	
	An. quadrimaculatus	18	92	

Cq. perturbans	7	9	
Cs. melanura	56	1358	1
Cx. erraticus	7	78	
Cx. mix	115	2264	
Cx. pipiens	16	320	
Cx. restuans	14	193	
Cx. salinarius	3	3	
Cx. territans	6	42	
Oc. canadensis	18	454	
Oc. cantator	18	110	
Oc. grossbecki	5	21	
Oc. japonicus	3	16	
Oc. sollicitans	1	1	
Oc. triseriatus	7	10	
Ps. columbiae	7	36	
Ps. ferox	1	1	
An. bradleyi	1	1	
Somerset	162	3636	6
Ae. cinereus	1	15	
Ae. vexans	4	38	
An. punctipennis	5	37	
An. quadrimaculatus	3	4	
Cx. mix	90	2715	2
Cx. pipiens	4	84	1
Cx. restuans	10	315	3
Cx. salinarius	2	55	
Cx. territans	2	14	
Oc. canadensis	2	4	
Oc. japonicus	19	99	
Oc. triseriatus	7	9	
Oc. trivittatus	9	234	
Ps. ferox	3	12	
Ps. howardii	1	1	
Sussex	285	6903	1
Ae. cinereus	4	16	
Ae. vexans	13	468	
An. punctipennis	17	119	
An. quadrimaculatus	5	18	
Cq. perturbans	10	275	
Cs. melanura	1	3	
Cx. mix	103	3175	1
Cx. pipiens	1	1	
Cx. restuans	12	438	
Cx. salinarius	2	6	
Cx. territans	1	12	

	Oc. abserratus	1	3	
	Oc. aurifer	1	50	
	Oc. canadensis	11	285	
	Oc. excrucians	3	58	
	Oc. japonicus	32	339	
	Oc. sticticus	18	756	
	Oc. stimulans	10	174	
	Oc. triseriatus	23	83	
	Oc. trivittatus	16	621	
	Ps. ferox	1	3	
Union		81	2220	2
	Ae. vexans	2	7	
	Cx. mix	29	1081	2
	Cx. pipiens	4	19	
	Cx. restuans	9	172	
	Cx. salinarius	4	6	
	Oc. canadensis	21	910	
	Oc. japonicus	4	5	
	Oc. sollicitans	1	7	
	Oc. sticticus	2	4	
	Oc. triseriatus	3	4	
	Oc. trivittatus	2	5	
Warren		221	5274	7
	Ae. cinereus	1	1	
	Ae. vexans	14	153	1
	An. punctipennis	15	100	
	An. quadrimaculatus	7	21	
	An. walkeri	5	147	
	Cq. perturbans	1	1	
	Cx. mix	115	4411	4
	Cx. restuans	4	22	
	Oc. aurifer	4	106	
	Oc. canadensis	4	50	
	Oc. cantator	5	67	
	Oc. japonicus	18	65	
	Oc. sticticus	3	14	
	Oc. stimulans	7	63	1
	Oc. triseriatus	8	12	
	Oc. trivittatus	10	41	1
Grand Total		4791	108029	75