

VECTOR SURVEILLANCE SUMMARY SHEET

WEEK: 8

Culiseta melanura Monitor

July 19 - 25, 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.)	3.7	1.3	1,083	43	1	Waterford (Camden Co.)	0.5	0.5	923	36	0
Corbin City (Atlantic Co.)	1.1	0.8	401	30	0	Centerton (Salem Co.)	2.8	1.9	1,181	43	0
Dennisville (Cape May Co.)	4.6	0.4	1,018	42	0	Turkey Swamp (Monmouth Co.)	0.7	0.4	273	28	0

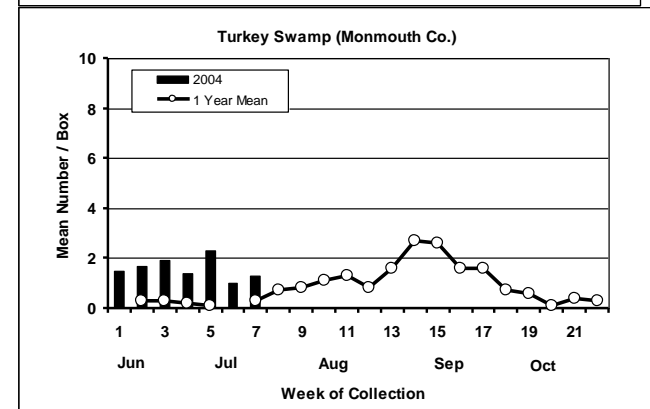
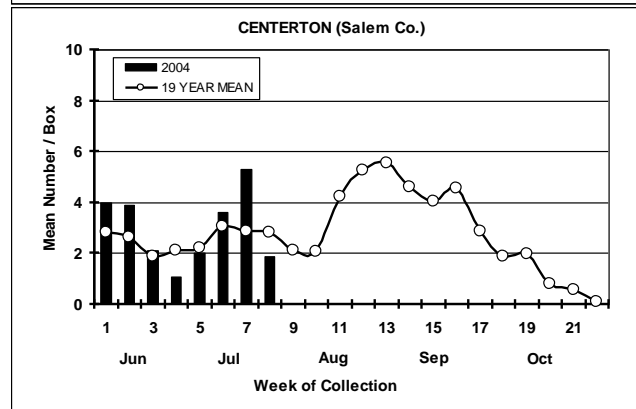
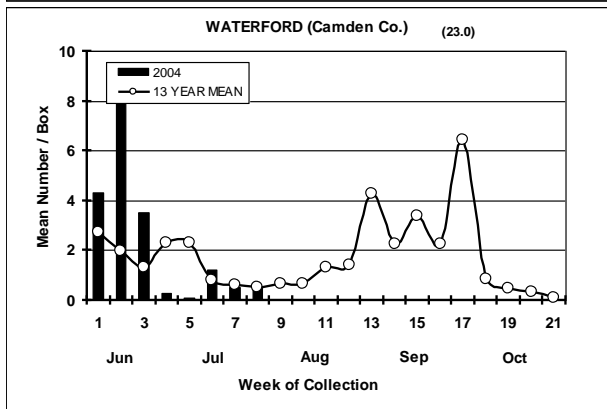
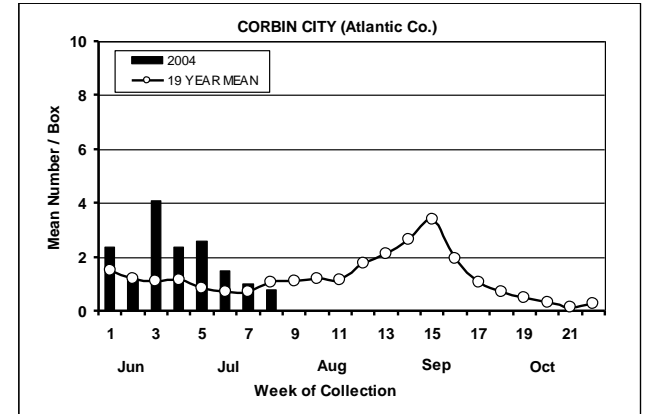
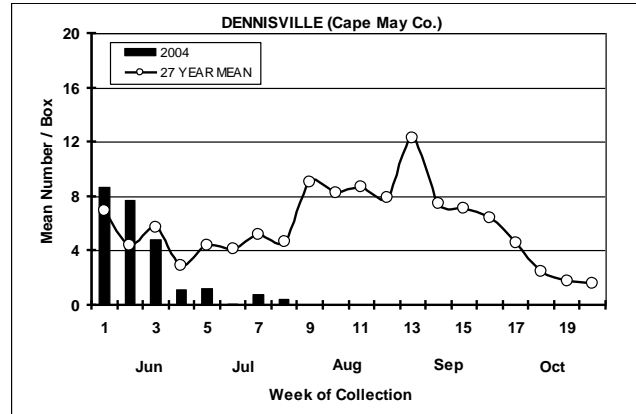
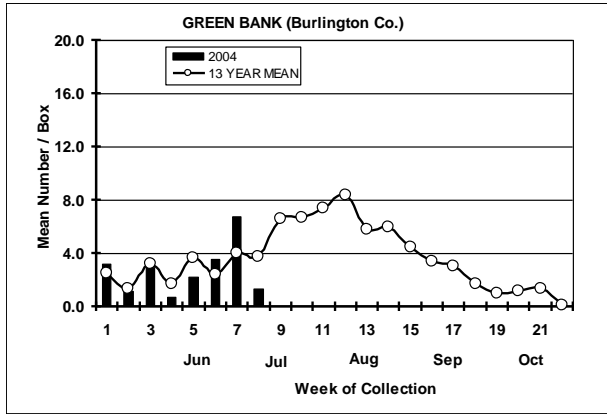
Collections submitted to PHEL for West Nile Virus testing

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	91	116	44	540	303	79	69	10	72	27	179	24	296	1,850
Total Specimens	1,409	2,236	459	19,740	5,966	997	1,102	124	371	505	1,359	103	4,053	38,424
No. Positive Pools	0	1	0	12	1	0	0	0	0	0	0	0	0	14

Remarks: EEE was detected in a pool of *Cs. melanura* collected from the Green Bank study site on July 12, 2004. The positive pool was obtained at a time when *Cs. melanura* populations peaked at that study site, supporting the hypothesis that an influx of newly emerged *Cs. melanura* contributes significantly to amplification of EEE in local bird populations. Mosquito control agencies should target mammalian biting mosquitoes as potential bridge vectors from this point on in the season and make sure that parity levels are kept at a minimum in biting populations of pest species. *Oc. sollicitans* and *Cq. perturbans* are recognized as the primary bridge vectors in our geographical area but virtually all mammalian biting mosquitoes have the potential of acquiring EEE during the amplification phase of the cycle. July 12 is early enough to allow the virus to spread widely before summer resident birds move southward. Hatch year birds typically disperse from their nest sites at this time of year providing a mechanism to spread EEE throughout the southern half of New Jersey. Amplification of WNV is also beginning to accelerate. WNV has been documented from 8 counties to date, but appears to be limited to bird feeding mosquitoes at this point in time. Recent flooding events in southern NJ will produce large numbers of floodwater mosquitoes to make contact with the amplification cycle over the next several weeks.

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Culiseta melanura Population Graphs



The positive pool of *Cs. melanura* from the Green Bank site was obtained from the Week 7 collection period. Historical data show that *Cs. melanura* populations normally begin to increase at this point in the season. Although EEE was detected on June 30 at the Green Bank site a year ago, this year's July 12 detection date is earlier than normal pointing toward another potentially active year.

Mosquito Species Submitted for West Nile Virus Testing through July 23, 2004

Species	Pools	Mosquitoes	Positives
Aedes albopictus	24	103	
Aedes cinereus	5	59	
Aedes vexans	79	997	
Anopheles barberi	3	4	
Anopheles bradleyi	8	10	
Anopheles punctipennis	66	395	
Anopheles quadrimaculatus	44	1272	
Anopheles walkeri	6	116	
Coquillettidia perturbans	58	871	
Culex erraticus	3	6	
Culex pipiens	91	1409	
Culex restuans	116	2236	1
Culex salinarius	44	459	
Culex spp.	540	19740	12
Culex territans	16	47	
Culiseta melanura	303	5966	1
Culiseta morsitans	1	1	
Ochlerotatus abserratus	1	9	
Ochlerotatus atropalpus	1	3	
Ochlerotatus canadensis	69	1102	
Ochlerotatus cantator	34	948	
Ochlerotatus excrucians	2	3	
Ochlerotatus grossbecki	6	18	
Ochlerotatus japonicus	179	1359	
Ochlerotatus mitchellae	1	1	
Ochlerotatus punctor	1	4	
Ochlerotatus sollicitans	27	505	
Ochlerotatus sticticus	4	58	
Ochlerotatus stimulans	5	30	
Ochlerotatus taeniorhynchus	7	111	
Ochlerotatus thibaulti	1	1	
Ochlerotatus triseriatus	72	371	
Ochlerotatus trivittatus	10	124	
Orthopodomyia signifera	3	7	
Psorophora ciliata	1	1	
Psorophora columbiae	9	16	
Psorophora ferox	2	2	
Psorophora howardii	2	8	
Uranotaenia sapphirina	6	52	
Grand Total	1850	38424	14

Submissions by County through July 23, 2004

County	Species	Pools	Mosquitoes	Positives
Atlantic		220	5354	2
	Aedes albopictus	6	22	
	Aedes cinereus	1	35	
	Aedes vexans	15	363	
	Anopheles bradleyi	4	6	
	Anopheles punctipennis	2	5	
	Anopheles quadrimaculatus	2	4	
	Coquillettidia perturbans	6	60	
	Culex erraticus	1	3	
	Culex pipiens	7	191	
	Culex restuans	10	120	
	Culex salinarius	4	41	
	Culex spp.	55	2229	2
	Culex territans	1	1	
	Culiseta melanura	45	900	
	Ochlerotatus canadensis	14	322	
	Ochlerotatus cantator	20	788	
	Ochlerotatus japonicus	7	28	
	Ochlerotatus sollicitans	6	118	
	Ochlerotatus taeniorhynchus	4	22	
	Ochlerotatus triseriatus	8	91	
	Ochlerotatus trivittatus	1	1	
	Orthopodomyia signifera	1	4	
Bergen		45	2170	2
	Culex spp.	42	2085	2
	Ochlerotatus japonicus	2	66	
	Ochlerotatus triseriatus	1	19	
Burlington		117	1645	1
	Aedes albopictus	3	8	
	Aedes cinereus	1	3	
	Aedes vexans	7	107	
	Anopheles punctipennis	5	20	
	Anopheles quadrimaculatus	3	20	
	Coquillettidia perturbans	5	31	
	Culex erraticus	1	2	
	Culex pipiens	2	21	
	Culex restuans	1	11	
	Culex salinarius	1	1	
	Culex spp.	13	205	
	Culex territans	2	8	

	Culiseta melanura	47	1108	1
	Ochlerotatus abserratus	1	9	
	Ochlerotatus atropalpus	1	3	
	Ochlerotatus canadensis	3	16	
	Ochlerotatus grossbecki	1	6	
	Ochlerotatus japonicus	8	25	
	Ochlerotatus mitchellae	1	1	
	Ochlerotatus sticticus	1	6	
	Ochlerotatus stimulans	1	4	
	Ochlerotatus triseriatus	3	11	
	Ochlerotatus trivittatus	1	1	
	Orthopodomyia signifera	1	2	
	Psorophora ciliata	1	1	
	Psorophora columbiae	1	2	
	Psorophora howardii	1	7	
	Uranotaenia sapphirina	1	6	
Camden		48	1003	0
	Aedes albopictus	2	25	
	Anopheles punctipennis	6	34	
	Anopheles quadrimaculatus	2	3	
	Culex restuans	1	2	
	Culex spp.	1	16	
	Culiseta melanura	36	923	
Cape May		176	3400	1
	Aedes albopictus	1	2	
	Aedes vexans	1	6	
	Anopheles bradleyi	2	2	
	Anopheles punctipennis	2	3	
	Anopheles quadrimaculatus	20	1166	
	Coquillettidia perturbans	3	82	
	Culex pipiens	32	441	
	Culex restuans	30	204	1
	Culex salinarius	7	158	
	Culex territans	4	19	
	Culiseta melanura	58	1155	
	Ochlerotatus cantator	4	17	
	Ochlerotatus japonicus	4	12	
	Ochlerotatus sollicitans	3	39	
	Ochlerotatus taeniorhynchus	3	89	
	Ochlerotatus triseriatus	2	5	

Cumberland	77	307	0
Aedes vexans	14	40	
Anopheles punctipennis	1	2	
Culex pipiens	8	44	
Culex restuans	6	28	
Culex salinarius	8	86	
Culex spp.	4	10	
Culiseta melanura	4	6	
Ochlerotatus canadensis	13	45	
Ochlerotatus cantator	4	4	
Ochlerotatus japonicus	7	27	
Ochlerotatus triseriatus	2	3	
Ochlerotatus trivittatus	1	1	
Psorophora columbiae	5	11	
Essex	57	599	0
Aedes albopictus	2	3	
Aedes vexans	4	9	
Anopheles punctipennis	1	1	
Coquillettia perturbans	6	59	
Culex spp.	30	455	
Ochlerotatus canadensis	1	4	
Ochlerotatus japonicus	6	39	
Ochlerotatus sticticus	1	9	
Ochlerotatus triseriatus	4	7	
Ochlerotatus trivittatus	1	12	
Psorophora ferox	1	1	
Gloucester	70	1910	5
Aedes albopictus	1	1	
Aedes vexans	2	7	
Culex pipiens	5	224	
Culex restuans	1	37	
Culex salinarius	1	20	
Culex spp.	43	1545	5
Ochlerotatus japonicus	13	71	
Ochlerotatus triseriatus	3	4	
Psorophora ferox	1	1	
Hudson	32	1033	0
Culex spp.	32	1033	
Hunterdon	65	2721	0
Culex spp.	60	2692	
Ochlerotatus japonicus	5	29	

Mercer	109	2305	1
Aedes albopictus	3	5	
Aedes vexans	6	185	
Anopheles punctipennis	6	61	
Anopheles quadrimaculatus	1	3	
Coquillettidia perturbans	3	30	
Culex pipiens	16	194	
Culex restuans	20	555	
Culex salinarius	2	6	
Culex spp.	17	751	1
Culiseta melanura	1	2	
Ochlerotatus canadensis	8	354	
Ochlerotatus excrucians	2	3	
Ochlerotatus japonicus	12	53	
Ochlerotatus sticticus	1	40	
Ochlerotatus triseriatus	6	13	
Ochlerotatus trivittatus	2	7	
Psorophora howardii	1	1	
Uranotaenia sapphirina	2	42	
Monmouth	157	1421	0
Aedes albopictus	2	2	
Aedes vexans	9	92	
Anopheles barberi	1	1	
Anopheles punctipennis	8	50	
Anopheles quadrimaculatus	4	11	
Coquillettidia perturbans	7	16	
Culex pipiens	8	157	
Culex restuans	11	200	
Culex salinarius	5	58	
Culex spp.	19	131	
Culex territans	1	1	
Culiseta melanura	36	282	
Ochlerotatus canadensis	9	85	
Ochlerotatus cantator	2	9	
Ochlerotatus grossbecki	1	2	
Ochlerotatus japonicus	17	125	
Ochlerotatus sollicitans	4	92	
Ochlerotatus sticticus	1	3	
Ochlerotatus triseriatus	11	103	
Psorophora columbiae	1	1	
Morris	83	3488	1
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.	57	3354	1
	Ochlerotatus canadensis	1	11	
	Ochlerotatus japonicus	11	57	
	Ochlerotatus triseriatus	4	13	
Ocean		167	2129	0
	Aedes albopictus	4	35	
	Aedes vexans	10	123	
	Anopheles punctipennis	7	60	
	Anopheles quadrimaculatus	3	3	
	Coquillettidia perturbans	9	235	
	Culex pipiens	7	86	
	Culex restuans	8	123	
	Culex salinarius	13	85	
	Culex spp.	23	391	
	Culex territans	2	5	
	Culiseta melanura	29	404	
	Ochlerotatus canadensis	9	184	
	Ochlerotatus cantator	1	50	
	Ochlerotatus grossbecki	4	10	
	Ochlerotatus japonicus	13	56	
	Ochlerotatus sollicitans	14	256	
	Ochlerotatus thibaulti	1	1	
	Ochlerotatus triseriatus	7	19	
	Ochlerotatus trivittatus	1	1	
	Orthopodomyia signifera	1	1	
	Uranotaenia sapphirina	1	1	
Passaic		26	633	1
	Anopheles punctipennis	2	4	
	Culex spp.	13	493	1
	Ochlerotatus japonicus	10	127	
	Ochlerotatus triseriatus	1	9	
Salem		102	2109	0
	Aedes vexans	1	2	
	Anopheles bradleyi	2	2	
	Anopheles punctipennis	7	36	
	Anopheles quadrimaculatus	6	45	
	Anopheles walkeri	2	14	
	Coquillettidia perturbans	3	5	
	Culex erraticus	1	1	
	Culex restuans	14	592	

	Culex spp.	11	104	
	Culex territans	2	4	
	Culiseta melanura	43	1181	
	Ochlerotatus cantator	2	30	
	Ochlerotatus japonicus	6	91	
	Psorophora columbiae	2	2	
Somerset		87	1811	0
	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.	37	1201	
	Culiseta melanura	1	1	
	Ochlerotatus canadensis	4	54	
	Ochlerotatus japonicus	19	222	
	Ochlerotatus triseriatus	8	28	
Sussex		109	1362	0
	Aedes cinereus	2	11	
	Aedes vexans	4	33	
	Anopheles barberi	1	1	
	Anopheles punctipennis	10	103	
	Anopheles quadrimaculatus	3	17	
	Anopheles walkeri	4	102	
	Coquillettidia perturbans	11	317	
	Culex pipiens	2	2	
	Culex restuans	7	141	
	Culex salinarius	2	2	
	Culex spp.	14	281	
	Culex territans	4	9	
	Culiseta melanura	3	4	
	Culiseta morsitans	1	1	
	Ochlerotatus canadensis	7	27	
	Ochlerotatus japonicus	19	144	
	Ochlerotatus stimulans	4	26	
	Ochlerotatus triseriatus	7	38	
	Ochlerotatus trivittatus	2	100	
	Uranotaenia sapphirina	2	3	
Union		10	361	0
	Culex spp.	8	359	
	Ochlerotatus japonicus	1	1	
	Ochlerotatus trivittatus	1	1	

Warren	93	2663	0
Aedes vexans	2	5	
Anopheles barberi	1	2	
Anopheles punctipennis	3	3	
Culex spp.	61	2405	
Ochlerotatus cantator	1	50	
Ochlerotatus japonicus	19	186	
Ochlerotatus punctor	1	4	
Ochlerotatus triseriatus	5	8	
Grand Total	1850	38424	14