

VECTOR SURVEILLANCE SUMMARY SHEET

WEEK: 19
(Preliminary Season Summation)

Culiseta melanura Monitor
October 7 - 13, 2006

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.)	1.0	0.7	733	65	1	Waterford (Camden Co.)	0.6	0.1	186	33	0
Corbin City (Atlantic Co.)	0.6	0.2	395	65	0	Centerton (Salem Co.)	1.9	<0.1	960	66	0
Dennisville (Cape May Co.)	1.6	NC	1916	80	0	Turkey Swamp (Monmouth Co.)	0.4	<0.1	497	63	0

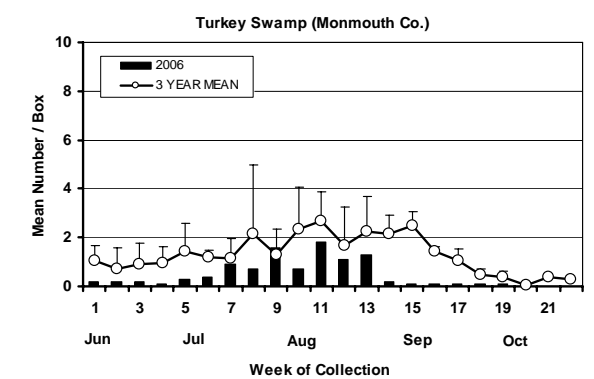
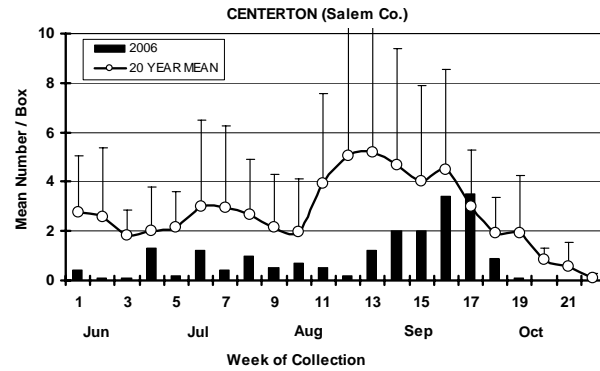
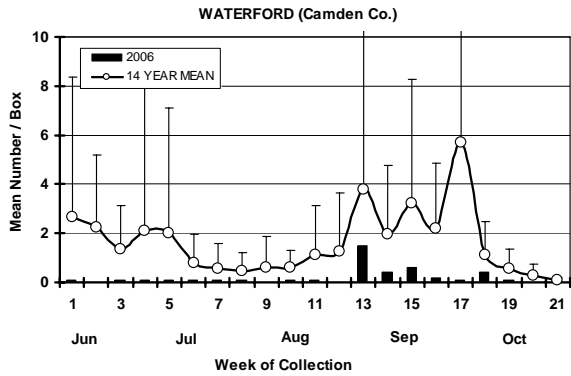
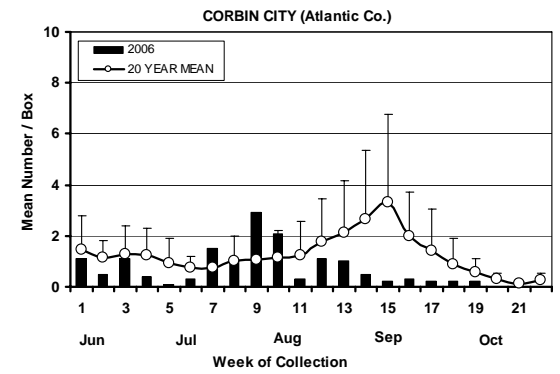
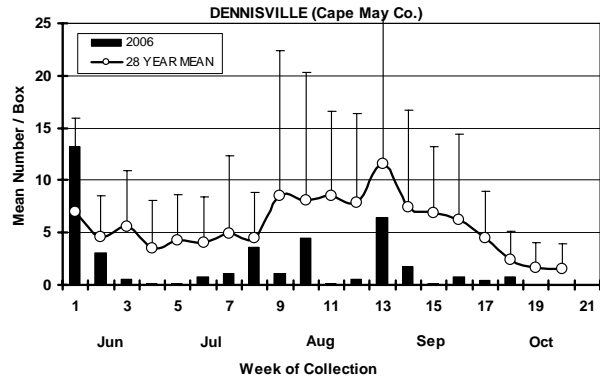
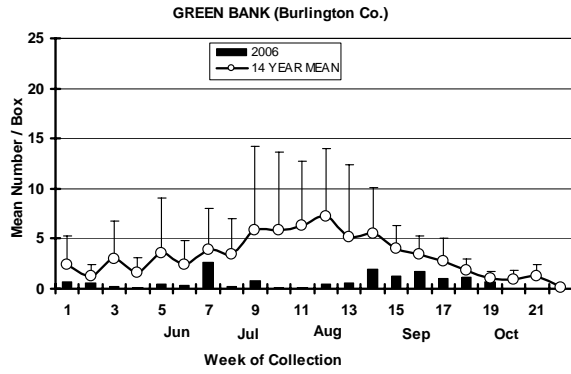
Collections submitted to PHEL for West Nile Virus testing

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	380	154	161	1,910	388	205	33	87	149	34	320	410	650	4,881
Total Specimens	9,996	2,616	5,828	72,400	4,814	4,732	353	1,954	494	542	1,402	3,194	7,804	116,129
No. Positive Pools	56	8	0	181	1	0	0	0	0	0	0	2		248
MIR Values	5.60	3.06	-	2.50	0.21	-	-	-	-	-	-	0.63		2.13

Remarks: After an initial early season influx of *Culiseta melanura* at some of the New Jersey study sites, population levels declined steadily during the month of June. The mid-summer peak normally produced by emergence of second generation females was staggered this year and resting box collections at most sites remained well below long-term means in July and August. Although EEE reached epidemic proportions in New England, ongoing virus surveillance indicated low level amplification in New Jersey. The only pool of *Cs. melanura* that tested positive for EEE was collected from Green Bank at the very end of August. An equine case was confirmed less than 10 mi. from the Green Bank study site one week after the positive pool was collected suggesting that EEE was extremely focal in New Jersey this year. WNV was first detected in pools of mixed *Culex* spp. collected from Bergen, Burlington and Hudson counties during the 2nd week of July and was eventually documented from 19 of NJ's 21 counties. Infection rates in the amplification vectors peaked during August. Five human cases and a single equine case have been confirmed to date. *Ae. albopictus* was the only mammal biter that tested positive during the season.

New Jersey Agricultural Experiment Station Publication No. PT-08-40500-19-06
Supported by State funds and funding by the NJ State Mosquito Control Commission.

Culiseta melanura Population Graphs



Mosquito Species Submitted for West Nile Virus Testing through October 13, 2006

Species	Pools	Mosquitoes	Positives
<i>Aedes albopictus</i>	410	3194	2
<i>Aedes cinereus</i>	1	1	
<i>Aedes vexans</i>	205	4732	
<i>Anopheles barberi</i>	4	4	
<i>Anopheles bradleyi</i>	55	518	
<i>Anopheles crucians</i>	1	1	
<i>Anopheles punctipennis</i>	86	343	
<i>Anopheles quadrimaculatus</i>	109	2900	
<i>Anopheles walkeri</i>	4	29	
<i>Coquillettidia perturbans</i>	59	246	
<i>Culex erraticus</i>	92	1057	
<i>Culex pipiens</i>	380	9996	56
<i>Culex restuans</i>	154	2616	8
<i>Culex salinarius</i>	161	5828	
<i>Culex spp.</i>	1910	72400	181
<i>Culex territans</i>	35	95	
<i>Culiseta melanura</i>	388	4814	1
<i>Ochlerotatus atlanticus</i>	33	325	
<i>Ochlerotatus atropalpus</i>	1	2	
<i>Ochlerotatus canadensis</i>	33	353	
<i>Ochlerotatus cantator</i>	18	233	
<i>Ochlerotatus japonicus</i>	320	1402	
<i>Ochlerotatus punctor</i>	1	1	
<i>Ochlerotatus sollicitans</i>	34	542	
<i>Ochlerotatus sticticus</i>	16	226	
<i>Ochlerotatus stimulans</i>	3	3	
<i>Ochlerotatus taeniorhynchus</i>	21	176	
<i>Ochlerotatus triseriatus</i>	149	494	
<i>Ochlerotatus trivittatus</i>	87	1954	
<i>Orthopodomyia signifera</i>	3	7	
<i>Psorophora ciliata</i>	5	15	
<i>Psorophora columbiae</i>	33	444	
<i>Psorophora ferox</i>	50	707	
<i>Psorophora howardii</i>	2	5	
<i>Uranotaenia sapphirina</i>	18	466	
Grand Total	4881	116129	248

Submission by County through October 13, 2006

County	Species	Pools	Mosquitoes	Positives
Atlantic		285	5502	0
	Aedes albopictus	22	244	
	Aedes vexans	26	769	
	Anopheles bradleyi	9	143	
	Anopheles punctipennis	3	7	
	Coquillettidia perturbans	5	35	
	Culex erraticus	16	596	
	Culex restuans	3	10	
	Culex salinarius	14	361	
	Culex spp.	54	1900	
	Culex territans	5	7	
	Culiseta melanura	67	417	
	Ochlerotatus atlanticus	8	138	
	Ochlerotatus canadensis	9	111	
	Ochlerotatus cantator	8	215	
	Ochlerotatus japonicus	5	11	
	Ochlerotatus sollicitans	11	283	
	Ochlerotatus sticticus	1	2	
	Ochlerotatus taeniorhynchus	6	71	
	Ochlerotatus triseriatus	5	15	
	Ochlerotatus trivittatus	2	3	
	Psorophora columbiae	1	50	
	Psorophora ferox	4	111	
	Psorophora howardii	1	3	
Bergen		483	24719	62
	Aedes albopictus	33	331	1
	Aedes cinereus	1	1	
	Aedes vexans	46	2214	
	Anopheles punctipennis	7	14	
	Anopheles quadrimaculatus	2	2	
	Coquillettidia perturbans	8	15	
	Culex erraticus	1	2	
	Culex pipiens	74	3911	22
	Culex restuans	24	634	5
	Culex salinarius	77	4571	
	Culex spp.	175	12706	34
	Culex territans	1	1	
	Ochlerotatus canadensis	1	2	
	Ochlerotatus cantator	1	6	
	Ochlerotatus japonicus	2	3	
	Ochlerotatus sollicitans	2	3	
	Ochlerotatus sticticus	2	10	
	Ochlerotatus triseriatus	4	14	
	Ochlerotatus trivittatus	6	11	

	<i>Orthopodomyia signifera</i>	2	4	
	<i>Psorophora columbiae</i>	10	211	
	<i>Psorophora ferox</i>	3	51	
	<i>Uranotaenia sapphirina</i>	1	2	
Burlington		219	1574	2
	<i>Aedes albopictus</i>	29	202	
	<i>Aedes vexans</i>	9	49	
	<i>Anopheles barberi</i>	1	1	
	<i>Anopheles bradleyi</i>	8	98	
	<i>Anopheles crucians</i>	1	1	
	<i>Anopheles punctipennis</i>	3	5	
	<i>Anopheles quadrimaculatus</i>	6	8	
	<i>Coquillettidia perturbans</i>	4	7	
	<i>Culex erraticus</i>	10	37	
	<i>Culex pipiens</i>	5	13	
	<i>Culex restuans</i>	1	2	
	<i>Culex salinarius</i>	3	13	
	<i>Culex</i> spp.	21	192	2
	<i>Culex territans</i>	2	4	
	<i>Culiseta melanura</i>	68	770	
	<i>Ochlerotatus atlanticus</i>	5	11	
	<i>Ochlerotatus canadensis</i>	8	34	
	<i>Ochlerotatus cantator</i>	3	6	
	<i>Ochlerotatus japonicus</i>	7	29	
	<i>Ochlerotatus sollicitans</i>	4	9	
	<i>Ochlerotatus sticticus</i>	1	3	
	<i>Ochlerotatus stimulans</i>	2	2	
	<i>Ochlerotatus taeniorhynchus</i>	2	7	
	<i>Ochlerotatus triseriatus</i>	3	3	
	<i>Ochlerotatus trivittatus</i>	3	8	
	<i>Orthopodomyia signifera</i>	1	3	
	<i>Psorophora ciliata</i>	1	9	
	<i>Psorophora columbiae</i>	1	9	
	<i>Psorophora ferox</i>	5	10	
	<i>Psorophora howardii</i>	1	2	
	<i>Uranotaenia sapphirina</i>	1	27	
Camden		141	1865	3
	<i>Aedes albopictus</i>	18	63	
	<i>Aedes vexans</i>	5	70	
	<i>Anopheles punctipennis</i>	8	12	
	<i>Anopheles quadrimaculatus</i>	9	16	
	<i>Coquillettidia perturbans</i>	4	4	
	<i>Culex erraticus</i>	2	5	
	<i>Culex restuans</i>	2	2	
	<i>Culex</i> spp.	47	1486	3

	<i>Culex territans</i>	1	1	
	<i>Culiseta melanura</i>	30	168	
	<i>Ochlerotatus japonicus</i>	8	13	
	<i>Ochlerotatus triseriatus</i>	1	5	
	<i>Ochlerotatus trivittatus</i>	3	7	
	<i>Psorophora ferox</i>	2	12	
	<i>Uranotaenia sapphirina</i>	1	1	
Cape May		233	5352	1
	<i>Aedes albopictus</i>	16	110	
	<i>Aedes vexans</i>	1	8	
	<i>Anopheles bradleyi</i>	17	207	
	<i>Anopheles punctipennis</i>	2	3	
	<i>Anopheles quadrimaculatus</i>	50	2536	
	<i>Coquillettidia perturbans</i>	2	15	
	<i>Culex erraticus</i>	14	218	
	<i>Culex pipiens</i>	9	55	
	<i>Culex restuans</i>	20	118	
	<i>Culex salinarius</i>	7	30	
	<i>Culex spp.</i>	3	9	
	<i>Culex territans</i>	1	4	
	<i>Culiseta melanura</i>	87	2035	1
	<i>Ochlerotatus atlanticus</i>	1	1	
	<i>Ochlerotatus cantator</i>	2	2	
	<i>Psorophora ferox</i>	1	1	
Cumberland		139	911	0
	<i>Aedes albopictus</i>	3	3	
	<i>Aedes vexans</i>	9	19	
	<i>Anopheles bradleyi</i>	13	48	
	<i>Anopheles quadrimaculatus</i>	3	4	
	<i>Coquillettidia perturbans</i>	9	16	
	<i>Culex erraticus</i>	19	50	
	<i>Culex spp.</i>	46	517	
	<i>Ochlerotatus atlanticus</i>	16	161	
	<i>Ochlerotatus canadensis</i>	1	1	
	<i>Ochlerotatus sollicitans</i>	3	5	
	<i>Ochlerotatus taeniorhynchus</i>	9	59	
	<i>Ochlerotatus triseriatus</i>	1	1	
	<i>Psorophora ciliata</i>	1	1	
	<i>Psorophora ferox</i>	6	26	
Essex		100	1870	6
	<i>Aedes albopictus</i>	12	50	
	<i>Aedes vexans</i>	9	72	
	<i>Anopheles punctipennis</i>	2	2	
	<i>Anopheles quadrimaculatus</i>	1	1	

	Coquillettidia perturbans	1	4	
	Culex spp.	49	1500	6
	Culiseta melanura	1	2	
	Ochlerotatus japonicus	11	70	
	Ochlerotatus sollicitans	1	1	
	Ochlerotatus sticticus	3	19	
	Ochlerotatus triseriatus	3	4	
	Ochlerotatus trivittatus	1	3	
	Psorophora ferox	5	141	
	Uranotaenia sapphirina	1	1	
Gloucester		244	2661	2
	Aedes albopictus	18	50	
	Aedes vexans	1	2	
	Anopheles bradleyi	2	10	
	Anopheles punctipennis	1	1	
	Anopheles quadrimaculatus	2	3	
	Anopheles walkeri	2	9	
	Coquillettidia perturbans	4	14	
	Culex pipiens	179	2506	2
	Culex restuans	1	2	
	Culex salinarius	1	2	
	Culex territans	1	1	
	Culiseta melanura	2	3	
	Ochlerotatus canadensis	2	4	
	Ochlerotatus japonicus	23	32	
	Ochlerotatus triseriatus	2	4	
	Psorophora ciliata	1	1	
	Psorophora columbiae	1	16	
	Psorophora ferox	1	1	
Hudson		282	10301	48
	Aedes albopictus	14	134	
	Aedes vexans	3	9	
	Coquillettidia perturbans	2	20	
	Culex pipiens	22	1263	8
	Culex restuans	1	4	
	Culex salinarius	9	405	
	Culex spp.	231	8466	40
Hunterdon		261	8941	14
	Aedes albopictus	1	2	
	Aedes vexans	3	34	
	Anopheles barberi	1	1	
	Anopheles punctipennis	9	108	
	Anopheles quadrimaculatus	4	13	
	Culex erraticus	1	1	

	Culex pipiens	4	42	
	Culex restuans	14	476	1
	Culex salinarius	3	3	
	Culex spp.	194	8125	13
	Culex territans	2	2	
	Ochlerotatus japonicus	11	79	
	Ochlerotatus sticticus	1	1	
	Ochlerotatus triseriatus	4	4	
	Ochlerotatus trivittatus	6	38	
	Psorophora columbiae	1	10	
	Uranotaenia sapphirina	2	2	
Mercer		358	5478	35
	Aedes albopictus	93	556	1
	Aedes vexans	14	160	
	Anopheles bradleyi	1	2	
	Anopheles punctipennis	3	5	
	Anopheles quadrimaculatus	2	10	
	Coquillettidia perturbans	2	3	
	Culex erraticus	8	60	
	Culex pipiens	61	1811	23
	Culex restuans	39	722	2
	Culex salinarius	9	76	
	Culex spp.	42	1531	9
	Culex territans	2	2	
	Culiseta melanura	1	1	
	Ochlerotatus atropalpus	1	2	
	Ochlerotatus canadensis	6	155	
	Ochlerotatus japonicus	30	56	
	Ochlerotatus sticticus	1	3	
	Ochlerotatus triseriatus	17	38	
	Ochlerotatus trivittatus	8	28	
	Psorophora columbiae	8	43	
	Psorophora ferox	7	14	
	Uranotaenia sapphirina	3	200	
Middlesex		239	8123	23
	Aedes albopictus	22	216	
	Anopheles punctipennis	1	1	
	Culex pipiens	1	1	
	Culex restuans	1	2	
	Culex spp.	196	7819	23
	Ochlerotatus japonicus	18	84	
Monmouth		330	2563	2
	Aedes albopictus	46	214	
	Aedes vexans	20	81	

Anopheles punctipennis	12	24	
Anopheles quadrimaculatus	7	9	
Coquillettidia perturbans	2	3	
Culex erraticus	2	6	
Culex pipiens	1	1	
Culex restuans	7	17	
Culex spp.	87	1193	2
Culex territans	11	57	
Culiseta melanura	62	495	
Ochlerotatus atlanticus	2	13	
Ochlerotatus canadensis	4	11	
Ochlerotatus cantator	2	2	
Ochlerotatus japonicus	19	110	
Ochlerotatus sollicitans	12	237	
Ochlerotatus taeniorhynchus	4	39	
Ochlerotatus triseriatus	18	34	
Ochlerotatus trivittatus	6	8	
Psorophora columbiae	2	2	
Psorophora ferox	4	7	
Morris	168	2656	5
Anopheles punctipennis	2	3	
Coquillettidia perturbans	1	1	
Culex restuans	1	13	
Culex spp.	105	2306	5
Ochlerotatus japonicus	32	204	
Ochlerotatus stimulans	1	1	
Ochlerotatus triseriatus	24	123	
Ochlerotatus trivittatus	1	1	
Uranotaenia sapphirina	1	4	
Ocean	195	1928	1
Aedes albopictus	61	927	
Aedes vexans	6	74	
Coquillettidia perturbans	1	1	
Culex erraticus	1	1	
Culex restuans	9	18	
Culex salinarius	18	127	
Culex spp.	59	593	1
Culex territans	2	5	
Culiseta melanura	6	7	
Ochlerotatus canadensis	2	35	
Ochlerotatus japonicus	13	50	
Ochlerotatus sollicitans	1	4	
Ochlerotatus triseriatus	11	38	
Ochlerotatus trivittatus	1	2	
Psorophora ferox	4	46	

Passaic	111	3392	13
Aedes albopictus	2	16	
Aedes vexans	1	4	
Culex spp.	103	3263	13
Ochlerotatus japonicus	4	91	
Ochlerotatus trivittatus	1	18	
Salem	210	2055	1
Aedes albopictus	6	33	
Aedes vexans	8	28	
Anopheles bradleyi	5	10	
Anopheles punctipennis	12	99	
Anopheles quadrimaculatus	16	280	
Coquillettidia perturbans	6	10	
Culex erraticus	17	80	
Culex pipiens	3	7	
Culex restuans	17	165	
Culex salinarius	5	30	
Culex spp.	34	373	1
Culex territans	6	10	
Culiseta melanura	64	916	
Ochlerotatus atlanticus	1	1	
Ochlerotatus cantator	1	1	
Ochlerotatus japonicus	1	1	
Ochlerotatus triseriatus	3	3	
Psorophora columbiae	5	8	
Somerset	175	4257	7
Aedes albopictus	2	2	
Anopheles barberi	1	1	
Anopheles punctipennis	4	6	
Anopheles quadrimaculatus	2	5	
Culex spp.	110	3791	7
Ochlerotatus japonicus	33	169	
Ochlerotatus triseriatus	16	80	
Ochlerotatus trivittatus	5	136	
Psorophora ferox	2	67	
Sussex	313	10665	2
Aedes vexans	23	806	
Anopheles barberi	1	1	
Anopheles punctipennis	9	34	
Anopheles quadrimaculatus	2	7	
Anopheles walkeri	1	11	
Coquillettidia perturbans	8	98	
Culex pipiens	6	18	

	Culex restuans	11	352	
	Culex salinarius	10	163	
	Culex spp.	136	7118	2
	Culex territans	1	1	
	Ochlerotatus japonicus	43	194	
	Ochlerotatus sticticus	7	188	
	Ochlerotatus triseriatus	19	84	
	Ochlerotatus trivittatus	25	1144	
	Psorophora ferox	5	219	
	Uranotaenia sapphirina	6	227	
Union		81	2041	17
	Aedes albopictus	12	41	
	Anopheles punctipennis	1	1	
	Anopheles quadrimaculatus	1	4	
	Culex spp.	54	1960	17
	Ochlerotatus japonicus	9	25	
	Ochlerotatus punctor	1	1	
	Ochlerotatus triseriatus	3	9	
Warren		314	9275	4
	Aedes vexans	21	333	
	Anopheles punctipennis	7	18	
	Anopheles quadrimaculatus	2	2	
	Anopheles walkeri	1	9	
	Culex erraticus	1	1	
	Culex pipiens	15	368	1
	Culex restuans	3	79	
	Culex salinarius	5	47	
	Culex spp.	164	7552	3
	Ochlerotatus cantator	1	1	
	Ochlerotatus japonicus	51	181	
	Ochlerotatus triseriatus	15	35	
	Ochlerotatus trivittatus	19	547	
	Psorophora ciliata	2	4	
	Psorophora columbiae	4	95	
	Psorophora ferox	1	1	
	Uranotaenia sapphirina	2	2	
Grand Total		4881	116129	248