

VECTOR SURVEILLANCE SUMMARY SHEET

FINAL SEASON SUMMATION

Culiseta melanura Monitor 2006 Season

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.)			733	65	1	Waterford (Camden Co.)			186	33	0
Corbin City (Atlantic Co.)			395	65	0	Centerton (Salem Co.)			960	66	0
Dennisville (Cape May Co.)			1916	80	0	Turkey Swamp (Monmouth Co.)			497	63	0

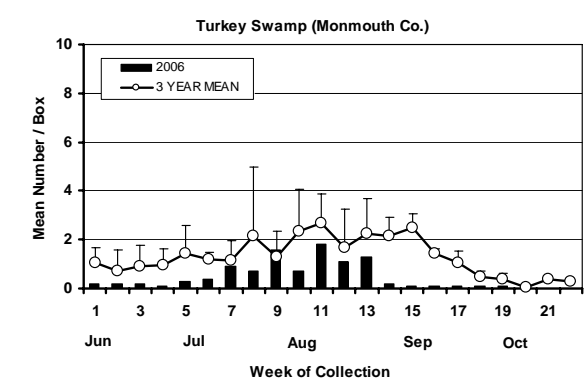
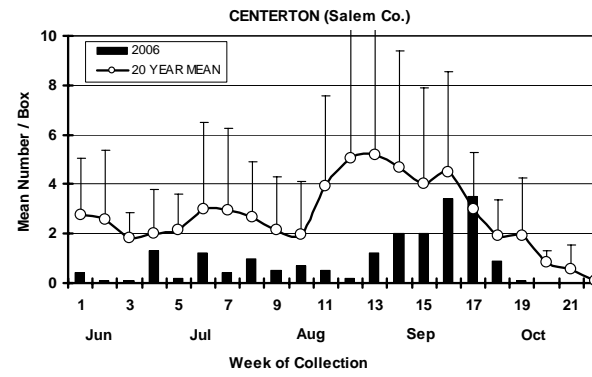
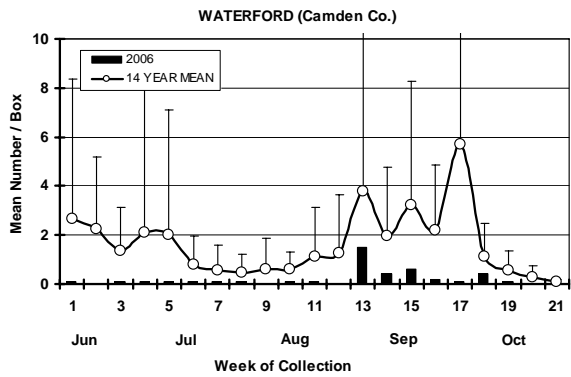
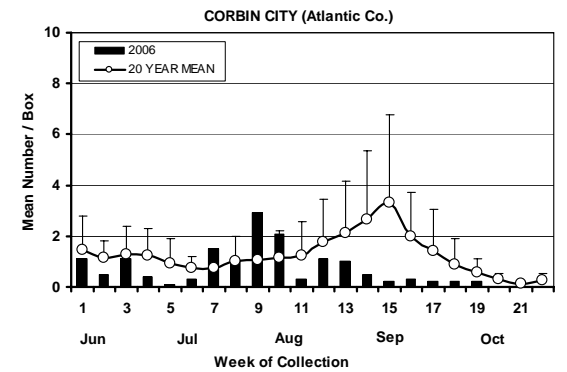
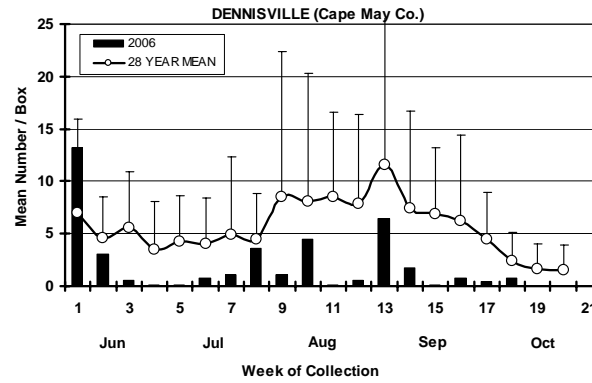
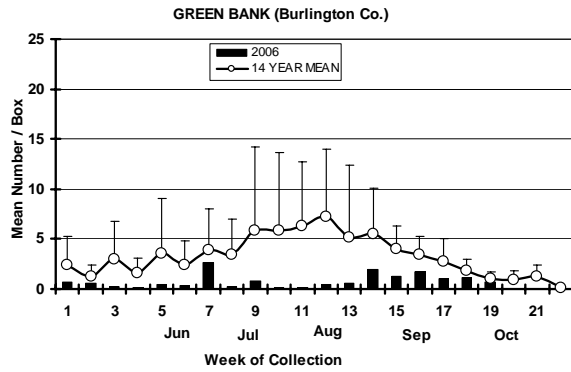
Collections submitted to PHEL for West Nile Virus testing

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	402	171	173	1,994	407	239	35	114	157	37	354	416	730	5,229
Total Specimens	10,910	2,958	6,199	74,334	4,982	5,661	358	2,792	506	548	1,519	3,220	8,534	122,521
No. Positive Pools	56	8	0	184	1	0	0	0	0	0	0	2	0	252
Season MIR	5.13	2.70	0	2.50	0.20	0	0	0	0	0	0	0.62	0	2.06

Remarks: New Jersey's Vector Surveillance Program tested 4,687 *Cs. melanura* for EEE from resting box collections in 2006. An additional 295 specimens were processed for EEE from WNV collections. A single pool collected from the Green Bank resting box site on August 29 tested positive for EEE. An equine case was confirmed in a 6 yr-old mare stabled less than 10 mi. from the study site 8 days later (onset of symptoms Sept. 6). Despite epidemic activity in New England, no further evidence of EEE was documented in New Jersey during the 2006 season. New Jersey's cooperative program tested 122,521 mosquitoes for WNV in 5,229 pools and obtained 252 positives. Of that total, 250 positives (99.2%) were obtained from bird feeding mosquitoes. Five human cases (Bergen, Essex, Mercer & Union Co.) and one equine case (Middlesex Co.) were confirmed during the season. *Aedes albopictus* was the only mammalian feeding bridge vector that tested positive for WNV in 2006.

New Jersey Agricultural Experiment Station Publication No. PT-08-40500-20-06 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 in 2006

Species	Pools	Mosquitoes	Positives
<i>Aedes albopictus</i>	416	3220	2
<i>Aedes cinereus</i>	3	3	
<i>Aedes vexans</i>	239	5661	
<i>Anopheles barberi</i>	4	4	
<i>Anopheles bradleyi</i>	61	572	
<i>Anopheles crucians</i>	1	1	
<i>Anopheles punctipennis</i>	101	370	
<i>Anopheles quadrimaculatus</i>	119	2987	
<i>Anopheles walkeri</i>	5	30	
<i>Coquillettidia perturbans</i>	61	254	
<i>Culex erraticus</i>	102	1098	
<i>Culex pipiens</i>	402	10910	56
<i>Culex restuans</i>	171	2958	8
<i>Culex salinarius</i>	173	6199	
<i>Culex spp.</i>	1994	74334	184
<i>Culex territans</i>	39	109	
<i>Culiseta melanura</i>	407	4982	1
<i>Ochlerotatus atlanticus</i>	37	374	
<i>Ochlerotatus atropalpus</i>	1	2	
<i>Ochlerotatus canadensis</i>	35	358	
<i>Ochlerotatus cantator</i>	19	265	
<i>Ochlerotatus japonicus</i>	354	1519	1
<i>Ochlerotatus punctor</i>	1	1	
<i>Ochlerotatus sollicitans</i>	37	548	
<i>Ochlerotatus sticticus</i>	28	581	
<i>Ochlerotatus stimulans</i>	3	3	
<i>Ochlerotatus taeniorhynchus</i>	21	176	
<i>Ochlerotatus triseriatus</i>	157	506	
<i>Ochlerotatus trivittatus</i>	114	2792	
<i>Orthopodomyia signifera</i>	3	7	
<i>Psorophora ciliata</i>	6	17	
<i>Psorophora columbiae</i>	33	444	
<i>Psorophora ferox</i>	59	762	
<i>Psorophora howardii</i>	2	5	
<i>Uranotaenia sapphirina</i>	21	469	
Grand Total	5229	122521	252

Submission by County in 2006

County	Species	Pools	Mosquitoes	Positives
Atlantic		293	5522	0
	Aedes albopictus	22	244	
	Aedes vexans	26	769	
	Anopheles bradleyi	9	143	
	Anopheles punctipennis	4	8	
	Anopheles quadrimaculatus	1	1	
	Coquillettidia perturbans	5	35	
	Culex erraticus	17	604	
	Culex restuans	4	13	
	Culex salinarius	14	361	
	Culex spp.	54	1900	
	Culex territans	6	10	
	Culiseta melanura	70	421	
	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		520	26349	62
	Aedes albopictus	36	339	1
	Aedes cinereus	1	1	
	Aedes vexans	49	2419	
	Anopheles bradleyi	1	1	
	Anopheles punctipennis	7	14	
	Anopheles quadrimaculatus	2	2	
	Coquillettidia perturbans	8	15	
	Culex erraticus	2	5	
	Culex pipiens	88	4791	22
	Culex restuans	30	944	5
	Culex salinarius	83	4790	
	Culex spp.	175	12706	34
	Culex territans	1	1	
	Ochlerotatus canadensis	2	4	
	Ochlerotatus cantator	1	6	
	Ochlerotatus japonicus	2	3	
	Ochlerotatus sollicitans	2	3	
	Ochlerotatus sticticus	2	10	

	Ochlerotatus triseriatus	4	14	
	Ochlerotatus trivittatus	7	12	
	Orthopodomyia signifera	2	4	
	Psorophora columbiae	10	211	
	Psorophora ferox	3	51	
	Uranotaenia sapphirina	2	3	
Burlington		224	1630	2
	Aedes albopictus	29	202	
	Aedes vexans	9	49	
	Anopheles barberi	1	1	
	Anopheles bradleyi	8	98	
	Anopheles crucians	1	1	
	Anopheles punctipennis	3	5	
	Anopheles quadrimaculatus	6	8	
	Coquillettidia perturbans	4	7	
	Culex erraticus	11	38	
	Culex pipiens	5	13	
	Culex restuans	1	2	
	Culex salinarius	3	13	
	Culex spp.	21	192	2
	Culex territans	2	4	
	Culiseta melanura	72	825	
	Ochlerotatus atlanticus	5	11	
	Ochlerotatus canadensis	8	34	
	Ochlerotatus cantator	3	6	
	Ochlerotatus japonicus	7	29	
	Ochlerotatus sollicitans	4	9	
	Ochlerotatus sticticus	1	3	
	Ochlerotatus stimulans	2	2	
	Ochlerotatus taeniorhynchus	2	7	
	Ochlerotatus triseriatus	3	3	
	Ochlerotatus trivittatus	3	8	
	Orthopodomyia signifera	1	3	
	Psorophora ciliata	1	9	
	Psorophora columbiae	1	9	
	Psorophora ferox	5	10	
	Psorophora howardii	1	2	
	Uranotaenia sapphirina	1	27	
Camden		149	1896	3
	Aedes albopictus	18	63	
	Aedes vexans	5	70	
	Anopheles punctipennis	9	14	
	Anopheles quadrimaculatus	10	19	
	Coquillettidia perturbans	4	4	
	Culex erraticus	3	6	

	<i>Culex restuans</i>	3	3	
	<i>Culex</i> spp.	47	1486	3
	<i>Culex territans</i>	2	7	
	<i>Culiseta melanura</i>	33	186	
	<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		242	5482	1
	<i>Aedes albopictus</i>	16	110	
	<i>Aedes vexans</i>	1	8	
	<i>Anopheles bradleyi</i>	19	243	
	<i>Anopheles punctipennis</i>	2	3	
	<i>Anopheles quadrimaculatus</i>	51	2574	
	<i>Coquillettidia perturbans</i>	2	15	
	<i>Culex erraticus</i>	15	230	
	<i>Culex pipiens</i>	9	55	
	<i>Culex restuans</i>	21	120	
	<i>Culex salinarius</i>	7	30	
	<i>Culex</i> spp.	3	9	
	<i>Culex territans</i>	1	4	
	<i>Culiseta melanura</i>	91	2077	1
	<i>Ochlerotatus atlanticus</i>	1	1	
	<i>Ochlerotatus cantator</i>	2	2	
	<i>Psorophora ferox</i>	1	1	
Cumberland		169	1056	0
	<i>Aedes albopictus</i>	4	4	
	<i>Aedes vexans</i>	16	63	
	<i>Anopheles bradleyi</i>	15	53	
	<i>Anopheles quadrimaculatus</i>	3	4	
	<i>Coquillettidia perturbans</i>	9	16	
	<i>Culex erraticus</i>	22	58	
	<i>Culex</i> spp.	50	537	
	<i>Ochlerotatus atlanticus</i>	20	210	
	<i>Ochlerotatus canadensis</i>	1	1	
	<i>Ochlerotatus sollicitans</i>	6	11	
	<i>Ochlerotatus taeniorhynchus</i>	9	59	
	<i>Ochlerotatus triseriatus</i>	2	2	
	<i>Ochlerotatus trivittatus</i>	2	3	
	<i>Psorophora ciliata</i>	1	1	
	<i>Psorophora ferox</i>	9	34	
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	
	<i>Coquillettidia perturbans</i>	1	4	
	<i>Culex</i> spp.	49	1500	6
	<i>Culiseta melanura</i>	1	2	
	<i>Ochlerotatus japonicus</i>	11	70	
	<i>Ochlerotatus sollicitans</i>	1	1	
	<i>Ochlerotatus sticticus</i>	3	19	
	<i>Ochlerotatus triseriatus</i>	3	4	
	<i>Ochlerotatus trivittatus</i>	1	3	
	<i>Psorophora ferox</i>	5	141	
	<i>Uranotaenia sapphirina</i>	1	1	
Gloucester		248	2670	2
	<i>Aedes albopictus</i>	18	50	
	<i>Aedes vexans</i>	1	2	
	<i>Anopheles bradleyi</i>	2	10	
	<i>Anopheles punctipennis</i>	1	1	
	<i>Anopheles quadrimaculatus</i>	2	3	
	<i>Anopheles walkeri</i>	2	9	
	<i>Coquillettidia perturbans</i>	4	14	
	<i>Culex pipiens</i>	181	2511	2
	<i>Culex restuans</i>	1	2	
	<i>Culex salinarius</i>	1	2	
	<i>Culex territans</i>	1	1	
	<i>Culiseta melanura</i>	2	3	
	<i>Ochlerotatus canadensis</i>	2	4	
	<i>Ochlerotatus japonicus</i>	25	36	
	<i>Ochlerotatus triseriatus</i>	2	4	
	<i>Psorophora ciliata</i>	1	1	
	<i>Psorophora columbiae</i>	1	16	
	<i>Psorophora ferox</i>	1	1	
Hudson		282	10301	50
	<i>Aedes albopictus</i>	14	134	
	<i>Aedes vexans</i>	3	9	
	<i>Coquillettidia perturbans</i>	2	20	
	<i>Culex pipiens</i>	22	1263	8
	<i>Culex restuans</i>	1	4	
	<i>Culex salinarius</i>	9	405	
	<i>Culex</i> spp.	231	8466	42
Hunterdon		276	9124	15
	<i>Aedes albopictus</i>	1	2	
	<i>Aedes vexans</i>	4	48	
	<i>Anopheles barberi</i>	1	1	

	Anopheles punctipennis	10	109	
	Anopheles quadrimaculatus	4	13	
	Culex erraticus	1	1	
	Culex pipiens	4	42	
	Culex restuans	14	476	1
	Culex salinarius	3	3	
	Culex spp.	202	8251	14
	Culex territans	2	2	
	Ochlerotatus japonicus	15	120	
	Ochlerotatus sticticus	1	1	
	Ochlerotatus triseriatus	4	4	
	Ochlerotatus trivittatus	7	39	
	Psorophora columbiae	1	10	
	Uranotaenia sapphirina	2	2	
Mercer		369	5522	35
	Aedes albopictus	94	559	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	65	1835	23
	Culex restuans	43	734	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	31	58	
	Ochlerotatus sticticus	1	3	
	Ochlerotatus triseriatus	18	41	
	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	334	2570	2
Aedes albopictus	46	214	
Aedes vexans	20	81	
Anopheles punctipennis	13	25	
Anopheles quadrimaculatus	7	9	
Coquillettidia perturbans	2	3	
Culex erraticus	3	8	
Culex pipiens	1	1	
Culex restuans	7	17	
Culex spp.	87	1193	2
Culex territans	12	59	
Culiseta melanura	63	497	
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	210	2144	1
Aedes albopictus	61	927	
Aedes vexans	9	114	
Anopheles bradleyi	1	12	
Coquillettidia perturbans	1	1	
Culex erraticus	1	1	
Culex restuans	10	20	
Culex salinarius	21	276	
Culex spp.	65	603	1
Culex territans	2	5	
Culiseta melanura	6	7	
Ochlerotatus canadensis	3	38	
Ochlerotatus japonicus	13	50	

	Ochlerotatus sollicitans	1	4	
	Ochlerotatus triseriatus	11	38	
	Ochlerotatus trivittatus	1	2	
	Psorophora ferox	4	46	
Passaic		119	3488	13
	Aedes albopictus	3	30	
	Aedes vexans	1	4	
	Culex spp.	110	3345	13
	Ochlerotatus japonicus	4	91	
	Ochlerotatus trivittatus	1	18	
Salem		217	2125	1
	Aedes albopictus	6	33	
	Aedes vexans	8	28	
	Anopheles bradleyi	5	10	
	Anopheles punctipennis	13	102	
	Anopheles quadrimaculatus	17	294	
	Coquillettidia perturbans	6	10	
	Culex erraticus	18	86	
	Culex pipiens	3	7	
	Culex restuans	17	165	
	Culex salinarius	5	30	
	Culex spp.	34	373	1
	Culex territans	6	10	
	Culiseta melanura	68	963	
	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		463	13886	3
	Aedes cinereus	2	2	
	Aedes vexans	41	1413	
	Anopheles barberi	1	1	

Anopheles punctipennis	17	51	
Anopheles quadrimaculatus	7	35	
Anopheles walkeri	1	11	
Coquillettidia perturbans	10	106	
Culex pipiens	8	23	
Culex restuans	14	364	
Culex salinarius	13	166	
Culex spp.	175	8427	2
Culex territans	2	4	
Ochlerotatus cantator	1	32	
Ochlerotatus japonicus	66	257	1
Ochlerotatus sticticus	19	543	
Ochlerotatus triseriatus	22	87	
Ochlerotatus trivittatus	44	1867	
Psorophora ciliata	1	2	
Psorophora ferox	11	266	
Uranotaenia sapphirina	8	229	
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	351	9809	4
Aedes vexans	23	352	
Anopheles punctipennis	9	20	
Anopheles quadrimaculatus	3	5	
Anopheles walkeri	2	10	
Culex erraticus	1	1	
Culex pipiens	15	368	1
Culex restuans	3	79	
Culex salinarius	5	47	
Culex spp.	184	7939	3
Ochlerotatus cantator	1	1	
Ochlerotatus japonicus	55	188	
Ochlerotatus triseriatus	18	40	
Ochlerotatus trivittatus	23	657	
Psorophora ciliata	2	4	
Psorophora columbiae	4	95	
Psorophora ferox	1	1	
Uranotaenia sapphirina	2	2	
Grand Total	5229	122521	252

