

VECTOR SURVEILLANCE SUMMARY SHEET

WEEK: 15

Culiseta melanura Monitor September 9 - 15, 2006

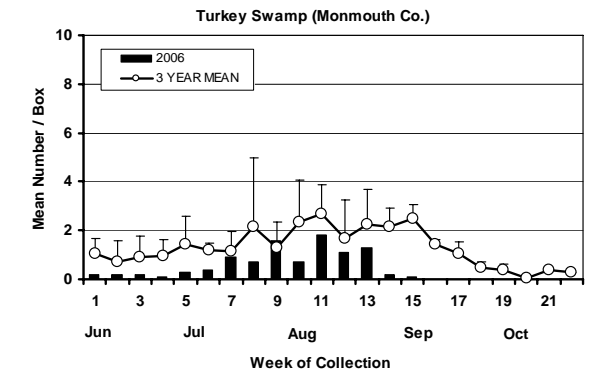
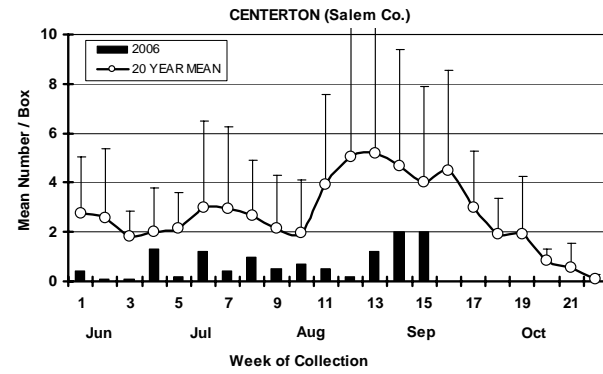
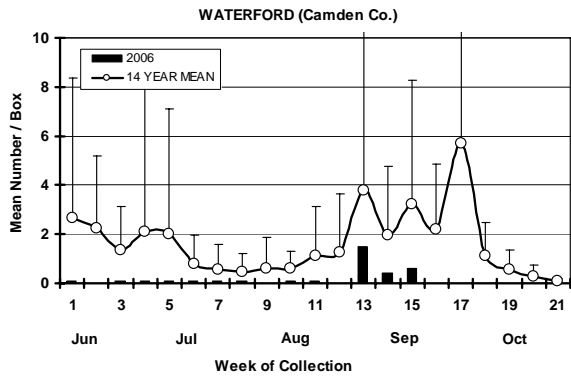
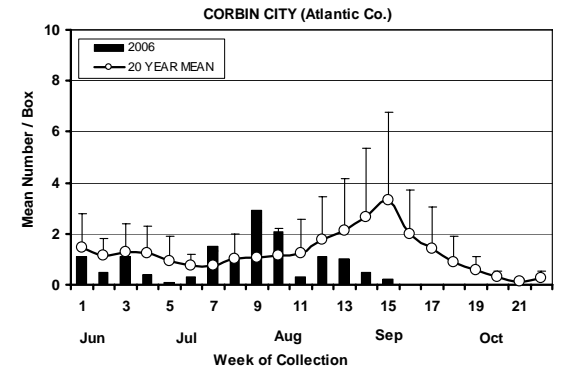
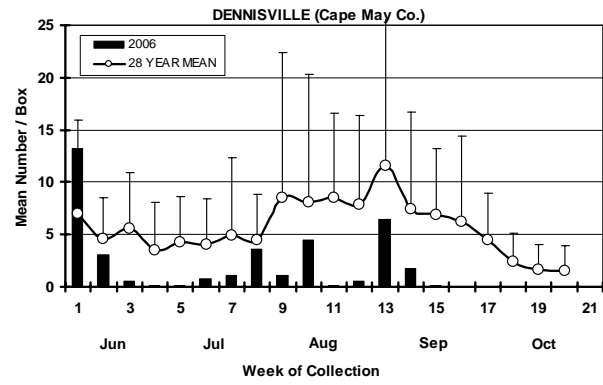
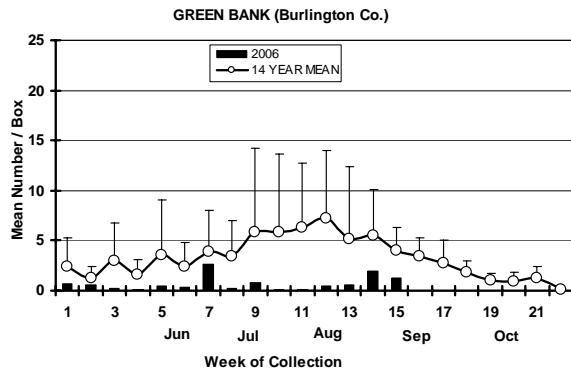
Coastal Resting Boxes						Inland Resting Boxes					
Sites	Mean From Previous Years	No. Per Box For This Collection	Total Collected to Date	Total Pools Submitted to Date	EEE Isolations To Date	Sites	Mean From Previous Years	No. Per Box For This Collection	Total Collected to Date	Total Pools Submitted to Date	EEE Isolations To Date
Green Bank (Burlington Co.)	4.0	1.3	512	49	1	Waterford (Camden Co.)	3.2	0.6	147	23	0
Corbin City (Atlantic Co.)	3.3	0.2	373	54	0	Centerton (Salem Co.)	4.0	2.0	573	50	0
Dennisville (Cape May Co.)	6.9	<0.1	1810	68	0	Turkey Swamp (Monmouth Co.)	2.5	0.1	484	55	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	275	109	120	1,519	319	110	16	45	109	24	228	271	464	3,609
Total Specimens	7,097	1,753	4,192	62,221	4,044	1,978	248	944	392	490	1,052	1,950	6,138	92,499
No. Positive Pools	46	6	0	158	1	0	0	0	0	0	0	2	0	213
MIR (Isolations/1000)	6.48	3.42	-	2.54	0.25	-	-	-	-	-	-	1.03	-	2.30

Remarks: The first EEE positive mosquito pool of the season was obtained from *Culiseta melanura* collected at the Green Bank site on August 29, 2006. On September 6, an EEE equine fatality was confirmed in a 6 yr. old mare stabled less than 10 mi. from the resting box study site. The Mullica River drainage has been a major focus for EEE activity over the years and is frequently the area where EEE appears first. Virus activity was exceptionally late this year and *Cs. melanura* has been below average all season but amplification appears to be following the long-term trend. EEE reached epidemic proportions in New England during the month of August. The annual fall bird migration is currently peaking in the Atlantic flyway and repeated introduction of virus from that area is likely over the next several weeks. West Nile virus transcended the amplification phase in early August with 4 human cases from 4 different counties confirmed to date. Onset dates for the human cases include: Union (8/4), Essex (8/13), Bergen (8/19) and Middlesex (8/25). A single equine case was confirmed from Middlesex Co. during the past week with onset of symptoms on September 6. *Aedes albopictus* remains as the only potential bridge vector that has tested positive for WNV this year.

Culiseta melanura Population Graphs



Mosquito Species Submitted for West Nile Virus Testing through September 15, 2006

Species	Pools	Mosquitoes	Positives
<i>Aedes albopictus</i>	271	1950	2
<i>Aedes cinereus</i>	1	1	
<i>Aedes vexans</i>	110	1978	
<i>Aedes vexans</i>	1	2	
<i>Anopheles barberi</i>	3	3	
<i>Anopheles bradleyi</i>	33	284	
<i>Anopheles crucians</i>	1	1	
<i>Anopheles punctipennis</i>	71	309	
<i>Anopheles quadrimaculatus</i>	88	2655	
<i>Anopheles walkeri</i>	3	20	
<i>Coquillettidia perturbans</i>	52	238	
<i>Culex erraticus</i>	59	773	
<i>Culex pipiens</i>	275	7097	46
<i>Culex restuans</i>	109	1753	6
<i>Culex salinarius</i>	120	4192	
<i>Culex spp.</i>	1519	62221	158
<i>Culex territans</i>	25	64	
<i>Culiseta melanura</i>	319	4044	1
<i>Ochlerotatus atlanticus</i>	19	287	
<i>Ochlerotatus atropalpus</i>	1	2	
<i>Ochlerotatus canadensis</i>	16	248	
<i>Ochlerotatus cantator</i>	7	35	
<i>Ochlerotatus japonicus</i>	228	1052	
<i>Ochlerotatus punctor</i>	1	1	
<i>Ochlerotatus sollicitans</i>	24	490	
<i>Ochlerotatus sticticus</i>	12	211	
<i>Ochlerotatus stimulans</i>	3	3	
<i>Ochlerotatus taeniorhynchus</i>	16	152	
<i>Ochlerotatus triseriatus</i>	109	392	
<i>Ochlerotatus trivittatus</i>	45	944	
<i>Orthopodomyia signifera</i>	1	3	
<i>Psorophora ciliata</i>	2	2	
<i>Psorophora columbiae</i>	22	320	
<i>Psorophora ferox</i>	29	531	
<i>Psorophora howardii</i>	1	3	
<i>Uranotaenia sapphirina</i>	13	238	
Grand Total	3609	92499	213

Submission by County through September 15, 2006

County	Species	Pools	Mosquitoes	Positives
Atlantic		212	4493	0
	Aedes albopictus	16	180	
	Aedes vexans	17	526	
	Anopheles bradleyi	6	80	
	Anopheles punctipennis	2	6	
	Coquillettidia perturbans	5	35	
	Culex erraticus	14	594	
	Culex restuans	3	10	
	Culex salinarius	11	230	
	Culex spp.	47	1792	
	Culex territans	3	5	
	Culiseta melanura	58	397	
	Ochlerotatus atlanticus	5	129	
	Ochlerotatus canadensis	4	62	
	Ochlerotatus cantator	2	30	
	Ochlerotatus japonicus	2	3	
	Ochlerotatus sollicitans	6	238	
	Ochlerotatus taeniorhynchus	3	60	
	Ochlerotatus triseriatus	3	5	
	Ochlerotatus trivittatus	1	2	
	Psorophora columbiae	1	50	
	Psorophora ferox	2	56	
	Psorophora howardii	1	3	
Bergen		323	17939	52
	Aedes albopictus	18	245	1
	Aedes cinereus	1	1	
	Aedes vexans	19	659	
	Anopheles punctipennis	5	9	
	Anopheles quadrimaculatus	2	2	
	Coquillettidia perturbans	5	12	
	Culex pipiens	40	1976	15
	Culex restuans	12	224	3
	Culex salinarius	53	3312	
	Culex spp.	152	11302	33
	Culex territans	1	1	
	Ochlerotatus triseriatus	2	4	
	Ochlerotatus trivittatus	4	6	
	Orthopodomyia signifera	1	3	
	Psorophora columbiae	6	179	
	Psorophora ferox	1	2	
	Uranotaenia sapphirina	1	2	

Burlington	152	1000	2
Aedes albopictus	26	120	
Aedes vexans	5	33	
Anopheles barberi	1	1	
Anopheles bradleyi	1	4	
Anopheles crucians	1	1	
Anopheles punctipennis	2	4	
Anopheles quadrimaculatus	5	7	
Coquillettidia perturbans	4	7	
Culex erraticus	8	33	
Culex pipiens	5	13	
Culex salinarius	1	1	
Culex spp.	17	164	2
Culex territans	1	3	
Culiseta melanura	51	516	
Ochlerotatus atlanticus	1	1	
Ochlerotatus canadensis	3	24	
Ochlerotatus japonicus	6	28	
Ochlerotatus sollicitans	2	7	
Ochlerotatus stimulans	2	2	
Ochlerotatus taeniorhynchus	2	7	
Ochlerotatus triseriatus	2	2	
Ochlerotatus trivittatus	2	6	
Psorophora columbiae	1	9	
Psorophora ferox	3	7	
Camden	99	1634	3
Aedes albopictus	12	45	
Aedes vexans	2	54	
Anopheles punctipennis	4	7	
Anopheles quadrimaculatus	7	12	
Coquillettidia perturbans	4	4	
Culex erraticus	1	3	
Culex restuans	2	2	
Culex spp.	38	1346	3
Culiseta melanura	23	147	
Ochlerotatus japonicus	5	9	
Ochlerotatus triseriatus	1	5	
Cape May	174	4686	1
Aedes albopictus	5	34	
Anopheles bradleyi	13	158	
Anopheles punctipennis	2	3	
Anopheles quadrimaculatus	42	2358	
Coquillettidia perturbans	2	15	
Culex erraticus	7	52	
Culex pipiens	7	41	

	<i>Culex restuans</i>	10	71	
	<i>Culex salinarius</i>	7	30	
	<i>Culex territans</i>	1	4	
	<i>Culiseta melanura</i>	74	1916	1
	<i>Ochlerotatus atlanticus</i>	1	1	
	<i>Ochlerotatus cantator</i>	2	2	
	<i>Psorophora ferox</i>	1	1	
Cumberland		64	623	0
	<i>Aedes albopictus</i>	1	1	
	<i>Aedes vexans</i>	2	3	
	<i>Anopheles bradleyi</i>	7	27	
	<i>Anopheles quadrimaculatus</i>	2	3	
	<i>Coquillettidia perturbans</i>	6	12	
	<i>Culex erraticus</i>	5	7	
	<i>Culex spp.</i>	17	368	
	<i>Ochlerotatus atlanticus</i>	9	142	
	<i>Ochlerotatus canadensis</i>	1	1	
	<i>Ochlerotatus sollicitans</i>	2	3	
	<i>Ochlerotatus taeniorhynchus</i>	7	46	
	<i>Ochlerotatus triseriatus</i>	1	1	
	<i>Psorophora ferox</i>	4	9	
Essex		99	1866	5
	<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 spp.</i>	48	1496	5
	<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		191	2243	2
	<i>Aedes albopictus</i>	13	41	
	<i>Aedes vexans</i>	1	2	
	<i>Anopheles bradleyi</i>	2	10	
	<i>Anopheles punctipennis</i>	1	1	
	<i>Anopheles walkeri</i>	2	9	
	<i>Coquillettidia perturbans</i>	4	14	
	<i>Culex pipiens</i>	139	2111	2

	Culex restuans	1	2	
	Culex salinarius	1	2	
	Culex territans	1	1	
	Culiseta melanura	2	3	
	Ochlerotatus canadensis	2	4	
	Ochlerotatus japonicus	19	25	
	Psorophora ciliata	1	1	
	Psorophora columbiae	1	16	
	Psorophora ferox	1	1	
Hudson		216	8323	42
	Aedes albopictus	8	67	
	Aedes vexans	1	6	
	Coquillettidia perturbans	2	20	
	Culex pipiens	20	1233	8
	Culex salinarius	5	301	
	Culex spp.	180	6696	34
Hunterdon		201	7303	10
	Aedes albopictus	1	2	
	Aedes vexans	1	3	
	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.	142	6583	9
	Culex territans	2	2	
	Ochlerotatus japonicus	8	48	
	Ochlerotatus sticticus	1	1	
	Ochlerotatus triseriatus	4	4	
	Ochlerotatus trivittatus	4	14	
	Uranotaenia sapphirina	2	2	
Mercer		247	4540	33
	Aedes albopictus	49	213	1
	Aedes vexans	8	131	
	Anopheles bradleyi	1	2	
	Anopheles punctipennis	3	5	
	Anopheles quadrimaculatus	2	10	
	Coquillettidia perturbans	2	3	
	Culex erraticus	6	31	
	Culex pipiens	53	1668	21
	Culex restuans	31	650	2
	Culex salinarius	9	76	

	Culex spp.	33	1463	9
	Culex territans	2	2	
	Ochlerotatus atropalpus	1	2	
	Ochlerotatus canadensis	3	147	
	Ochlerotatus japonicus	20	43	
	Ochlerotatus sticticus	1	3	
	Ochlerotatus triseriatus	11	27	
	Ochlerotatus trivittatus	5	22	
	Psorophora columbiae	5	40	
	Psorophora ferox	2	2	
Middlesex		174	7003	17
	Aedes albopictus	10	70	
	Culex pipiens	1	1	
	Culex restuans	1	2	
	Culex spp.	151	6879	17
	Ochlerotatus japonicus	11	51	
Monmouth		278	2376	2
	Aedes albopictus	38	171	
	Aedes vexans	14	49	
	Aedes vexans	1	2	
	Anopheles punctipennis	10	19	
	Anopheles quadrimaculatus	4	5	
	Coquillettidia perturbans	2	3	
	Culex erraticus	1	2	
	Culex pipiens	1	1	
	Culex restuans	5	14	
	Culex spp.	78	1149	2
	Culex territans	8	36	
	Culiseta melanura	55	484	
	Ochlerotatus atlanticus	2	13	
	Ochlerotatus canadensis	3	10	
	Ochlerotatus cantator	1	1	
	Ochlerotatus japonicus	16	100	
	Ochlerotatus sollicitans	12	237	
	Ochlerotatus taeniorhynchus	4	39	
	Ochlerotatus triseriatus	15	28	
	Ochlerotatus trivittatus	4	6	
	Psorophora columbiae	2	2	
	Psorophora ferox	2	5	

Morris	153	2508	5
Anopheles punctipennis	2	3	
Coquillettidia perturbans	1	1	
Culex restuans	1	13	
Culex spp.	95	2179	5
Ochlerotatus japonicus	29	188	
Ochlerotatus stimulans	1	1	
Ochlerotatus triseriatus	22	118	
Ochlerotatus trivittatus	1	1	
Uranotaenia sapphirina	1	4	
Ocean	150	1391	1
Aedes albopictus	47	654	
Aedes vexans	4	7	
Coquillettidia perturbans	1	1	
Culex erraticus	1	1	
Culex restuans	6	15	
Culex salinarius	15	48	
Culex spp.	48	550	1
Culex territans	2	5	
Culiseta melanura	3	3	
Ochlerotatus japonicus	12	49	
Ochlerotatus sollicitans	1	4	
Ochlerotatus triseriatus	9	33	
Psorophora ferox	1	21	
Passaic	87	2992	12
Aedes albopictus	1	13	
Culex spp.	84	2929	12
Ochlerotatus japonicus	2	50	
Salem	176	1563	1
Aedes albopictus	3	4	
Aedes vexans	7	23	
Anopheles bradleyi	3	3	
Anopheles punctipennis	9	84	
Anopheles quadrimaculatus	13	227	
Coquillettidia perturbans	6	10	
Culex erraticus	14	48	
Culex pipiens	3	7	
Culex restuans	17	165	
Culex salinarius	5	30	
Culex spp.	31	369	1
Culex territans	3	4	
Culiseta melanura	52	576	
Ochlerotatus atlanticus	1	1	
Ochlerotatus cantator	1	1	

	Ochlerotatus japonicus	1	1	
	Ochlerotatus triseriatus	2	2	
	Psorophora columbiae	5	8	
Somerset		127	3838	6
	Anopheles punctipennis	4	6	
	Anopheles quadrimaculatus	2	5	
	Culex spp.	84	3446	6
	Ochlerotatus japonicus	20	115	
	Ochlerotatus triseriatus	12	70	
	Ochlerotatus trivittatus	3	129	
	Psorophora ferox	2	67	
Sussex		208	7093	2
	Aedes vexans	14	384	
	Anopheles barberi	1	1	
	Anopheles punctipennis	9	34	
	Anopheles quadrimaculatus	1	6	
	Anopheles walkeri	1	11	
	Coquillettidia perturbans	7	97	
	Culex pipiens	2	4	
	Culex restuans	6	109	
	Culex salinarius	9	158	
	Culex spp.	89	4713	2
	Culex territans	1	1	
	Ochlerotatus japonicus	22	127	
	Ochlerotatus sticticus	7	188	
	Ochlerotatus triseriatus	13	74	
	Ochlerotatus trivittatus	15	740	
	Psorophora ferox	5	219	
	Uranotaenia sapphirina	6	227	
Union		72	1934	15
	Aedes albopictus	11	40	
	Anopheles punctipennis	1	1	
	Anopheles quadrimaculatus	1	4	
	Culex spp.	50	1864	15
	Ochlerotatus japonicus	7	22	
	Ochlerotatus punctor	1	1	
	Ochlerotatus triseriatus	1	2	
Warren		206	7151	2
	Aedes vexans	6	26	
	Anopheles punctipennis	6	17	
	Anopheles quadrimaculatus	2	2	
	Culex erraticus	1	1	
	Culex salinarius	1	1	

Culex spp.	135	6933	2
Ochlerotatus cantator	1	1	
Ochlerotatus japonicus	37	123	
Ochlerotatus triseriatus	8	13	
Ochlerotatus trivittatus	5	15	
Psorophora ciliata	1	1	
Psorophora columbiae	1	16	
Uranotaenia sapphirina	2	2	
Grand Total	3609	92499	213