

VECTOR SURVEILLANCE SUMMARY SHEET

WEEK: 15

Culiseta melanura Monitor September 6 - 12, 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.)	4.4	0.7	1,478	67	3	Waterford (Camden Co.)	3.4	3.8	1,233	57	0
Corbin City (Atlantic Co.)	3.4	2.6	754	58	1	Centerton (Salem Co.)	4.1	4.3	2,705	86	7
Dennisville (Cape May Co.)	7.1	6.4	2,037	77	0	Turkey Swamp (Monmouth Co.)	2.6	3.0	579	55	0

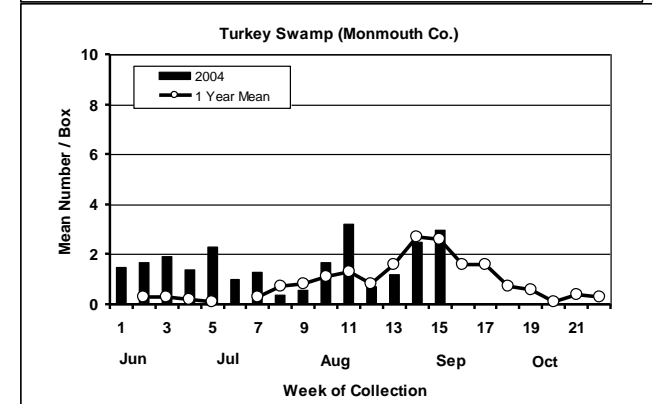
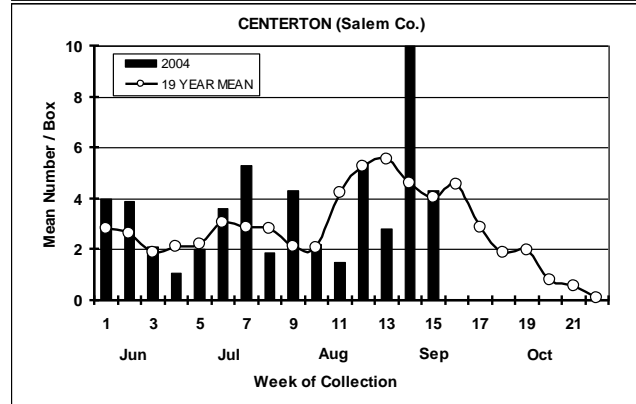
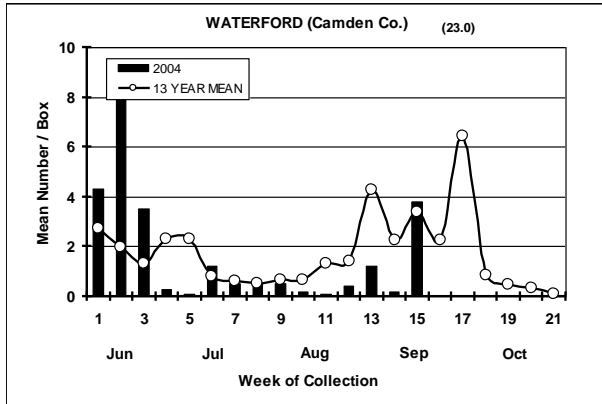
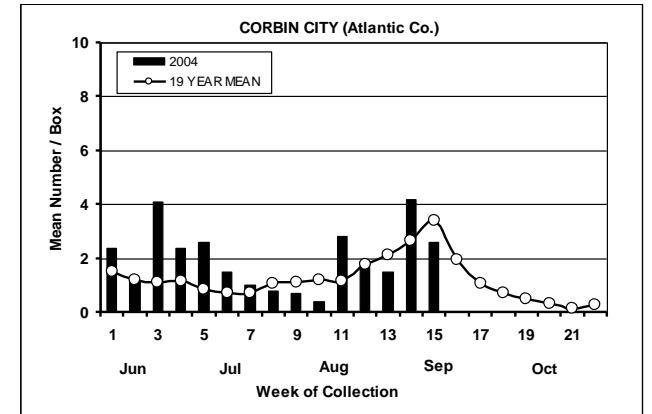
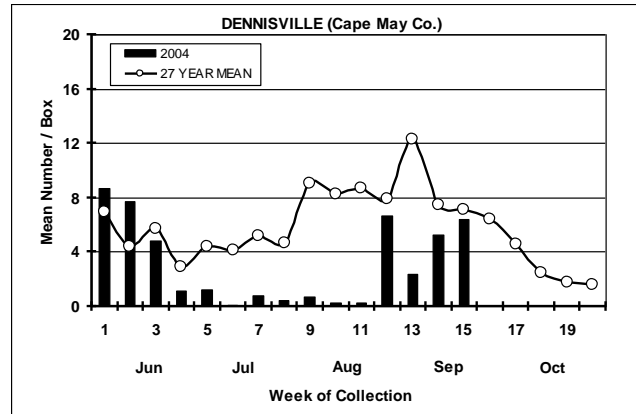
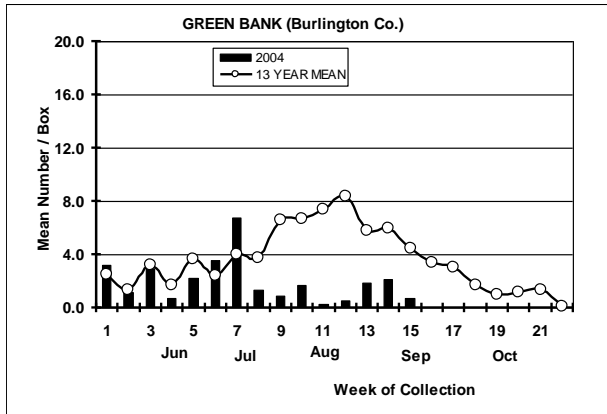
Collections submitted to PHEL for West Nile Virus testing

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	263	219	164	1,463	555	256	142	60	207	95	470	112	812	4,818
Total Specimens	7,183	3,983	4,767	49,229	10,631	3,497	1,678	987	898	2,018	2,877	672	10,984	99,404
No. Positive Pools	30	6	1	125	5	0	0	0	0	0	0	0	0	167

Remarks: A virus positive from *Cs. melanura* collected at Corbin City on Aug. 31 indicates that EEE virus is now active at 3 of the 6 study sites being monitored in New Jersey. Evidence for EEE amplification began at Green Bank, in mid-July, quickly followed by positives at Centerton in Salem Co., signaling that amplification was taking place on the Atlantic coast as well as the inner coastal plain this year. Equine cases from Cumberland and Camden Counties showed that EEE reached epizootic proportions at inland areas of southern NJ in early August. After a 1 month hiatus, a 23 yr.-old gelding from Franklinville, in Gloucester Co., represents the 3rd confirmed equine case of EEE for this season with an onset date of September 1. *Cs. melanura* populations are currently high enough to keep the virus cycling in nature at a time when migratory bird behavior contributes to widespread dispersal of the pathogen. WNV activity has now been documented in mosquitoes collected from 17 of New Jersey's 21 counties. Virus positive pools are still limited largely to avian feeding mosquito species but recent horse cases from Mercer and Salem counties show that WNV is being picked up by mammalian feeding bridge vectors in some areas of the state.

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Culiseta melanura Population Graphs



Positive pools of *Cs. melanura* were obtained from collections made at the Green Bank site during weeks 7, 10 & 12. Positive pools from Centerton came from collections made during weeks 8, 9, 10, 13 & 14. The single positive from Corbin City came from the week 14 collection at that site. EEE virus has not yet been detected from Dennisville, Waterford or Turkey Swamp.

**Mosquito Species Submitted for West Nile Virus Testing through
September 10, 2004**

Species	Pools	Mosquitoes	Positives
Aedes albopictus	112	672	
Aedes cinereus	10	94	
Aedes vexans	256	3497	
Anopheles barberi	6	7	
Anopheles bradleyi	25	206	
Anopheles crucians	1	3	
Anopheles punctipennis	151	945	
Anopheles quadrimaculatus	137	3471	
Anopheles walkeri	9	168	
Coquillettidia perturbans	105	1376	
Culex erraticus	23	374	
Culex pipiens	263	7183	30
Culex restuans	219	3983	6
Culex salinarius	164	4767	1
Culex spp.	1463	49229	125
Culex territans	40	157	
Culiseta melanura	555	10631	5
Culiseta morsitans	1	1	
Ochlerotatus abserratus	2	13	
Ochlerotatus atlanticus	5	11	
Ochlerotatus atropalpus	2	11	
Ochlerotatus canadensis	142	1678	
Ochlerotatus cantator	52	982	
Ochlerotatus excrucians	3	4	
Ochlerotatus grossbecki	10	23	
Ochlerotatus japonicus	470	2877	
Ochlerotatus mitchellae	2	3	
Ochlerotatus punctor	1	4	
Ochlerotatus sollicitans	95	2018	
Ochlerotatus sticticus	14	103	
Ochlerotatus stimulans	7	34	
Ochlerotatus taeniorhynchus	16	177	
Ochlerotatus thibaulti	1	1	
Ochlerotatus triseriatus	207	898	
Ochlerotatus trivittatus	60	987	
Orthopodomyia signifera	5	9	
Psorophora ciliata	28	261	
Psorophora columbiae	52	652	
Psorophora discolor	1	1	
Psorophora ferox	77	1662	
Psorophora howardii	4	15	
Uranotaenia sapphirina	22	216	
Grand Total	4818	99404	167

Submissions by County through September 10, 2004

County	Species	Pools	Mosquitoes	Positives
Atlantic		360	7805	9
	Aedes albopictus	16	102	
	Aedes cinereus	1	35	
	Aedes vexans	26	491	
	Anopheles bradleyi	7	16	
	Anopheles punctipennis	3	6	
	Anopheles quadrimaculatus	4	6	
	Coquillettidia perturbans	11	158	
	Culex erraticus	6	123	
	Culex pipiens	8	192	1
	Culex restuans	12	125	
	Culex salinarius	4	41	
	Culex spp.	78	2946	8
	Culex territans	3	10	
	Culiseta melanura	77	1316	
	Ochlerotatus canadensis	17	331	
	Ochlerotatus cantator	21	790	
	Ochlerotatus japonicus	11	73	
	Ochlerotatus sollicitans	26	800	
	Ochlerotatus taeniorhynchus	9	72	
	Ochlerotatus triseriatus	15	130	
	Ochlerotatus trivittatus	2	4	
	Orthopodomyia signifera	1	4	
	Psorophora ferox	2	34	
Bergen		217	11850	35
	Aedes albopictus	3	49	
	Aedes cinereus	1	11	
	Aedes vexans	10	358	
	Culex pipiens	22	1171	7
	Culex restuans	4	37	
	Culex salinarius	26	1775	1
	Culex spp.	130	7929	27
	Culiseta melanura	1	1	
	Ochlerotatus canadensis	1	3	
	Ochlerotatus cantator	1	1	
	Ochlerotatus japonicus	2	66	
	Ochlerotatus sollicitans	10	410	
	Ochlerotatus triseriatus	6	39	

Burlington	245	3488	9
Aedes albopictus	16	79	
Aedes cinereus	1	3	
Aedes vexans	19	191	
Anopheles bradleyi	1	5	
Anopheles crucians	1	3	
Anopheles punctipennis	7	30	
Anopheles quadrimaculatus	9	37	
Coquillettidia perturbans	7	49	
Culex erraticus	4	15	
Culex pipiens	2	21	
Culex restuans	1	11	
Culex salinarius	2	2	
Culex spp.	33	971	5
Culex territans	2	8	
Culiseta melanura	77	1677	4
Ochlerotatus abserratus	1	9	
Ochlerotatus atlanticus	1	2	
Ochlerotatus atropalpus	1	3	
Ochlerotatus canadensis	4	17	
Ochlerotatus cantator	1	2	
Ochlerotatus grossbecki	1	6	
Ochlerotatus japonicus	18	52	
Ochlerotatus mitchellae	2	3	
Ochlerotatus sollicitans	6	106	
Ochlerotatus sticticus	2	13	
Ochlerotatus stimulans	1	4	
Ochlerotatus taeniorhynchus	1	7	
Ochlerotatus triseriatus	9	37	
Ochlerotatus trivittatus	2	2	
Orthopodomyia signifera	1	2	
Psorophora ciliata	2	18	
Psorophora columbiae	4	66	
Psorophora ferox	3	12	
Psorophora howardii	1	7	
Uranotaenia sapphirina	2	18	
Camden	154	1713	1
Aedes albopictus	10	63	
Aedes cinereus	1	1	
Aedes vexans	5	14	
Anopheles barberi	1	1	
Anopheles bradleyi	2	7	
Anopheles punctipennis	12	43	
Anopheles quadrimaculatus	7	15	
Coquillettidia perturbans	4	11	
Culex pipiens	3	4	

	Culex restuans	2	6	
	Culex spp.	10	129	1
	Culex territans	2	2	
	Culiseta melanura	65	1261	
	Ochlerotatus atlanticus	1	1	
	Ochlerotatus canadensis	6	13	
	Ochlerotatus japonicus	8	30	
	Ochlerotatus triseriatus	4	6	
	Ochlerotatus trivittatus	2	2	
	Psorophora ferox	7	101	
	Uranotaenia sapphirina	2	3	
Cape May		372	7687	3
	Aedes albopictus	11	44	
	Aedes vexans	1	6	
	Anopheles bradleyi	7	163	
	Anopheles punctipennis	4	28	
	Anopheles quadrimaculatus	50	2902	
	Coquillettidia perturbans	6	120	
	Culex erraticus	5	212	
	Culex pipiens	73	944	
	Culex restuans	52	323	2
	Culex salinarius	24	300	
	Culex territans	9	61	
	Culiseta melanura	102	2356	1
	Ochlerotatus cantator	4	17	
	Ochlerotatus japonicus	10	28	
	Ochlerotatus sollicitans	8	83	
	Ochlerotatus taeniorhynchus	4	95	
	Ochlerotatus triseriatus	2	5	
Cumberland		263	2159	0
	Aedes albopictus	1	1	
	Aedes vexans	50	383	
	Anopheles bradleyi	1	5	
	Anopheles punctipennis	7	12	
	Anopheles quadrimaculatus	2	2	
	Coquillettidia perturbans	3	3	
	Culex erraticus	1	1	
	Culex pipiens	18	461	
	Culex restuans	15	119	
	Culex salinarius	23	700	
	Culex spp.	15	41	
	Culiseta melanura	12	19	
	Ochlerotatus canadensis	53	219	
	Ochlerotatus cantator	13	17	
	Ochlerotatus grossbecki	4	5	

	Ochlerotatus japonicus	17	52	
	Ochlerotatus sollicitans	5	10	
	Ochlerotatus triseriatus	7	9	
	Ochlerotatus trivittatus	2	2	
	Psorophora ciliata	1	4	
	Psorophora columbiae	13	94	
Essex		164	2267	0
	Aedes albopictus	4	8	
	Aedes vexans	12	60	
	Anopheles punctipennis	1	1	
	Anopheles quadrimaculatus	2	2	
	Coquillettidia perturbans	10	77	
	Culex pipiens	1	4	
	Culex spp.	79	1414	
	Ochlerotatus abserratus	1	4	
	Ochlerotatus canadensis	1	4	
	Ochlerotatus japonicus	15	75	
	Ochlerotatus sticticus	6	27	
	Ochlerotatus triseriatus	7	20	
	Ochlerotatus trivittatus	1	12	
	Psorophora ferox	24	559	
Gloucester		262	5745	35
	Aedes albopictus	11	39	
	Aedes vexans	10	93	
	Anopheles bradleyi	1	1	
	Anopheles punctipennis	8	24	
	Anopheles quadrimaculatus	3	5	
	Coquillettidia perturbans	1	1	
	Culex pipiens	13	537	3
	Culex restuans	8	126	1
	Culex salinarius	7	87	
	Culex spp.	143	4545	31
	Culex territans	1	1	
	Culiseta melanura	6	95	
	Ochlerotatus canadensis	1	1	
	Ochlerotatus japonicus	30	128	
	Ochlerotatus sollicitans	1	1	
	Ochlerotatus triseriatus	8	23	
	Psorophora columbiae	3	15	
	Psorophora ferox	7	23	
Hudson		136	4269	19
	Culex spp.	136	4269	19

Hunterdon	170	7448	5
Aedes vexans	2	87	
Anopheles punctipennis	2	19	
Anopheles quadrimaculatus	1	16	
Culex spp.	151	7087	5
Ochlerotatus japonicus	6	35	
Ochlerotatus trivittatus	3	150	
Psorophora ciliata	3	31	
Psorophora columbiae	1	8	
Psorophora ferox	1	15	
Mercer	233	5860	21
Aedes albopictus	6	15	
Aedes cinereus	2	22	
Aedes vexans	11	321	
Anopheles punctipennis	8	110	
Anopheles quadrimaculatus	3	13	
Coquillettidia perturbans	6	164	
Culex pipiens	52	1669	12
Culex restuans	37	747	
Culex salinarius	6	48	
Culex spp.	26	1381	9
Culex territans	2	7	
Culiseta melanura	5	34	
Ochlerotatus atropalpus	1	8	
Ochlerotatus canadensis	10	458	
Ochlerotatus excrucians	2	3	
Ochlerotatus japonicus	28	128	
Ochlerotatus sticticus	1	40	
Ochlerotatus triseriatus	9	19	
Ochlerotatus trivittatus	4	92	
Psorophora ciliata	1	8	
Psorophora columbiae	1	23	
Psorophora ferox	6	382	
Psorophora howardii	2	7	
Uranotaenia sapphirina	4	161	
Middlesex	57	803	0
Aedes albopictus	2	2	
Aedes vexans	4	35	
Anopheles punctipennis	4	7	
Culex pipiens	7	300	
Culex restuans	3	24	
Culex spp.	16	338	
Ochlerotatus japonicus	5	21	
Ochlerotatus sollicitans	4	50	
Ochlerotatus triseriatus	6	9	

	Ochlerotatus trivittatus	3	14	
	Orthopodomyia signifera	1	1	
	Psorophora columbiae	2	2	
Monmouth		475	6594	7
	Aedes albopictus	4	6	
	Aedes vexans	31	500	
	Anopheles barberi	3	3	
	Anopheles punctipennis	20	163	
	Anopheles quadrimaculatus	16	81	
	Coquillettidia perturbans	8	17	
	Culex erraticus	3	11	
	Culex pipiens	32	1352	6
	Culex restuans	22	595	1
	Culex salinarius	29	1521	
	Culex spp.	60	365	
	Culex territans	6	16	
	Culiseta melanura	66	560	
	Ochlerotatus atlanticus	3	8	
	Ochlerotatus canadensis	17	124	
	Ochlerotatus cantator	5	13	
	Ochlerotatus grossbecki	1	2	
	Ochlerotatus japonicus	52	334	
	Ochlerotatus sollicitans	14	245	
	Ochlerotatus sticticus	1	3	
	Ochlerotatus taeniorhynchus	2	3	
	Ochlerotatus triseriatus	43	312	
	Ochlerotatus trivittatus	8	29	
	Orthopodomyia signifera	1	1	
	Psorophora ciliata	9	58	
	Psorophora columbiae	11	235	
	Psorophora ferox	8	37	
Morris		180	6146	3
	Aedes cinereus	1	10	
	Aedes vexans	5	65	
	Anopheles punctipennis	5	13	
	Anopheles quadrimaculatus	1	1	
	Coquillettidia perturbans	4	32	
	Culex pipiens	2	6	
	Culex restuans	1	1	
	Culex spp.	99	5046	3
	Ochlerotatus canadensis	1	11	
	Ochlerotatus japonicus	35	211	
	Ochlerotatus sticticus	1	13	
	Ochlerotatus stimulans	1	1	
	Ochlerotatus triseriatus	10	32	

	Ochlerotatus trivittatus	6	271	
	Psorophora ferox	8	433	
Ocean		380	4792	6
	Aedes albopictus	23	252	
	Aedes vexans	25	526	
	Anopheles bradleyi	1	1	
	Anopheles punctipennis	15	134	
	Anopheles quadrimaculatus	10	31	
	Coquillettidia perturbans	16	303	
	Culex pipiens	15	378	1
	Culex restuans	20	573	2
	Culex salinarius	30	237	
	Culex spp.	46	639	3
	Culex territans	3	7	
	Culiseta melanura	50	594	
	Ochlerotatus canadensis	16	330	
	Ochlerotatus cantator	1	50	
	Ochlerotatus grossbecki	4	10	
	Ochlerotatus japonicus	31	121	
	Ochlerotatus sollicitans	20	312	
	Ochlerotatus sticticus	2	2	
	Ochlerotatus thibaulti	1	1	
	Ochlerotatus triseriatus	18	43	
	Ochlerotatus trivittatus	4	8	
	Orthopodomyia signifera	1	1	
	Psorophora ciliata	10	138	
	Psorophora columbiae	6	29	
	Psorophora ferox	6	58	
	Psorophora howardii	1	1	
	Uranotaenia sapphirina	5	13	
Passaic		126	2464	4
	Aedes albopictus	1	1	
	Anopheles punctipennis	2	4	
	Culex spp.	84	2124	4
	Ochlerotatus japonicus	34	314	
	Ochlerotatus triseriatus	5	21	
Salem		278	4673	1
	Aedes albopictus	1	1	
	Aedes vexans	15	74	
	Anopheles bradleyi	5	8	
	Anopheles punctipennis	16	105	
	Anopheles quadrimaculatus	18	304	
	Anopheles walkeri	3	15	
	Coquillettidia perturbans	7	13	

	Culex erraticus	4	12	
	Culex pipiens	2	3	
	Culex restuans	15	595	
	Culex salinarius	1	1	
	Culex spp.	54	463	1
	Culex territans	7	35	
	Culiseta melanura	88	2709	
	Ochlerotatus canadensis	1	1	
	Ochlerotatus cantator	4	37	
	Ochlerotatus japonicus	19	108	
	Ochlerotatus sollicitans	1	1	
	Ochlerotatus triseriatus	4	4	
	Psorophora ciliata	1	3	
	Psorophora columbiae	10	179	
	Psorophora ferox	1	1	
	Uranotaenia sapphirina	1	1	
Somerset		201	3697	5
	Aedes vexans	5	26	
	Anopheles punctipennis	5	10	
	Anopheles quadrimaculatus	1	1	
	Coquillettidia perturbans	2	6	
	Culex pipiens	5	104	
	Culex restuans	10	291	
	Culex salinarius	1	2	
	Culex spp.	96	2730	5
	Culex territans	1	1	
	Culiseta melanura	1	1	
	Ochlerotatus canadensis	5	57	
	Ochlerotatus japonicus	40	341	
	Ochlerotatus sticticus	1	5	
	Ochlerotatus triseriatus	18	79	
	Ochlerotatus trivittatus	8	40	
	Psorophora ciliata	1	1	
	Psorophora ferox	1	2	
Sussex		290	3733	1
	Aedes cinereus	3	12	
	Aedes vexans	17	250	
	Anopheles barberi	1	1	
	Anopheles punctipennis	22	223	
	Anopheles quadrimaculatus	9	48	
	Anopheles walkeri	6	153	
	Coquillettidia perturbans	19	421	
	Culex pipiens	8	37	
	Culex restuans	16	407	
	Culex salinarius	11	53	

	Culex spp.	65	1338	1
	Culex territans	4	9	
	Culiseta melanura	5	8	
	Culiseta morsitans	1	1	
	Ochlerotatus canadensis	8	34	
	Ochlerotatus japonicus	54	408	
	Ochlerotatus stimulans	5	29	
	Ochlerotatus triseriatus	19	76	
	Ochlerotatus trivittatus	8	204	
	Psorophora columbiae	1	1	
	Uranotaenia sapphirina	8	20	
Union		63	2059	3
	Aedes albopictus	3	10	
	Culex spp.	46	1979	3
	Ochlerotatus japonicus	10	65	
	Ochlerotatus triseriatus	2	3	
	Ochlerotatus trivittatus	1	1	
	Psorophora discolor	1	1	
Warren		192	4152	0
	Aedes vexans	8	17	
	Anopheles barberi	1	2	
	Anopheles punctipennis	10	13	
	Anopheles quadrimaculatus	1	7	
	Coquillettidia perturbans	1	1	
	Culex restuans	1	3	
	Culex spp.	96	3495	
	Ochlerotatus canadensis	1	75	
	Ochlerotatus cantator	2	55	
	Ochlerotatus excrucians	1	1	
	Ochlerotatus japonicus	45	287	
	Ochlerotatus punctor	1	4	
	Ochlerotatus triseriatus	15	31	
	Ochlerotatus trivittatus	6	156	
	Psorophora ferox	3	5	
Grand Total		4818	99404	167

