

VECTOR SURVEILLANCE SUMMARY SHEET

WEEK: 14

Culiseta melanura Monitor August 30 – September 5, 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.)	6.0	2.1	1,443	63	3	Waterford (Camden Co.)	2.2	0.2	1,045	51	0
Corbin City (Atlantic Co.)	2.1	4.2	689	54	0	Centerton (Salem Co.)	4.6	10.0	2,489	80	4
Dennisville (Cape May Co.)	7.5	5.3	1,717	69	0	Turkey Swamp (Monmouth Co.)	1.6	2.5	508	51	0

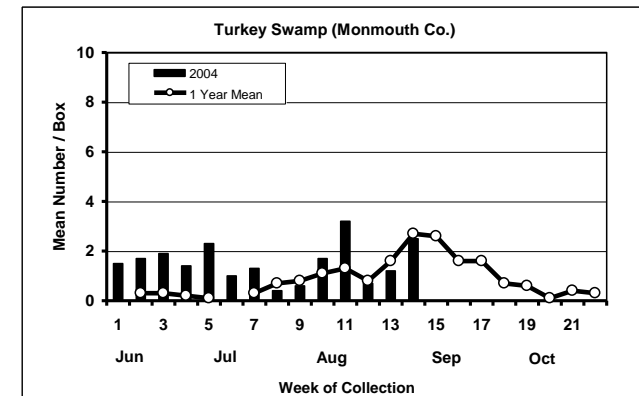
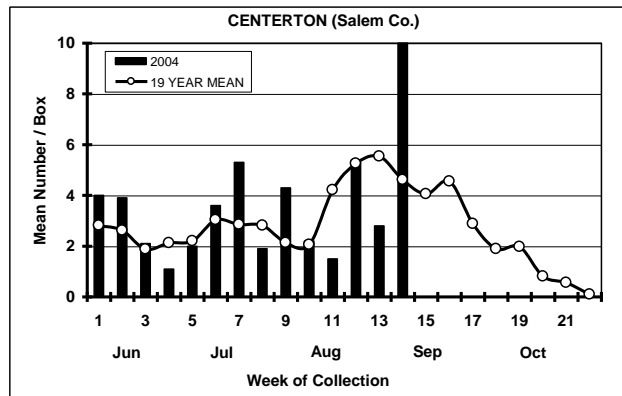
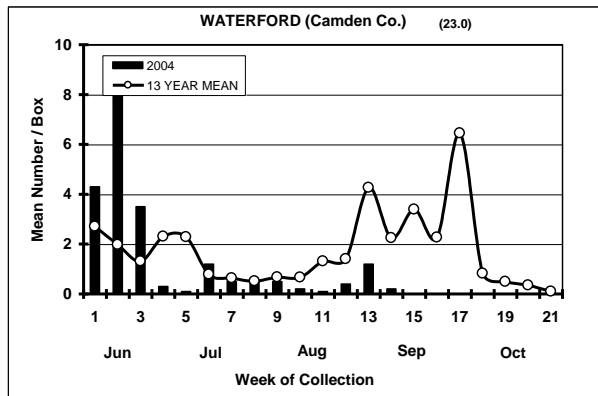
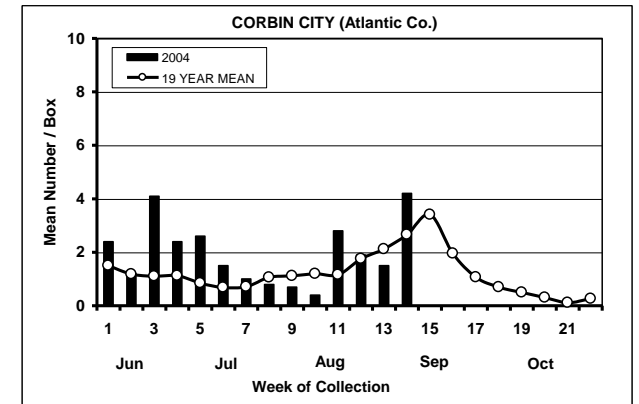
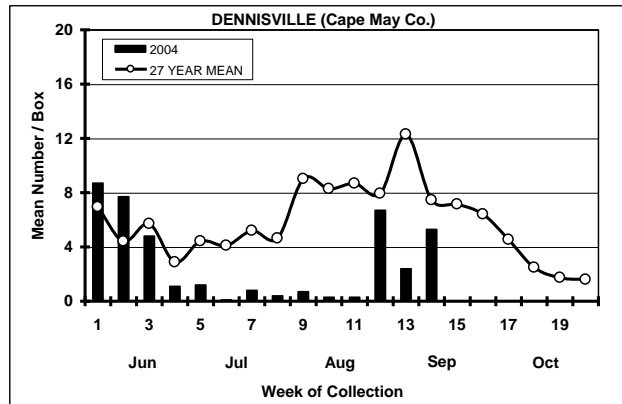
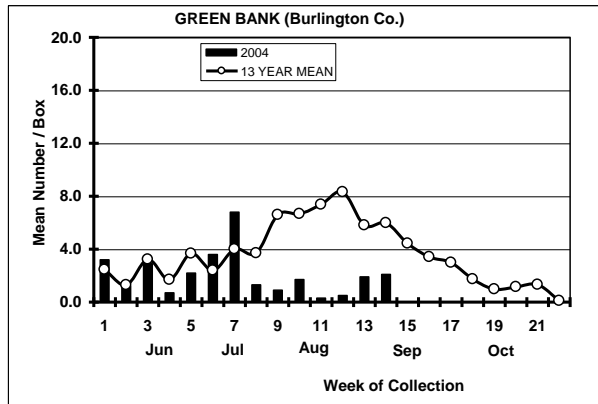
Collections submitted to PHEL for West Nile Virus testing

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	247	212	151	1,344	514	234	131	54	181	89	432	98	758	4,445
Total Specimens	6,602	3,813	4,232	45,749	9,568	3,251	1,579	868	837	1,859	2,700	564	10,458	92,080
No. Positive Pools	26	5	1	107	4	0	0	0	0	0	0	0	0	143

Remarks: *Culiseta melanura* populations remain low for this time of year at Green Bank and Waterford but are well above average at the Corbin City and Centerton resting box sites. EEE virus activity continues at low levels. The population spike at Centerton should increase amplification among bird feeders at that site and make the virus available to whatever bridge vectors are on the wing. Light trap records indicate that late season *Cq. perturbans* have emerged in some areas. This is an important inland vector of EEE that has been incriminated with virus isolations during past equine epizootics in southern New Jersey. Surveillance for WNV indicates that virus activity is still limited to bird feeding species with 142 of the 143 total positives from species that rarely bite humans. Infection rates, however, are relatively high in some areas. Counties with the highest Minimum Infection Rates in the *Culex* complex include: Gloucester (5.5), Burlington (5.0), Hudson (4.9), Ocean (4.7) & Bergen (4.3). This is the time of year when risk to humans and horses generally peaks. WNV has forced mosquito control agencies to maintain aggressive programs well beyond Labor Day.

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Culiseta melanura Population Graphs



Culiseta melanura at Green Bank and Dennisville dropped markedly in July but appear to be recovering at the present time. Populations at Corbin City and Centerton have been above average for much of the year and are currently at the highest levels seen this season. *Culiseta melanura* is a cold hearty species that continues to feed well into the month of October. Resting box collections, however, tend to drop off in late September even though the species is still actively feeding on birds. Low collection numbers are probably a function of temperature rather than true abundance. Cool morning temperatures prevent the mosquitoes from entering resting boxes in the fall despite the fact that were actively host-seeking the previous night.

Mosquito Species Submitted for West Nile Virus Testing through September 3, 2004

Species	Pools	Mosquitoes	Positives
Aedes albopictus	98	564	
Aedes cinereus	10	94	
Aedes vexans	234	3251	
Anopheles barberi	5	6	
Anopheles bradleyi	20	118	
Anopheles crucians	1	3	
Anopheles punctipennis	142	892	
Anopheles quadrimaculatus	128	3230	
Anopheles walkeri	8	167	
Coquilletidia perturbans	104	1375	
Culex erraticus	19	340	
Culex pipiens	247	6602	26
Culex restuans	212	3813	5
Culex salinarius	151	4232	1
Culex spp.	1344	45749	107
Culex territans	36	138	
Culiseta melanura	514	9568	4
Culiseta morsitans	1	1	
Ochlerotatus abserratus	2	13	
Ochlerotatus atlanticus	5	11	
Ochlerotatus atropalpus	2	11	
Ochlerotatus canadensis	131	1579	
Ochlerotatus cantator	47	975	
Ochlerotatus excrucians	3	4	
Ochlerotatus grossbecki	9	22	
Ochlerotatus japonicus	432	2700	
Ochlerotatus mitchellae	2	3	
Ochlerotatus punctor	1	4	
Ochlerotatus sollicitans	89	1859	
Ochlerotatus sticticus	14	103	
Ochlerotatus stimulans	6	33	
Ochlerotatus taeniorhynchus	15	173	
Ochlerotatus thibaulti	1	1	
Ochlerotatus triseriatus	181	837	
Ochlerotatus trivittatus	54	868	
Orthopodomyia signifera	5	9	
Psorophora ciliata	26	258	
Psorophora columbiae	47	624	
Psorophora discolor	1	1	
Psorophora ferox	73	1620	
Psorophora howardii	4	15	
Uranotaenia sapphirina	21	214	
Grand Total	4445	92080	143

Submissions by County through September 3, 2004

County	Species	Pools	Mosquitoes	Positives
Atlantic		333	7556	9
	Aedes albopictus	13	95	
	Aedes cinereus	1	35	
	Aedes vexans	25	488	
	Anopheles bradleyi	4	6	
	Anopheles punctipennis	3	6	
	Anopheles quadrimaculatus	4	6	
	Coquillettidia perturbans	11	158	
	Culex erraticus	6	123	
	Culex pipiens	7	191	1
	Culex restuans	12	125	
	Culex salinarius	4	41	
	Culex spp.	76	2929	8
	Culex territans	3	10	
	Culiseta melanura	70	1186	
	Ochlerotatus canadensis	15	325	
	Ochlerotatus cantator	20	788	
	Ochlerotatus japonicus	11	73	
	Ochlerotatus sollicitans	24	739	
	Ochlerotatus taeniorhynchus	8	68	
	Ochlerotatus triseriatus	12	123	
	Ochlerotatus trivittatus	2	4	
	Orthopodomyia signifera	1	4	
	Psorophora ferox	1	33	
Bergen		202	10818	35
	Aedes albopictus	3	49	
	Aedes cinereus	1	11	
	Aedes vexans	10	358	
	Culex pipiens	22	1171	7
	Culex restuans	4	37	
	Culex salinarius	25	1700	1
	Culex spp.	117	6976	27
	Culiseta melanura	1	1	
	Ochlerotatus canadensis	1	3	
	Ochlerotatus cantator	1	1	
	Ochlerotatus japonicus	2	66	
	Ochlerotatus sollicitans	10	410	
	Ochlerotatus triseriatus	5	35	
Burlington		231	3339	9
	Aedes albopictus	15	73	
	Aedes cinereus	1	3	
	Aedes vexans	18	183	
	Anopheles bradleyi	1	5	

Anopheles crucians	1	3	
Anopheles punctipennis	6	29	
Anopheles quadrimaculatus	8	34	
Coquillettidia perturbans	7	49	
Culex erraticus	3	14	
Culex pipiens	2	21	
Culex restuans	1	11	
Culex salinarius	2	2	
Culex spp.	33	971	5
Culex territans	2	8	
Culiseta melanura	73	1642	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	17	51	
Ochlerotatus mitchellae	2	3	
Ochlerotatus sollicitans	4	19	
Ochlerotatus sticticus	2	13	
Ochlerotatus stimulans	1	4	
Ochlerotatus taeniorhynchus	1	7	
Ochlerotatus triseriatus	8	36	
Ochlerotatus trivittatus	2	2	
Orthopodomyia signifera	1	2	
Psorophora ciliata	2	18	
Psorophora columbiae	3	60	
Psorophora ferox	3	12	
Psorophora howardii	1	7	
Uranotaenia sapphirina	2	18	
Camden	139	1494	0
Aedes albopictus	9	54	
Aedes cinereus	1	1	
Aedes vexans	5	14	
Anopheles bradleyi	2	7	
Anopheles punctipennis	11	40	
Anopheles quadrimaculatus	6	12	
Coquillettidia perturbans	4	11	
Culex pipiens	2	3	
Culex restuans	2	6	
Culex spp.	8	117	
Culex territans	2	2	
Culiseta melanura	59	1073	
Ochlerotatus atlanticus	1	1	
Ochlerotatus canadensis	6	13	

Ochlerotatus japonicus	7	29	
Ochlerotatus triseriatus	3	5	
Ochlerotatus trivittatus	2	2	
Psorophora ferox	7	101	
Uranotaenia sapphirina	2	3	
Cape May	340	6775	2
Aedes albopictus	6	17	
Aedes vexans	1	6	
Anopheles bradleyi	6	88	
Anopheles punctipennis	4	28	
Anopheles quadrimaculatus	48	2752	
Coquillettidia perturbans	6	120	
Culex erraticus	4	187	
Culex pipiens	67	808	
Culex restuans	51	320	2
Culex salinarius	22	229	
Culex territans	8	55	
Culiseta melanura	92	1952	
Ochlerotatus cantator	4	17	
Ochlerotatus japonicus	8	22	
Ochlerotatus sollicitans	7	74	
Ochlerotatus taeniorhynchus	4	95	
Ochlerotatus triseriatus	2	5	
Cumberland	239	1901	0
Aedes albopictus	1	1	
Aedes vexans	46	378	
Anopheles bradleyi	1	5	
Anopheles punctipennis	7	12	
Anopheles quadrimaculatus	2	2	
Coquillettidia perturbans	3	3	
Culex erraticus	1	1	
Culex pipiens	16	333	
Culex restuans	13	113	
Culex salinarius	21	633	
Culex spp.	14	40	
Culiseta melanura	12	19	
Ochlerotatus canadensis	47	179	
Ochlerotatus cantator	10	14	
Ochlerotatus grossbecki	3	4	
Ochlerotatus japonicus	16	48	
Ochlerotatus sollicitans	5	10	
Ochlerotatus triseriatus	6	8	
Ochlerotatus trivittatus	2	2	
Psorophora ciliata	1	4	
Psorophora columbiae	12	92	

Essex	149	1923	0
Aedes albopictus	4	8	
Aedes vexans	12	60	
Anopheles punctipennis	1	1	
Anopheles quadrimaculatus	1	1	
Coquillettidia perturbans	10	77	
Culex pipiens	1	4	
Culex spp.	66	1075	
Ochlerotatus abserratus	1	4	
Ochlerotatus canadensis	1	4	
Ochlerotatus japonicus	14	71	
Ochlerotatus sticticus	6	27	
Ochlerotatus triseriatus	7	20	
Ochlerotatus trivittatus	1	12	
Psorophora ferox	24	559	
Gloucester	242	5423	27
Aedes albopictus	10	38	
Aedes vexans	10	93	
Anopheles bradleyi	1	1	
Anopheles punctipennis	7	23	
Anopheles quadrimaculatus	3	5	
Coquillettidia perturbans	1	1	
Culex pipiens	13	537	3
Culex restuans	8	126	1
Culex salinarius	7	87	
Culex spp.	129	4230	23
Culex territans	1	1	
Culiseta melanura	6	95	
Ochlerotatus canadensis	1	1	
Ochlerotatus japonicus	27	124	
Ochlerotatus sollicitans	1	1	
Ochlerotatus triseriatus	7	22	
Psorophora columbiae	3	15	
Psorophora ferox	7	23	
Hudson	121	3852	19
Culex spp.	121	3852	19
Hunterdon	155	6761	5
Aedes vexans	2	87	
Anopheles punctipennis	2	19	
Anopheles quadrimaculatus	1	16	
Culex spp.	137	6450	5
Ochlerotatus japonicus	6	35	
Ochlerotatus trivittatus	2	100	
Psorophora ciliata	3	31	

	Psorophora columbiae	1	8	
	Psorophora ferox	1	15	
Mercer		233	5860	11
	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	10
	Culex restuans	37	747	
	Culex salinarius	6	48	
	Culex spp.	26	1381	1
	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	433	5635	4
Aedes albopictus	4	6	
Aedes vexans	26	377	
Anopheles barberi	3	3	
Anopheles punctipennis	19	136	
Anopheles quadrimaculatus	15	50	
Coquillettidia perturbans	7	16	
Culex erraticus	3	11	
Culex pipiens	28	1101	4
Culex restuans	21	521	
Culex salinarius	25	1228	
Culex spp.	54	327	
Culex territans	5	13	
Culiseta melanura	61	488	
Ochlerotatus atlanticus	3	8	
Ochlerotatus canadensis	17	124	
Ochlerotatus cantator	4	11	
Ochlerotatus grossbecki	1	2	
Ochlerotatus japonicus	48	320	
Ochlerotatus sollicitans	13	243	
Ochlerotatus sticticus	1	3	
Ochlerotatus taeniorhynchus	2	3	
Ochlerotatus triseriatus	38	302	
Ochlerotatus trivittatus	8	29	
Orthopodomyia signifera	1	1	
Psorophora ciliata	8	57	
Psorophora columbiae	10	218	
Psorophora ferox	8	37	
Morris	168	6059	3
Aedes cinereus	1	10	
Aedes vexans	3	55	
Anopheles punctipennis	4	12	
Anopheles quadrimaculatus	1	1	
Coquillettidia perturbans	4	32	
Culex pipiens	2	6	
Culex restuans	1	1	
Culex spp.	96	4996	3
Ochlerotatus canadensis	1	11	
Ochlerotatus japonicus	34	201	
Ochlerotatus sticticus	1	13	
Ochlerotatus triseriatus	9	31	
Ochlerotatus trivittatus	4	260	
Psorophora ferox	7	430	

Ocean	352	4423	6
Aedes albopictus	20	194	
Aedes vexans	22	502	
Anopheles bradleyi	1	1	
Anopheles punctipennis	14	131	
Anopheles quadrimaculatus	9	29	
Coquillettidia perturbans	16	303	
Culex pipiens	14	321	1
Culex restuans	18	496	2
Culex salinarius	28	214	
Culex spp.	44	633	3
Culex territans	2	5	
Culiseta melanura	49	580	
Ochlerotatus canadensis	14	284	
Ochlerotatus cantator	1	50	
Ochlerotatus grossbecki	4	10	
Ochlerotatus japonicus	28	110	
Ochlerotatus sollicitans	20	312	
Ochlerotatus sticticus	2	2	
Ochlerotatus thibaulti	1	1	
Ochlerotatus triseriatus	15	38	
Ochlerotatus trivittatus	4	8	
Orthopodomyia signifera	1	1	
Psorophora ciliata	9	136	
Psorophora columbiae	5	27	
Psorophora ferox	5	21	
Psorophora howardii	1	1	
Uranotaenia sapphirina	5	13	
Passaic	114	2314	4
Aedes albopictus	1	1	
Anopheles punctipennis	2	4	
Culex spp.	78	1998	4
Ochlerotatus japonicus	30	295	
Ochlerotatus triseriatus	3	16	
Salem	251	4343	1
Aedes albopictus	1	1	
Aedes vexans	13	71	
Anopheles bradleyi	4	5	
Anopheles punctipennis	14	90	
Anopheles quadrimaculatus	16	253	
Anopheles walkeri	3	15	
Coquillettidia perturbans	7	13	
Culex erraticus	2	4	
Culex pipiens	2	3	

	<i>Culex restuans</i>	15	595	1
	<i>Culex</i> spp.	47	442	
	<i>Culex territans</i>	6	27	
	<i>Culiseta melanura</i>	81	2492	
	<i>Ochlerotatus canadensis</i>	1	1	
	<i>Ochlerotatus cantator</i>	4	37	
	<i>Ochlerotatus japonicus</i>	18	106	
	<i>Ochlerotatus sollicitans</i>	1	1	
	<i>Ochlerotatus triseriatus</i>	4	4	
	<i>Psorophora ciliata</i>	1	3	
	<i>Psorophora columbiae</i>	9	178	
	<i>Psorophora ferox</i>	1	1	
	<i>Uranotaenia sapphirina</i>	1	1	
Somerset		188	3473	
	<i>Aedes vexans</i>	5	26	4
	<i>Anopheles punctipennis</i>	5	10	
	<i>Anopheles quadrimaculatus</i>	1	1	
	<i>Coquillettidia perturbans</i>	2	6	
	<i>Culex pipiens</i>	5	104	
	<i>Culex restuans</i>	10	291	
	<i>Culex salinarius</i>	1	2	
	<i>Culex</i> spp.	89	2538	
	<i>Culex territans</i>	1	1	
	<i>Culiseta melanura</i>	1	1	
	<i>Ochlerotatus canadensis</i>	5	57	
	<i>Ochlerotatus japonicus</i>	36	320	
	<i>Ochlerotatus sticticus</i>	1	5	
	<i>Ochlerotatus triseriatus</i>	16	68	
	<i>Ochlerotatus trivittatus</i>	8	40	
	<i>Psorophora ciliata</i>	1	1	
	<i>Psorophora ferox</i>	1	2	
Sussex		263	3393	
	<i>Aedes cinereus</i>	3	12	1
	<i>Aedes vexans</i>	13	180	
	<i>Anopheles barberi</i>	1	1	
	<i>Anopheles punctipennis</i>	21	221	
	<i>Anopheles quadrimaculatus</i>	9	48	
	<i>Anopheles walkeri</i>	5	152	
	<i>Coquillettidia perturbans</i>	19	421	
	<i>Culex pipiens</i>	7	30	
	<i>Culex restuans</i>	15	397	
	<i>Culex salinarius</i>	10	48	
	<i>Culex</i> spp.	59	1204	
	<i>Culex territans</i>	4	9	
	<i>Culiseta melanura</i>	4	5	

Culiseta morsitans	1	1	
Ochlerotatus canadensis	7	27	
Ochlerotatus japonicus	49	374	
Ochlerotatus stimulans	5	29	
Ochlerotatus triseriatus	17	66	
Ochlerotatus trivittatus	6	149	
Psorophora columbiae	1	1	
Uranotaenia sapphirina	7	18	
Union	58	1879	3
Aedes albopictus	3	10	
Culex spp.	43	1835	3
Ochlerotatus japonicus	8	29	
Ochlerotatus triseriatus	2	3	
Ochlerotatus trivittatus	1	1	
Psorophora discolor	1	1	
Warren	177	4056	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.	91	3417	
Ochlerotatus canadensis	1	75	
Ochlerotatus cantator	2	55	
Ochlerotatus excrucians	1	1	
Ochlerotatus japonicus	40	277	
Ochlerotatus punctor	1	4	
Ochlerotatus triseriatus	12	27	
Ochlerotatus trivittatus	5	153	
Psorophora ferox	2	4	
Grand Total	4445	92080	143