

# VECTOR SURVEILLANCE SUMMARY SHEET

WEEK: 9

## *Culiseta melanura* Monitor July 26 – August 1, 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.)	6.6	0.9	1,125	46	1	Waterford (Camden Co.)	0.7	0.5	946	40	0
Corbin City (Atlantic Co.)	1.1	0.7	418	34	0	Centerton (Salem Co.)	2.1	4.3	1,397	49	0
Dennisville (Cape May Co.)	9.0	0.1	1,024	45	0	Turkey Swamp (Monmouth Co.)	0.7	0.6	287	32	0

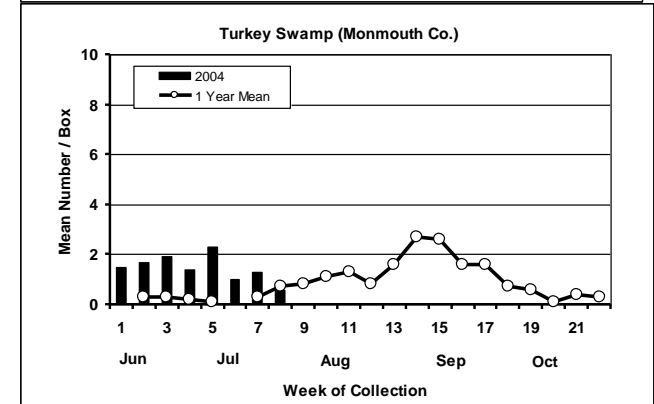
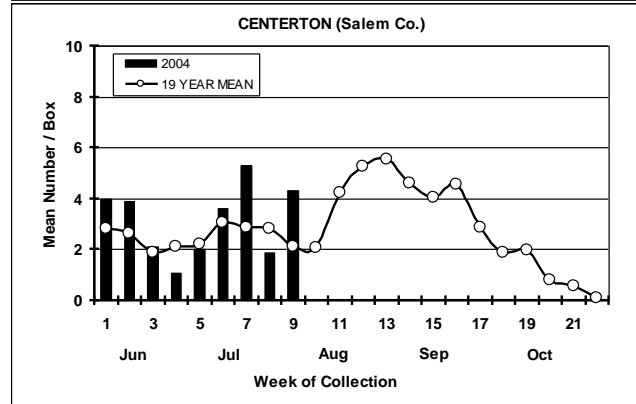
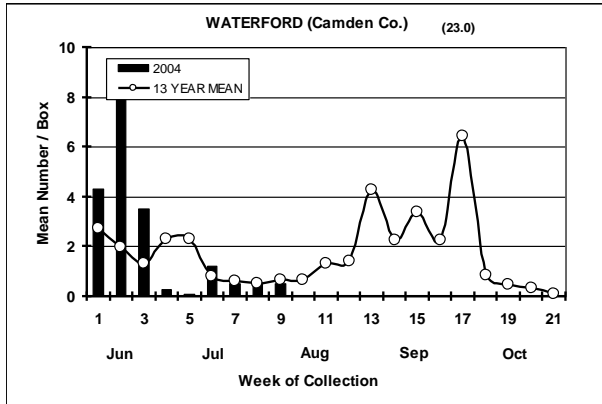
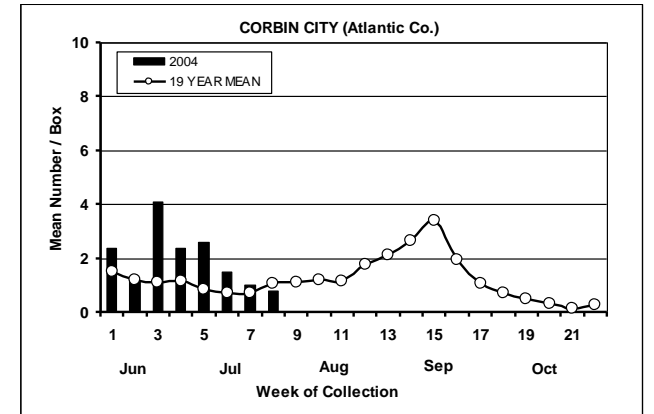
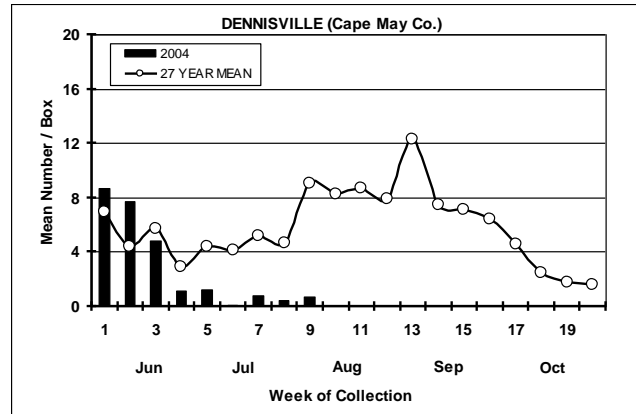
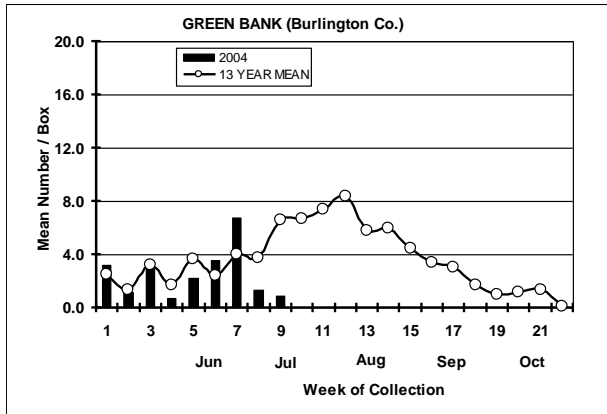
### Collections submitted to PHEL for West Nile Virus testing

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	122	130	61	691	340	103	82	13	93	43	228	34	370	2,310
Total Specimens	2,412	2,400	826	24,491	6,472	1,170	1,140	128	487	657	1,599	153	5,062	46,997
No. Positive Pools	4	1	0	19	2	0	0	0	0	0	0	0	0	26

**Remarks:** This week's resting box collections produced erratic results. Heavy rains coupled with treatments targeting bridge vectors appear to have had an impact on *Cs. melanura* populations at some of the study sites. *Culiseta melanura* went well above the long term mean at the Centerton study site in Salem Co. Resting box populations at the other study sites were either down or close to normal for this time of year. Last week's data from the Green Bank site showed that EEE is cycling in local birds this year. The above normal rainfall southern New Jersey experienced in recent weeks has maximized breeding habitat for *Cs. melanura* as well as floodwater bridge vector species. WNV has now been detected in mosquitoes from 10 different counties. Recent positives from Hudson and Union counties add a northern urban component to the southern rural cycle that has been evident in vector surveillance data this year. Overall infection rates in mosquitoes are somewhat higher than those seen last year at this point in the season (21 positives from 88,768 mosquitoes). The month of August is the time when the amplification cycle normally escalates.

New Jersey Agricultural Experiment Station Publication No. PT-09-40500-09-04 Supported by State funds and funding by the NJ State Mosquito Control Commission. Summary Prepared by: Wayne J. Crans, Rutgers University
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## *Culiseta melanura* Population Graphs



The late June influx of nulliparous *Cs. melanura* appears to have dissipated at most of the study sites. Historical data indicate that further emergence is probable with a population peak in early fall.

## Mosquito Species Submitted for West Nile Virus Testing through July 30, 2004

Species	Pools	Mosquitoes	Positives
Aedes albopictus	34	153	
Aedes cinereus	5	59	
Aedes vexans	103	1170	
Anopheles barberi	4	5	
Anopheles bradleyi	11	17	
Anopheles punctipennis	76	437	
Anopheles quadrimaculatus	53	1388	
Anopheles walkeri	7	166	
Coquillettidia perturbans	67	1109	
Culex erraticus	8	202	
Culex pipiens	122	2412	4
Culex restuans	130	2400	1
Culex salinarius	61	826	
Culex spp.	691	24491	19
Culex territans	18	50	
Culiseta melanura	340	6472	2
Culiseta morsitans	1	1	
Ochlerotatus abserratus	1	9	
Ochlerotatus atropalpus	1	3	
Ochlerotatus canadensis	82	1140	
Ochlerotatus cantator	40	962	
Ochlerotatus excrucians	2	3	
Ochlerotatus grossbecki	8	21	
Ochlerotatus japonicus	228	1599	
Ochlerotatus mitchellae	1	1	
Ochlerotatus punctor	1	4	
Ochlerotatus sollicitans	43	657	
Ochlerotatus sticticus	4	58	
Ochlerotatus stimulans	6	33	
Ochlerotatus taeniorhynchus	8	118	
Ochlerotatus thibaulti	1	1	
Ochlerotatus triseriatus	93	487	
Ochlerotatus trivittatus	13	128	
Orthopodomyia signifera	4	8	
Psorophora ciliata	8	157	
Psorophora columbiae	17	66	
Psorophora discolor	1	1	
Psorophora ferox	5	43	
Psorophora howardii	3	9	
Uranotaenia sapphirina	9	131	
<b>Grand Total</b>	<b>2310</b>	<b>46997</b>	<b>26</b>

## Submissions by County through July 30, 2004

County	Species	Pools	Mosquitoes	Positives
<b>Atlantic</b>		<b>239</b>	<b>5728</b>	<b>4</b>
	<i>Aedes albopictus</i>	7	40	
	<i>Aedes cinereus</i>	1	35	
	<i>Aedes vexans</i>	17	380	
	<i>Anopheles bradleyi</i>	4	6	
	<i>Anopheles punctipennis</i>	2	5	
	<i>Anopheles quadrimaculatus</i>	2	4	
	<i>Coquillettidia perturbans</i>	6	60	
	<i>Culex erraticus</i>	2	12	
	<i>Culex pipiens</i>	7	191	<b>1</b>
	<i>Culex restuans</i>	10	120	
	<i>Culex salinarius</i>	4	41	
	<i>Culex</i> spp.	63	2524	<b>3</b>
	<i>Culex territans</i>	1	1	
	<i>Culiseta melanura</i>	49	911	
	<i>Ochlerotatus canadensis</i>	14	322	
	<i>Ochlerotatus cantator</i>	20	788	
	<i>Ochlerotatus japonicus</i>	8	33	
	<i>Ochlerotatus sollicitans</i>	7	132	
	<i>Ochlerotatus taeniorhynchus</i>	4	22	
	<i>Ochlerotatus triseriatus</i>	9	96	
	<i>Ochlerotatus trivittatus</i>	1	1	
	<i>Orthopodomyia signifera</i>	1	4	
<b>Bergen</b>		<b>60</b>	<b>2920</b>	<b>4</b>
	<i>Culex salinarius</i>	2	100	
	<i>Culex</i> spp.	55	2735	<b>4</b>
	<i>Ochlerotatus japonicus</i>	2	66	
	<i>Ochlerotatus triseriatus</i>	1	19	
<b>Burlington</b>		<b>135</b>	<b>1901</b>	<b>2</b>
	<i>Aedes albopictus</i>	3	8	
	<i>Aedes cinereus</i>	1	3	
	<i>Aedes vexans</i>	7	107	
	<i>Anopheles bradleyi</i>	1	5	
	<i>Anopheles punctipennis</i>	5	20	
	<i>Anopheles quadrimaculatus</i>	3	20	
	<i>Coquillettidia perturbans</i>	5	31	
	<i>Culex erraticus</i>	1	2	
	<i>Culex pipiens</i>	2	21	
	<i>Culex restuans</i>	1	11	
	<i>Culex salinarius</i>	2	2	
	<i>Culex</i> spp.	14	217	

	<i>Culex territans</i>	2	8	
	<i>Culiseta melanura</i>	54	1302	2
	<i>Ochlerotatus abserratus</i>	1	9	
	<i>Ochlerotatus atropalpus</i>	1	3	
	<i>Ochlerotatus canadensis</i>	3	16	
	<i>Ochlerotatus cantator</i>	1	2	
	<i>Ochlerotatus grossbecki</i>	1	6	
	<i>Ochlerotatus japonicus</i>	10	27	
	<i>Ochlerotatus mitchellae</i>	1	1	
	<i>Ochlerotatus sollicitans</i>	3	16	
	<i>Ochlerotatus sticticus</i>	1	6	
	<i>Ochlerotatus stimulans</i>	1	4	
	<i>Ochlerotatus taeniorhynchus</i>	1	7	
	<i>Ochlerotatus triseriatus</i>	3	11	
	<i>Ochlerotatus trivittatus</i>	1	1	
	<i>Orthopodomyia signifera</i>	1	2	
	<i>Psorophora ciliata</i>	2	18	
	<i>Psorophora columbiae</i>	1	2	
	<i>Psorophora howardii</i>	1	7	
	<i>Uranotaenia sapphirina</i>	1	6	
<b>Camden</b>		<b>57</b>	<b>1073</b>	<b>0</b>
	<i>Aedes albopictus</i>	4	32	
	<i>Anopheles punctipennis</i>	6	34	
	<i>Anopheles quadrimaculatus</i>	2	3	
	<i>Culex restuans</i>	1	2	
	<i>Culex</i> spp.	1	16	
	<i>Culiseta melanura</i>	40	946	
	<i>Ochlerotatus trivittatus</i>	1	1	
	<i>Psorophora ferox</i>	2	39	
<b>Cape May</b>		<b>197</b>	<b>3774</b>	<b>1</b>
	<i>Aedes albopictus</i>	1	2	
	<i>Aedes vexans</i>	1	6	
	<i>Anopheles bradleyi</i>	2	2	
	<i>Anopheles punctipennis</i>	2	3	
	<i>Anopheles quadrimaculatus</i>	22	1228	
	<i>Coquillettidia perturbans</i>	4	111	
	<i>Culex erraticus</i>	4	187	
	<i>Culex pipiens</i>	36	480	
	<i>Culex restuans</i>	31	212	1
	<i>Culex salinarius</i>	10	172	
	<i>Culex territans</i>	4	19	
	<i>Culiseta melanura</i>	62	1171	
	<i>Ochlerotatus cantator</i>	4	17	
	<i>Ochlerotatus japonicus</i>	4	12	
	<i>Ochlerotatus sollicitans</i>	5	58	

	Ochlerotatus taeniorhynchus	3	89	
	Ochlerotatus triseriatus	2	5	
<b>Cumberland</b>		<b>115</b>	<b>449</b>	<b>0</b>
	Aedes vexans	23	70	
	Anopheles punctipennis	1	2	
	Coquillettidia perturbans	1	1	
	Culex pipiens	9	88	
	Culex restuans	7	30	
	Culex salinarius	9	89	
	Culex spp.	7	19	
	Culiseta melanura	6	8	
	Ochlerotatus canadensis	24	77	
	Ochlerotatus cantator	6	8	
	Ochlerotatus grossbecki	2	3	
	Ochlerotatus japonicus	8	30	
	Ochlerotatus sollicitans	2	2	
	Ochlerotatus triseriatus	3	4	
	Ochlerotatus trivittatus	1	1	
	Psorophora columbiae	6	17	
<b>Essex</b>		<b>72</b>	<b>743</b>	<b>0</b>
	Aedes albopictus	3	4	
	Aedes vexans	4	9	
	Anopheles punctipennis	1	1	
	Coquillettidia perturbans	7	60	
	Culex spp.	39	591	
	Ochlerotatus canadensis	1	4	
	Ochlerotatus japonicus	9	44	
	Ochlerotatus sticticus	1	9	
	Ochlerotatus triseriatus	5	8	
	Ochlerotatus trivittatus	1	12	
	Psorophora ferox	1	1	
<b>Gloucester</b>		<b>103</b>	<b>2404</b>	<b>7</b>
	Aedes albopictus	4	7	
	Aedes vexans	4	16	
	Anopheles bradleyi	1	1	
	Culex pipiens	7	300	
	Culex restuans	3	54	
	Culex salinarius	3	68	
	Culex spp.	56	1838	<b>7</b>
	Culiseta melanura	1	3	
	Ochlerotatus japonicus	16	87	
	Ochlerotatus sollicitans	1	1	
	Ochlerotatus triseriatus	4	14	
	Psorophora columbiae	2	14	

	<i>Psorophora ferox</i>	1	1	
<b>Hudson</b>		<b>45</b>	<b>1623</b>	<b>1</b>
	<i>Culex</i> spp.	45	1623	1
<b>Hunterdon</b>		<b>80</b>	<b>3392</b>	<b>0</b>
	<i>Culex</i> spp.	74	3357	
	<i>Ochlerotatus japonicus</i>	6	35	
<b>Mercer</b>		<b>136</b>	<b>2988</b>	<b>4</b>
	<i>Aedes albopictus</i>	3	5	
	<i>Aedes vexans</i>	7	204	
	<i>Anopheles punctipennis</i>	7	71	
	<i>Anopheles quadrimaculatus</i>	2	6	
	<i>Coquillettidia perturbans</i>	4	105	
	<i>Culex pipiens</i>	28	582	3
	<i>Culex restuans</i>	22	570	
	<i>Culex salinarius</i>	3	14	
	<i>Culex</i> spp.	18	806	1
	<i>Culiseta melanura</i>	2	6	
	<i>Ochlerotatus canadensis</i>	8	354	
	<i>Ochlerotatus excrucians</i>	2	3	
	<i>Ochlerotatus japonicus</i>	16	61	
	<i>Ochlerotatus sticticus</i>	1	40	
	<i>Ochlerotatus triseriatus</i>	6	13	
	<i>Ochlerotatus trivittatus</i>	2	7	
	<i>Psorophora columbiae</i>	1	23	
	<i>Psorophora howardii</i>	1	1	
	<i>Uranotaenia sapphirina</i>	3	117	
<b>Middlesex</b>		<b>42</b>	<b>626</b>	<b>0</b>
	<i>Aedes albopictus</i>	1	1	
	<i>Aedes vexans</i>	4	35	
	<i>Anopheles punctipennis</i>	3	6	
	<i>Culex pipiens</i>	7	300	
	<i>Culex restuans</i>	3	24	
	<i>Culex</i> spp.	8	181	
	<i>Ochlerotatus japonicus</i>	3	18	
	<i>Ochlerotatus sollicitans</i>	4	50	
	<i>Ochlerotatus triseriatus</i>	4	5	
	<i>Ochlerotatus trivittatus</i>	2	3	
	<i>Orthopodomyia signifera</i>	1	1	
	<i>Psorophora columbiae</i>	2	2	

<b>Monmouth</b>	<b>195</b>	<b>1976</b>	<b>0</b>
Aedes albopictus	2	2	
Aedes vexans	10	112	
Anopheles barberi	2	2	
Anopheles punctipennis	10	59	
Anopheles quadrimaculatus	5	12	
Coquillettidia perturbans	7	16	
Culex pipiens	10	266	
Culex restuans	12	239	
Culex salinarius	8	236	
Culex spp.	24	144	
Culex territans	2	2	
Culiseta melanura	40	296	
Ochlerotatus canadensis	11	91	
Ochlerotatus cantator	3	10	
Ochlerotatus grossbecki	1	2	
Ochlerotatus japonicus	21	164	
Ochlerotatus sollicitans	5	117	
Ochlerotatus sticticus	1	3	
Ochlerotatus triseriatus	18	176	
Psorophora ciliata	1	23	
Psorophora columbiae	2	4	
<b>Morris</b>	<b>98</b>	<b>3879</b>	<b>1</b>
Aedes cinereus	1	10	
Aedes vexans	1	1	
Anopheles punctipennis	3	6	
Coquillettidia perturbans	3	30	
Culex pipiens	2	6	
Culex restuans	1	1	
Culex spp.	65	3713	<b>1</b>
Ochlerotatus canadensis	1	11	
Ochlerotatus japonicus	17	88	
Ochlerotatus triseriatus	4	13	
<b>Ocean</b>	<b>202</b>	<b>2579</b>	<b>0</b>
Aedes albopictus	6	52	
Aedes vexans	11	156	
Anopheles bradleyi	1	1	
Anopheles punctipennis	8	61	
Anopheles quadrimaculatus	4	6	
Coquillettidia perturbans	11	287	
Culex pipiens	8	103	
Culex restuans	9	147	
Culex salinarius	16	99	
Culex spp.	27	504	
Culex territans	2	5	



	<i>Culiseta melanura</i>	33	426	
	<i>Ochlerotatus canadensis</i>	9	184	
	<i>Ochlerotatus cantator</i>	1	50	
	<i>Ochlerotatus grossbecki</i>	4	10	
	<i>Ochlerotatus japonicus</i>	15	60	
	<i>Ochlerotatus sollicitans</i>	16	281	
	<i>Ochlerotatus thibaulti</i>	1	1	
	<i>Ochlerotatus triseriatus</i>	8	20	
	<i>Ochlerotatus trivittatus</i>	1	1	
	<i>Orthopodomyia signifera</i>	1	1	
	<i>Psorophora ciliata</i>	5	116	
	<i>Psorophora columbiae</i>	1	2	
	<i>Psorophora ferox</i>	1	2	
	<i>Psorophora howardii</i>	1	1	
	<i>Uranotaenia sapphirina</i>	2	3	
<b>Passaic</b>		<b>41</b>	<b>1027</b>	<b>1</b>
	<i>Anopheles punctipennis</i>	2	4	
	<i>Culex</i> spp.	24	860	<b>1</b>
	<i>Ochlerotatus japonicus</i>	14	154	
	<i>Ochlerotatus triseriatus</i>	1	9	
<b>Salem</b>		<b>126</b>	<b>2473</b>	<b>0</b>
	<i>Aedes vexans</i>	3	5	
	<i>Anopheles bradleyi</i>	2	2	
	<i>Anopheles punctipennis</i>	8	48	
	<i>Anopheles quadrimaculatus</i>	9	78	
	<i>Anopheles walkeri</i>	2	14	
	<i>Coquillettidia perturbans</i>	3	5	
	<i>Culex erraticus</i>	1	1	
	<i>Culex restuans</i>	14	592	
	<i>Culex</i> spp.	19	193	
	<i>Culex territans</i>	3	6	
	<i>Culiseta melanura</i>	49	1398	
	<i>Ochlerotatus cantator</i>	4	37	
	<i>Ochlerotatus japonicus</i>	7	92	
	<i>Psorophora columbiae</i>	2	2	
<b>Somerset</b>		<b>102</b>	<b>1980</b>	<b>0</b>
	<i>Aedes vexans</i>	3	24	
	<i>Anopheles punctipennis</i>	4	8	
	<i>Coquillettidia perturbans</i>	2	6	
	<i>Culex pipiens</i>	3	71	
	<i>Culex restuans</i>	7	233	
	<i>Culex salinarius</i>	1	2	
	<i>Culex</i> spp.	45	1297	
	<i>Culiseta melanura</i>	1	1	

	Ochlerotatus canadensis	4	54	
	Ochlerotatus japonicus	23	249	
	Ochlerotatus triseriatus	9	35	
<b>Sussex</b>		<b>135</b>	<b>1627</b>	<b>0</b>
	Aedes cinereus	2	11	
	Aedes vexans	5	38	
	Anopheles barberi	1	1	
	Anopheles punctipennis	11	106	
	Anopheles quadrimaculatus	4	31	
	Anopheles walkeri	5	152	
	Coquillettidia perturbans	14	397	
	Culex pipiens	3	4	
	Culex restuans	8	162	
	Culex salinarius	3	3	
	Culex spp.	21	334	
	Culex territans	4	9	
	Culiseta melanura	3	4	
	Culiseta morsitans	1	1	
	Ochlerotatus canadensis	7	27	
	Ochlerotatus japonicus	24	167	
	Ochlerotatus stimulans	5	29	
	Ochlerotatus triseriatus	9	46	
	Ochlerotatus trivittatus	2	100	
	Uranotaenia sapphirina	3	5	
<b>Union</b>		<b>22</b>	<b>766</b>	<b>1</b>
	Culex spp.	17	759	<b>1</b>
	Ochlerotatus japonicus	2	4	
	Ochlerotatus triseriatus	1	1	
	Ochlerotatus trivittatus	1	1	
	Psorophora discolor	1	1	
<b>Warren</b>		<b>108</b>	<b>3069</b>	<b>0</b>
	Aedes vexans	3	7	
	Anopheles barberi	1	2	
	Anopheles punctipennis	3	3	
	Culex restuans	1	3	
	Culex spp.	69	2780	
	Ochlerotatus cantator	1	50	
	Ochlerotatus japonicus	23	208	
	Ochlerotatus punctor	1	4	
	Ochlerotatus triseriatus	6	12	
<b>Grand Total</b>		<b>2310</b>	<b>46997</b>	<b>26</b>