

VECTOR SURVEILLANCE IN NEW JERSEY
EEE and WNV
CDC WEEK 43: October 19 to October 25, 2008

Prepared by Lisa M. Reed, Scott Crans Dina Fonseca and Marc Slaff at the Center for Vector Biology, Rutgers University.
Supported by funding from the NJ State Mosquito Control Commission.

Culiseta melanura and Eastern Equine Encephalitis

SITE	Inland / Coastal	Historic Mean	Current Weekly Mean	Total Collected to Date*	Total Pools Submitted	EEE Isolations	MFIR
Green Bank (Burlington County)	Coastal	1.2	0.1	249	49	1	4.02
Corbin City (Atlantic County)	Coastal	0.1	0	161	55		
Dennisville (Cape May County)	Coastal	2.3	< 0.1	588	66	1**	1.70
Waterford (Camden County)	Inland	0.1	< 0.1	66	13	2	30.30
Centerton (Salem County)	Inland	0.6	0.5	569	64	2	3.51
Turkey Swamp (Monmouth County)	Inland	0.1	0	270	58		
Glassboro (Gloucester County)	Inland	no history	0.1	87	37	1	11.49

*Including trial run last week in May. **does not include the additional positive pool collected and tested in Cape May.

Remarks: As the end of the season draws near, positive EEE pools were detected only in the enzootic vector. No transmission to date has been found to either horse or humans and neither was transmission to bridge vectors detected. The very high MFIR values at the Waterford monitoring site were influenced by the low numbers of *Cs. melanura* collected there. In comparison with eastern US EEE activity, New Jersey appears to have moderate activity for the few *Culiseta melanura* collected. This is the last report for the season – samples collected this week will be reported in the final report.

To date, 342 pools from 1990 *Cs. melanura* mosquitoes have been sent for EEE testing from the resting box collections. Previously, an additional EEE positive pool from Cape May had been detected by the Cape May Mosquito Control Department's lab, giving a statewide cumulative total of 8 positive EEE pools. No horse or human cases have been reported to date.

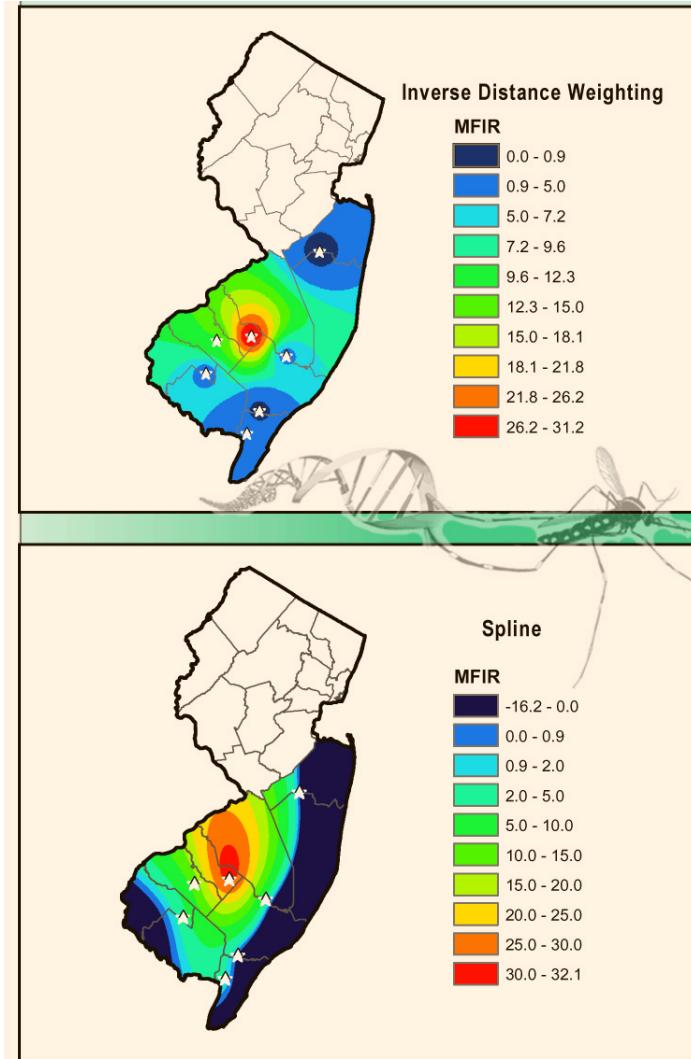
An additional 584 pools of 5224 individual mosquitoes from 31 species other than *Cs. melanura* have also been tested and all pools were found to be negative. These species include: *Aedes albopictus*, *Ae. canadensis canadensis*, *Ae. cantator*, *Ae. cinereus*, *Ae. communis*, *Ae. grossbecki*, *Ae. japonicus*, *Ae. sollicitans*, *Ae. sticticus*, *Ae. taeniorhynchus*, *Ae. triseriatus*, *Ae. trivittatus*, *Ae. vexans*, *Anopheles bradleyi*, *An. crucians*, *An. punctipennis*, *An. quadrimaculatus*, *Coquillettidia perturbans*, *Culex erraticus*, *Cx. pipiens*, *Cx. restuans*, *Cx. salinarius*, Mixed *Culex*, *Cx. territans*, *Culiseta inornata*, *Orthopodomyia signifera*, *Psorophora ciliata*, *Ps. columbiiae*, *Ps. cyanescens*, *Ps.*, *ferox*, *Ps. howardii* and *Uranotaenia sapphirina*.

Application of GIS Mapping to Resting Box MFIR values.

In order to predict the world (or in this case, EEE MFIR values), the use of GIS programs to plot either direct measurements such as these MFIR values or the predicted value such as potential human cases based upon an equation can provide enlightening if not surprising results. The varying results come from the many forms of interpolation used to predict unknown points lying between the few known measurements. The type of interpolation used should be based upon the type of data one has, the need for reduced error of prediction and the resulting graph that is reasonable based upon the biology of the situation.

Inverse Distance Weighting.

The top left map was created by interpolating points where known points closer to the interpolated point will have a greater influence than more distant known points. This is



a simple and straightforward strategy that is best implemented when known points are evenly distributed (which isn't really the case here as the resting box sites are more heavily concentrated in the southern portion of south New Jersey). In this interpolation, MFIR values are low to moderate throughout much of southern New Jersey, and the higher MFIR value are contained closer to the originating point of Waterford.

Spline: Spline interpolations are derived from fitting a smooth curve to the known points such that the curve is minimized. This interpretation resulted in larger areas (coastal and Delaware bayshore) with estimated MFIR values close to zero, concentrating EEE activity to the inland areas and extending toward Pennsylvania. Spline techniques can use few known points in their interpolations, but outliers have more of an effect here than with the inverse distance weighting technique, and thus the larger distribution of higher MFIR values from Waterford.

There are other interpolation techniques such as kriging that are available, which may offer interpolation patterns with smaller variance and thus, more likely to be closer to actual measurements when ground-truthed.

GIS mapping by Chris Klaube, CVB.

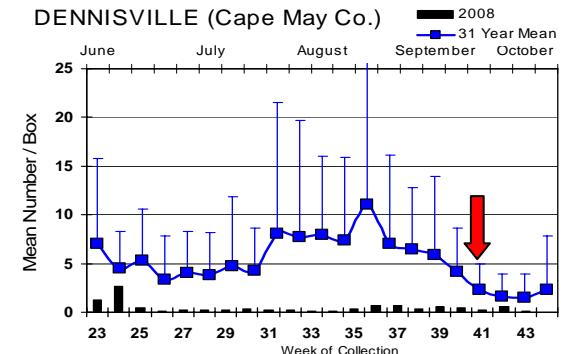
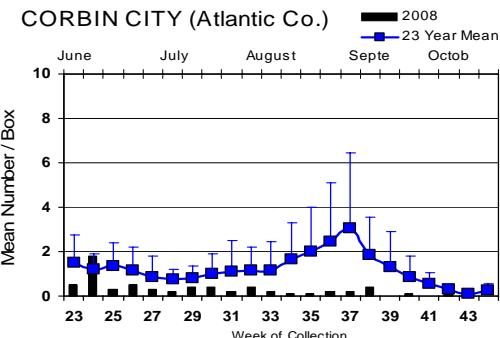
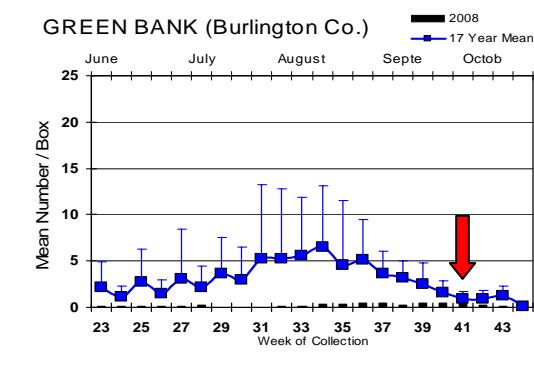
Resting Box- EEE- MFIR's



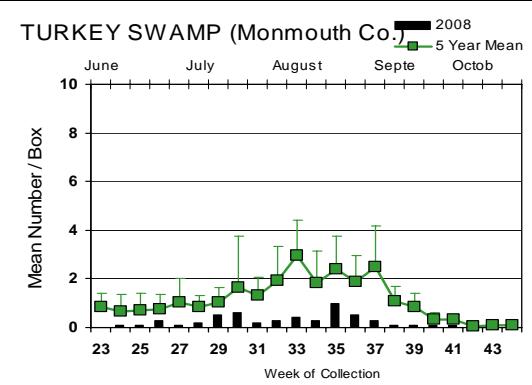
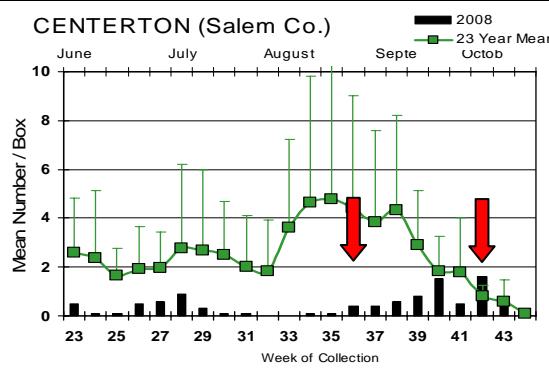
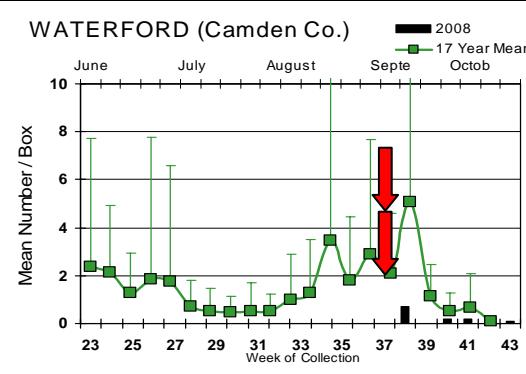
* Interpolations based on data for the week of October 12th- 18th 2008

Culiseta melanura Population Graphs

Coastal



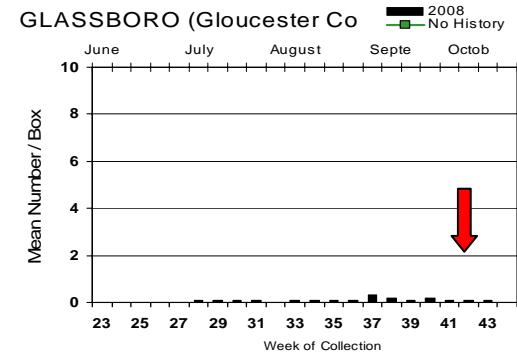
Inland



Figures: Inland and coastal resting box sites showing current weekly population levels (in bars) against historical trends (lines with standard deviation). The number of years for historical population levels varies by site.

An additional inland resting box site has been added. This site is located near Glassboro, in Gloucester County. The location is in a wildlife management area, with box location in a mixed forest swamp (Red Maple/White Pine).

Red arrows indicate when EEE-positive *Cs. melanura* populations were detected. Earliest infection occurred at week 36 in Centerton.



EEE in US (2008 cumulative cases): (Red = new reported cases occurring)

- equine: 13(AL), 84(FL) 23(GA) 7(LA) 1(MA) 1(ME) 1(MI) 8(MS) 11(NC) 5(SC) 1(TN) 2(TX) 1(VA) 1(WI)
- mosquito: 2(AR) 3(FL) 1(GA) 1(IN) 5(LA) 13(MA) 4(MD) 1(ME) 2(MI) 8(NH) 7(NJ) 4(MD) 9(VA)
- sentinel: 3(AL) 3(DE) 112(FL74 wild) 19[2emu](NC) emu(NH) 5(VA)
- human: 1(AL) 1(FL) 1(MAtravel?)

West Nile Virus

West Nile in US (2008 cumulative cases): Single black values indicate no change from previous week. Black values / red values equals previous week/[New](#)

	Birds	Mosquito Pools	Sentinels	Horses			Birds	Mosquito Pools	Sentinels	Horses	Humans
Alabama				4	Nevada	13	4	38		2	15
Alaska					New Hampshire	0/17		1			
Arizona	4	200/206	40/42	3	New Jersey	52/53	602/606	1			7
Arkansas	2	19		1	New Mexico			3		2	7/8
California	2387/2418	1849/1921	481/515	29	New York		154	351		2	
Colorado	4	61		1	North Carolina					2	42
Connecticut		190			North Dakota					1	1
Delaware	2		18		Ohio	3	11	355			1
DC		50			Oklahoma	0/9		15			43
Florida	3 live		9	1	Oregon		2	18			16
Georgia	4	42			Pennsylvania		14	518		1/2	5/13
Hawaii					Rhode Island			10			1
Idaho	4	7 counties		1	South Carolina		3	7			
Illinois	31	641		1	South Dakota	8	1	39		4	37/39
Indiana	6	191			Tennessee	22/25	1	618/622			8
Iowa	3	5	3	5	Texas	7/16	3	115		2	51
Kansas					Utah		3	140	16	7	27
Kentucky	2	11		5	Vermont	0/9	1	1			
Louisiana		600/1017	9/12	1/6	Virginia			675/677	1/2		1
Maine					Washington	14	20	57		37/40	2
Maryland		10/23		1	West Virginia	2/14	2	44		2	1
Mass.	63	135			Wisconsin	16/16	38/39			5	6
Michigan	8	2		1	Wyoming		5	14		1	8
Minnesota	7	22									
Mississippi		3		2/3							
Missouri	29	215		1/2							
Montana		5		6/7							
Nebraska	17	88		2/3	44/45	totals.					

Note: Some data reported by states are provisional and are subject to change. Sources for this table can be found [here](#).

Protocol: New Jersey Department of Health and Senior Services (NJDHSS Public Health and Environmental Laboratories, PHEL) tests mosquito pools using RT-PCR Taqman techniques.

Mosquito Species Submitted for West Nile Virus Testing through 29 October 2008

Species	Pools	Mosquitoes	Positives	MFIR
<i>Aedes abserratus</i>	1	9		
<i>Aedes albopictus</i>	1135	10000	3	0.30
<i>Aedes atlanticus</i>	2	5		
<i>Aedes atropalpus</i>	1	1		
<i>Aedes canadensis canadensis</i>	62	1260		
<i>Aedes cantator</i>	36	417		
<i>Aedes cinereus</i>	3	5		
<i>Aedes communis</i>	1	1		
<i>Aedes grossbecki</i>	3	4		
<i>Aedes japonicus</i>	549	2263	1	0.44
<i>Aedes sollicitans</i>	74	1449		

<i>Aedes sticticus</i>	9	93		
<i>Aedes stimulans</i>	1	1		
<i>Aedes taeniorhynchus</i>	41	816		
<i>Aedes thibaulti</i>	5	13		
<i>Aedes triseriatus</i>	242	683		
<i>Aedes trivittatus</i>	24	172		
<i>Aedes vexans</i>	331	4433		
<i>Anopheles atropos</i>	1	1		
<i>Anopheles barberi</i>	3	3		
<i>Anopheles bradleyi</i>	88	1275		
<i>Anopheles crucians</i>	11	35		
<i>Anopheles earlei</i>	2	2		
<i>Anopheles punctipennis</i>	184	1012		
<i>Anopheles quadrimaculatus</i>	181	2086		
<i>Coquillettidia perturbans</i>	106	942		
<i>Culex erraticus</i>	166	1357		
<i>Culex pipiens</i>	1045	21090	120	5.69
<i>Culex restuans</i>	530	5206	7	1.34
<i>Culex salinarius</i>	266	9999	2	0.20
<i>Culex spp.</i>	3061	107410	470	4.38
<i>Culex territans</i>	88	368		
<i>Culiseta inornata</i>	3	5		
<i>Culiseta melanura</i>	452	2524	3	1.19
<i>Orthopodomyia signifera</i>	12	21		
<i>Psorophora ciliata</i>	9	54		
<i>Psorophora columbae</i>	36	218		
<i>Psorophora cyanescens</i>	1	1		
<i>Psorophora ferox</i>	39	185		
<i>Psorophora howardii</i>	4	11		
<i>Uranotaenia sapphirina</i>	45	476		
State Total	8853	175906	606	3.50

Remarks: Submitted pools (8,853) comprised of 175,906 individual mosquitoes produced 606 positive pools from 20 different counties.

Humans, Horses and Wild Birds: No additional humans have been reported positive for WNV by PHEL. A total of seven humans have been reported by PHEL as having contracted WNV. For more details plus information about WNV, see the PHEL's West Nile Virus Alert and FAQ Sheets:

<http://www.state.nj.us/health/cd/westnile/enceph.htm>

No confirmed horse cases have occurred.

To date, there have been 163 dead birds submitted for West Nile virus testing with 53 positives Last year, there were 45 positive birds from 184 submissions to this point in time. One sentinel chicken from Cape May County tested positive for WNV.

2008 Positive Mosquito pools to date / Total Mosquito Pools Submitted	This time last year
606 / 8,853	346 / 7,196

WNV Results by County through 29 October 2008

County	Species	Pools	Mosquitoes	Positives	MFIR
Atlantic		369	7229	10	1.38
	<i>Aedes albopictus</i>	38	751		

	Aedes canadensis canadensis	4	13		
	Aedes cantator	6	47		
	Aedes japonicus	7	12		
	Aedes sollicitans	22	751		
	Aedes taeniorhynchus	26	621		
	Aedes thibaulti	4	8		
	Aedes triseriatus	8	19		
	Aedes vexans	30	709		
	Anopheles atropos	1	1		
	Anopheles bradleyi	16	189		
	Anopheles crucians	2	24		
	Anopheles punctipennis	9	15		
	Anopheles quadrimaculatus	3	6		
	Coquillettidia perturbans	6	44		
	Culex erraticus	11	135		
	Culex pipiens	1	17		
	Culex restuans	12	357	1	2.80
	Culex salinarius	3	3		
	Culex sp.	83	3296	9	2.73
	Culex territans	10	24		
	Culiseta melanura	59	167		
	Orthopodomyia signifera	2	2		
	Psorophora columbiae	1	1		
	Psorophora ferox	4	15		
	Uranotaenia sapphirina	1	2		
Bergen		668	30941	153	4.94
	Aedes albopictus	29	151		
	Aedes canadensis canadensis	1	6		
	Aedes japonicus	34	165		
	Aedes sollicitans	1	1		
	Aedes triseriatus	13	42		
	Aedes vexans	28	111		
	Anopheles barberi	1	1		
	Anopheles bradleyi	6	15		
	Anopheles punctipennis	6	35		
	Coquillettidia perturbans	29	192		
	Culex pipiens	103	3581	15	4.19
	Culex restuans	33	322		
	Culex salinarius	132	8142	1	0.12
	Culex spp.	250	18175	137	7.54
	Culex territans	1	1		
	Orthopodomyia signifera	1	1		
Burlington		554	4113	5	1.22
	Aedes albopictus	65	594		
	Aedes canadensis canadensis	23	609		
	Aedes cantator	4	148		
	Aedes cinereus	1	3		
	Aedes grossbecki	1	1		
	Aedes japonicus	26	73		
	Aedes sollicitans	2	22		
	Aedes sticticus	2	5		
	Aedes taeniorhynchus	2	9		
	Aedes triseriatus	18	45		
	Aedes trivittatus	2	5		

	Aedes vexans	68	672		
	Anopheles bradleyi	4	16		
	Anopheles crucians	8	10		
	Anopheles punctipennis	21	55		
	Anopheles quadrimaculatus	18	31		
	Coquillettidia perturbans	22	237		
	Culex erraticus	12	36		
	Culex pipiens	19	179	3	16.76
	Culex restuans	16	98	1	10.20
	Culex salinarius	7	7		
	Culex sp.	82	745	1	1.34
	Culex territans	14	25		
	Culiseta inornata	1	3		
	Culiseta melanura	75	393		
	Orthopodomyia signifera	4	12		
	Psorophora ciliata	6	10		
	Psorophora columbiae	14	46		
	Psorophora cyanescens	1	1		
	Psorophora ferox	5	6		
	Psorophora howardii	1	3		
	Uranotaenia sapphirina	10	14		
Camden		228	3830	18	4.70
	Aedes albopictus	45	306		
	Aedes canadensis canadensis	1	19		
	Aedes cantator	1	22		
	Aedes japonicus	16	33		
	Aedes triseriatus	2	2		
	Aedes trivittatus	1	1		
	Aedes vexans	7	144		
	Anopheles punctipennis	8	33		
	Anopheles quadrimaculatus	8	14		
	Coquillettidia perturbans	4	16		
	Culex erraticus	3	9		
	Culex pipiens	14	531		
	Culex restuans	22	523		
	Culex salinarius	4	15		
	Culex sp.	72	2091	17	8.13
	Culex territans	1	1		
	Culiseta inornata	1	1		
	Culiseta melanura	15	65	1	15.38
	Orthopodomyia signifera	2	3		
	Psorophora columbiae	1	1		
Cape May		834	9584	3	0.31
	Aedes albopictus	57	187		
	Aedes canadensis canadensis	4	71		
	Aedes cantator	8	82		
	Aedes japonicus	17	28		
	Aedes sollicitans	15	482		
	Aedes taeniorhynchus	6	156		
	Aedes triseriatus	4	6		
	Aedes vexans	4	16		
	Anopheles bradleyi	26	711		
	Anopheles punctipennis	13	110		
	Anopheles quadrimaculatus	31	689		

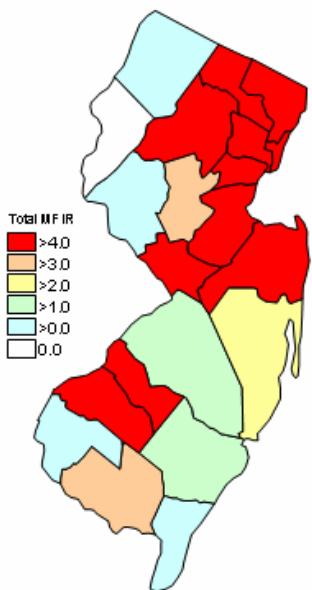
<i>Coquillettidia perturbans</i>	4	28		
<i>Culex erraticus</i>	19	419		
<i>Culex pipiens</i>	208	2580	1	0.39
<i>Culex restuans</i>	212	1985	1	0.50
<i>Culex salinarius</i>	16	532		
<i>Culex sp.</i>	87	793	1	1.26
<i>Culex territans</i>	10	36		
<i>Culiseta melanura</i>	93	673		
Cumberland	307	3468	8	3.24
<i>Aedes albopictus</i>	64	218		
<i>Aedes japonicus</i>	20	43		
<i>Aedes sticticus</i>	2	6		
<i>Aedes triseriatus</i>	14	27		
<i>Aedes vexans</i>	9	76		
<i>Anopheles bradleyi</i>	2	2		
<i>Anopheles punctipennis</i>	7	16		
<i>Anopheles quadrimaculatus</i>	2	4		
<i>Coquillettidia perturbans</i>	1	1		
<i>Culex erraticus</i>	27	84		
<i>Culex pipiens</i>	43	338	4	11.83
<i>Culex restuans</i>	19	146	1	6.85
<i>Culex salinarius</i>	3	3		
<i>Culex spp.</i>	77	1387	3	2.16
<i>Culex territans</i>	2	5		
<i>Culiseta melanura</i>	9	102		
<i>Psorophora columbiae</i>	1	2		
<i>Psorophora ferox</i>	1	1		
<i>Psorophora howardii</i>	1	1		
<i>Uranotaenia sapphirina</i>	3	6		
Essex	335	3928	34	8.66
<i>Aedes albopictus</i>	90	539		
<i>Aedes japonicus</i>	31	132	1	7.58
<i>Aedes triseriatus</i>	21	36		
<i>Aedes trivittatus</i>	1	1		
<i>Aedes vexans</i>	12	40		
<i>Anopheles punctipennis</i>	6	6		
<i>Anopheles quadrimaculatus</i>	4	11		
<i>Coquillettidia perturbans</i>	2	2		
<i>Culex pipiens</i>	4	79	1	12.66
<i>Culex restuans</i>	2	17		
<i>Culex spp.</i>	155	3054	32	10.48
<i>Culex territans</i>	6	10		
<i>Psorophora columbiae</i>	1	1		
Gloucester	737	13134	56	4.26
<i>Aedes abserratus</i>	1	9		
<i>Aedes albopictus</i>	74	498		
<i>Aedes canadensis canadensis</i>	7	245		

	<i>Aedes communis</i>	1	1		
	<i>Aedes japonicus</i>	40	147		
	<i>Aedes sollicitans</i>	1	2		
	<i>Aedes thibaulti</i>	1	5		
	<i>Aedes triseriatus</i>	13	24		
	<i>Aedes vexans</i>	11	302		
	<i>Anopheles bradleyi</i>	4	86		
	<i>Anopheles earlei</i>	2	2		
	<i>Anopheles punctipennis</i>	31	100		
	<i>Anopheles quadrimaculatus</i>	33	71		
	<i>Coquillettidia perturbans</i>	9	39		
	<i>Culex erraticus</i>	7	47		
	<i>Culex pipiens</i>	390	10494	55	5.24
	<i>Culex restuans</i>	19	591		
	<i>Culex salinarius</i>	6	34		
	<i>Culex territans</i>	12	92		
	<i>Culiseta melanura</i>	59	179	1	5.59
	<i>Psorophora columbiae</i>	7	125		
	<i>Psorophora ferox</i>	4	11		
	<i>Uranotaenia sapphirina</i>	5	30		
Hudson		236	10367	63	6.08
	<i>Culex spp.</i>	236	10367	63	6.08
Hunterdon		349	14823	7	0.47
	<i>Aedes albopictus</i>	5	58		
	<i>Aedes japonicus</i>	1	6		
	<i>Aedes trivittatus</i>	1	18		
	<i>Aedes vexans</i>	10	352		
	<i>Anopheles punctipennis</i>	1	50		
	<i>Anopheles quadrimaculatus</i>	2	25		
	<i>Culex erraticus</i>	1	10		
	<i>Culex spp.</i>	327	14303	7	0.49
	<i>Culiseta inornata</i>	1	1		
Mercer		593	6218	46	7.40
	<i>Aedes albopictus</i>	250	3260	2	0.61
	<i>Aedes atropalpus</i>	1	1		
	<i>Aedes japonicus</i>	69	116		
	<i>Aedes stimulans</i>	1	1		
	<i>Aedes triseriatus</i>	27	52		
	<i>Aedes trivittatus</i>	1	1		
	<i>Aedes vexans</i>	7	17		
	<i>Anopheles punctipennis</i>	1	1		
	<i>Culex erraticus</i>	17	58		
	<i>Culex pipiens</i>	121	2007	37	18.44
	<i>Culex restuans</i>	71	270	3	11.11
	<i>Culex salinarius</i>	13	162		
	<i>Culex spp.</i>	11	267	4	14.98
	<i>Culex territans</i>	1	1		
	<i>Orthopodomyia signifera</i>	1	1		
	<i>Psorophora columbiae</i>	1	3		
Middlesex		351	8082	44	5.44
	<i>Aedes albopictus</i>	34	386		

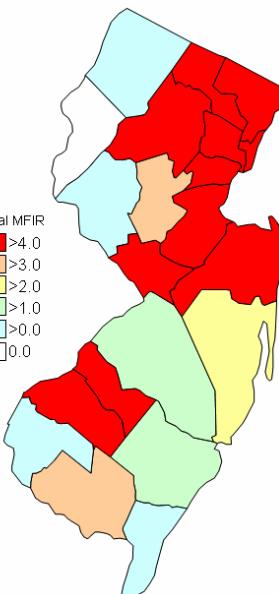
	<i>Aedes japonicus</i>	13	58		
	<i>Aedes triseriatus</i>	5	22		
	<i>Aedes trivittatus</i>	1	1		
	<i>Aedes vexans</i>	21	512		
	<i>Culex erraticus</i>	1	1		
	<i>Culex pipiens</i>	26	253	1	3.95
	<i>Culex restuans</i>	13	140		
	<i>Culex salinarius</i>	14	324	1	3.09
	<i>Culex spp.</i>	212	6315	42	6.65
	<i>Culex territans</i>	3	10		
	<i>Psorophora ciliata</i>	3	44		
	<i>Psorophora columbiae</i>	1	4		
	<i>Psorophora ferox</i>	1	1		
	<i>Psorophora howardii</i>	1	3		
	<i>Uranotaenia sapphirina</i>	2	8		
Monmouth		646	5802	26	4.48
	<i>Aedes albopictus</i>	118	680		
	<i>Aedes canadensis canadensis</i>	3	18		
	<i>Aedes cantator</i>	4	5		
	<i>Aedes japonicus</i>	28	73		
	<i>Aedes sollicitans</i>	13	46		
	<i>Aedes taeniorhynchus</i>	7	30		
	<i>Aedes triseriatus</i>	11	21		
	<i>Aedes trivittatus</i>	3	4		
	<i>Aedes vexans</i>	35	155		
	<i>Anopheles barberi</i>	1	1		
	<i>Anopheles crucians</i>	1	1		
	<i>Anopheles punctipennis</i>	21	47		
	<i>Anopheles quadrimaculatus</i>	12	24		
	<i>Coquillettidia perturbans</i>	4	5		
	<i>Culex erraticus</i>	12	97		
	<i>Culex pipiens</i>	64	591	1	1.69
	<i>Culex restuans</i>	45	258		
	<i>Culex salinarius</i>	17	51		
	<i>Culex spp.</i>	163	3298	25	7.58
	<i>Culex territans</i>	16	119		
	<i>Culiseta melanura</i>	60	270		
	<i>Psorophora ferox</i>	1	1		
	<i>Uranotaenia sapphirina</i>	3	7		
Morris		231	6904	31	4.49
	<i>Aedes albopictus</i>	1	3		
	<i>Aedes japonicus</i>	10	41		
	<i>Aedes triseriatus</i>	2	4		
	<i>Anopheles punctipennis</i>	1	4		
	<i>Coquillettidia perturbans</i>	1	50		
	<i>Culex spp.</i>	216	6802	31	4.56
Ocean		454	6238	13	2.08
	<i>Aedes albopictus</i>	112	1443	1	0.69
	<i>Aedes atlanticus</i>	1	1		
	<i>Aedes canadensis canadensis</i>	9	85		
	<i>Aedes cantator</i>	5	33		
	<i>Aedes japonicus</i>	28	56		
	<i>Aedes sollicitans</i>	16	133		

	<i>Aedes triseriatus</i>	12	24		
	<i>Aedes trivittatus</i>	2	2		
	<i>Aedes vexans</i>	31	171		
	<i>Anopheles bradleyi</i>	6	10		
	<i>Anopheles punctipennis</i>	6	10		
	<i>Anopheles quadrimaculatus</i>	6	21		
	<i>Coquillettidia perturbans</i>	5	16		
	<i>Culex pipiens</i>	11	251	1	3.98
	<i>Culex restuans</i>	28	260		
	<i>Culex salinarius</i>	20	161		
	<i>Culex spp.</i>	128	3415	11	3.22
	<i>Culex territans</i>	2	2		
	<i>Culiseta melanura</i>	15	94		
	<i>Psorophora ferox</i>	10	27		
	<i>Uranotaenia sapphirina</i>	1	23		
Passaic		121	3859	32	8.29
	<i>Aedes albopictus</i>	17	97		
	<i>Aedes japonicus</i>	8	89		
	<i>Aedes triseriatus</i>	1	2		
	<i>Anopheles punctipennis</i>	1	5		
	<i>Culex spp.</i>	94	3666	32	8.73
Salem		505	5945	1	0.17
	<i>Aedes albopictus</i>	39	135		
	<i>Aedes atlanticus</i>	1	4		
	<i>Aedes canadensis canadensis</i>	7	181		
	<i>Aedes cantator</i>	8	80		
	<i>Aedes grossbecki</i>	2	3		
	<i>Aedes japonicus</i>	16	37		
	<i>Aedes sollicitans</i>	2	9		
	<i>Aedes sticticus</i>	4	81		
	<i>Aedes triseriatus</i>	20	39		
	<i>Aedes vexans</i>	26	897		
	<i>Anopheles bradleyi</i>	24	246		
	<i>Anopheles punctipennis</i>	34	498		
	<i>Anopheles quadrimaculatus</i>	52	1180		
	<i>Coquillettidia perturbans</i>	9	93		
	<i>Culex erraticus</i>	56	461		
	<i>Culex pipiens</i>	20	71		
	<i>Culex restuans</i>	16	45		
	<i>Culex salinarius</i>	27	557		
	<i>Culex spp.</i>	37	235		
	<i>Culex territans</i>	10	42		
	<i>Culiseta melanura</i>	67	581	1	1.72
	<i>Psorophora columbiae</i>	4	27		
	<i>Psorophora ferox</i>	6	83		
	<i>Psorophora howardii</i>	1	4		
	<i>Uranotaenia sapphirina</i>	17	356		
Somerset		337	4232	14	3.31
	<i>Aedes albopictus</i>	22	73		
	<i>Aedes canadensis canadensis</i>	1	2		
	<i>Aedes japonicus</i>	54	332		
	<i>Aedes triseriatus</i>	40	156		

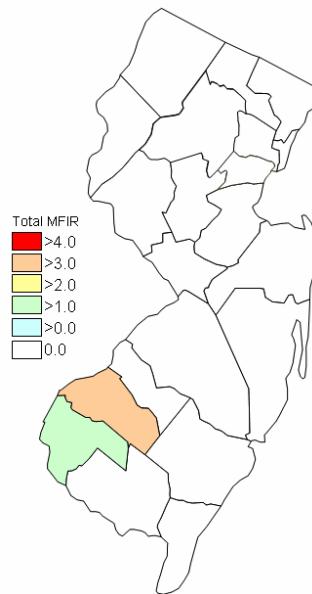
	<i>Aedes trivittatus</i>	8	107		
	<i>Aedes vexans</i>	7	123		
	<i>Anopheles barberi</i>	1	1		
	<i>Anopheles punctipennis</i>	12	14		
	<i>Anopheles quadrimaculatus</i>	8	8		
	<i>Culex pipiens</i>	2	22		
	<i>Culex restuans</i>	2	19		
	<i>Culex spp.</i>	172	3334	14	4.20
	<i>Orthopodomyia signifera</i>	2	2		
	<i>Psorophora ferox</i>	5	38		
	<i>Uranotaenia sapphirina</i>	1	1		
Sussex		487	12400	7	0.56
	<i>Aedes canadensis canadensis</i>	2	11		
	<i>Aedes cinereus</i>	2	2		
	<i>Aedes japonicus</i>	117	738		
	<i>Aedes sticticus</i>	1	1		
	<i>Aedes triseriatus</i>	28	159		
	<i>Aedes trivittatus</i>	4	32		
	<i>Aedes vexans</i>	6	48		
	<i>Anopheles punctipennis</i>	3	8		
	<i>Anopheles quadrimaculatus</i>	1	1		
	<i>Coquillettidia perturbans</i>	10	219		
	<i>Culex pipiens</i>	15	73		
	<i>Culex restuans</i>	13	146		
	<i>Culex salinarius</i>	2	5		
	<i>Culex spp.</i>	280	10927	7	0.64
	<i>Psorophora ferox</i>	1	1		
	<i>Uranotaenia sapphirina</i>	2	29		
Union		248	4739	35	7.39
	<i>Aedes albopictus</i>	75	621		
	<i>Aedes japonicus</i>	9	14		
	<i>Aedes sollicitans</i>	2	3		
	<i>Aedes triseriatus</i>	3	3		
	<i>Aedes vexans</i>	19	88		
	<i>Anopheles punctipennis</i>	3	5		
	<i>Anopheles quadrimaculatus</i>	1	1		
	<i>Culex pipiens</i>	4	23	1	43.48
	<i>Culex restuans</i>	7	29		
	<i>Culex salinarius</i>	2	3		
	<i>Culex spp.</i>	117	3940	34	8.63
	<i>Psorophora columbiae</i>	5	8		
	<i>Psorophora ferox</i>	1	1		
Warren		267	11070		
	<i>Aedes japonicus</i>	5	70		
	<i>Culex spp.</i>	262	11000		
Grand Total		8853	175906	606	3.45



Cumulative activity to last week



Cumulative activity to this week



Recent Activity 9/28 to 10/13

RAMP (Rapid Analyte Measurement Platform). More than half of the counties in New Jersey are incorporating the use of RAMP results in their vector surveillance programs. Counties participate with the PHEL Lab in monitoring the efficacy and sensitivity of the RAMP results by sending in samples to be confirmed. Note that not all samples done by the counties are sent in to PHEL and therefore the number of pools submitted can differ from the number of pools reported by the counties.

Note: PHEL reported additional positive RAMP pools for data not currently in the database. This table will be updated to include those positives when the database is up to date.

RAMP Results for 29 October 2008

County	Species	Pools	Mosquitoes	Positives	PHEL (pools submitted/+-)
Monmouth		75	671		
	<i>Aedes albopictus</i>	4	11		
	<i>Aedes canadensis</i>	8	38		
	<i>Aedes cantator</i>	3	13		
	<i>Aedes japonicus</i>	11	42		
	<i>Aedes triseriatus</i>	1	1		
	<i>Anopheles punctipennis</i>	3	6		
	<i>Coquillettidia perturbans</i>	1	1		
	<i>Culex spp.</i>	2	2		
	<i>Culiseta melanura</i>	1	1		
Warren		51	1968		
	<i>Aedes japonicus</i>	3	33		
	<i>Aedes triseriatus</i>	1	1		
	<i>Aedes vexans</i>	1	2		
	<i>Culex restuans</i>	1	4		
	<i>Culex spp.</i>	45	1928	2	9/0/2