

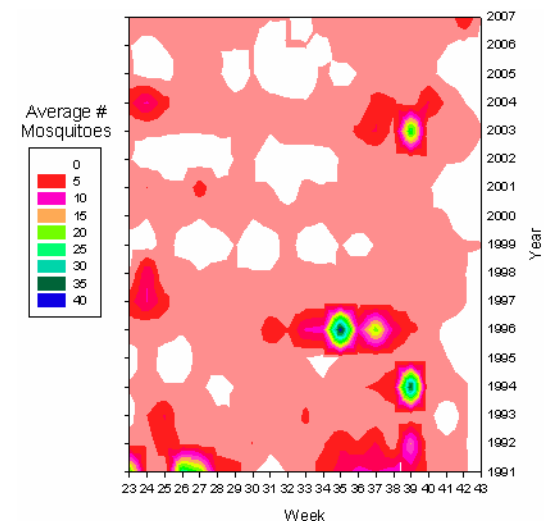
Culiseta melanura and Eastern Equine Encephalitis

SITE	Inland / Coastal	Historic Mean	Current Weekly Mean	Total Collected to Date	Total Pools Submitted	EEE Isolations	MFIR
Green Bank (Burlington County)	Coastal	2.2	0.2	34	15		
Corbin City (Atlantic County)	Coastal	0.7	0.2	98	25		
Dennisville (Cape May County)	Coastal	3.8	0.2	342	21		
Waterford (Camden County)	Inland	0.7	0	0	0		
Centerton (Salem County)	Inland	2.8	0.9	161	22		
Turkey Swamp (Monmouth County)	Inland	0.9	0.2	54	17		
Glassboro (Gloucester County)	Inland		< 0.1	2	2		

*Including trial run last week in May.

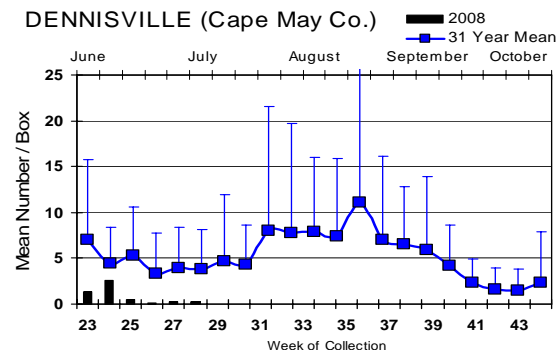
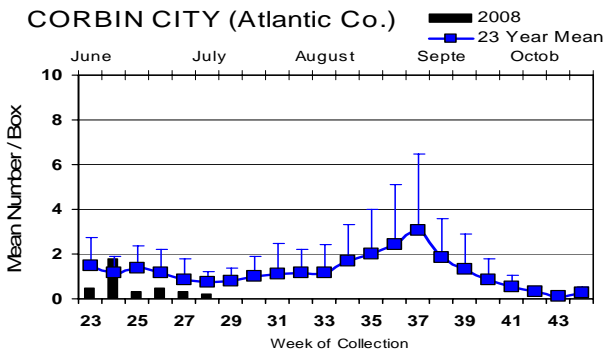
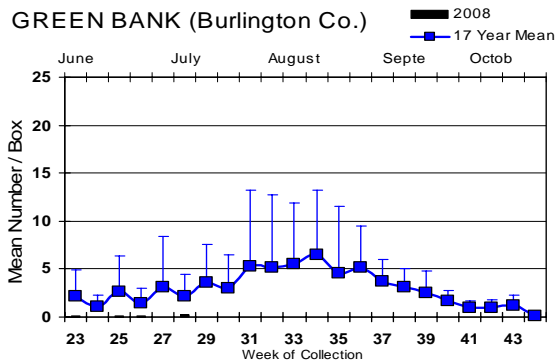
Remarks: No isolations of EEE virus have been found in any of the areas that are currently monitored through the resting boxes, either through the state program or boxes put out by county agencies. Last week, a contour graph of the activity over 30 years in Dennisville indicated that the past several years have shown a decrease in *Culiseta melanura* abundance. This week, the graph is that of the Waterford site. A similar pattern can be seen. However, it should be noted that this site was active with EEE in the recent past. NOTE: the large amounts of light pink are values greater than zero but less than 5.

To date, 102 pools from 691 *Cs. melanura* mosquitoes have been sent for EEE testing from the resting box collections. No positives have been detected from these pools or from pools submitted by the counties. An additional 231 pools of 1996 individual mosquitoes from 27 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. triseriatus*, *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.*, *ferox*, and *Uranotaenia sapphirina*.

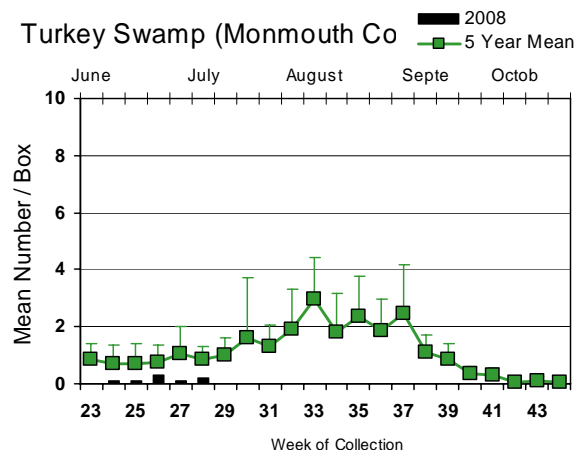
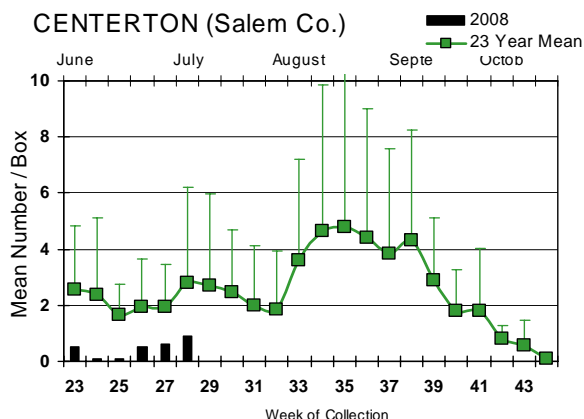
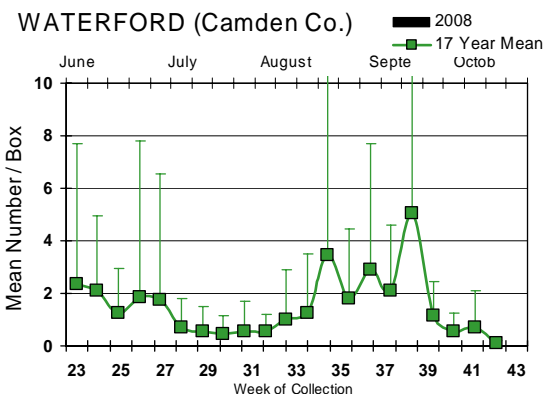


Culiseta melanura Population Graphs

Coastal

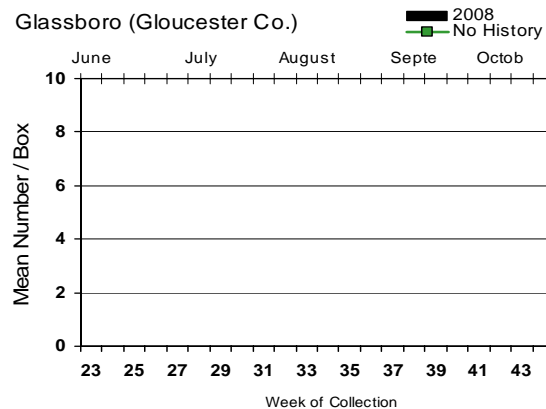


Inland



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 (mixed Red Maple/Coniferous).



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

- equine: 2(AL), 52(FL), 10(GA) 1(LA) 1(MS)
- mosquito: 4(FL)
- sentinel: 3(AL), 50(FL, 31 wild)
- human: 1(AL)

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 totals**.

	Birds	Mosquito Pools	Sentinels	Horses	Humans
Alabama				1	1
Alaska					
Arizona		4/3	9/10		1
Arkansas				1	2
California	184/322	57/155	2/6	1/2	1/3
Colorado					2
Connecticut		2/3			
Delaware					
Florida	2 live		2	1	
Georgia					
Hawaii					
Idaho		2 counties			
Illinois	2	8/36			
Indiana		2			
Iowa					
Kansas					
Kentucky					
Louisiana		251/273		1	2
Maine					
Maryland					
Mass.		3			
Michigan	*				
Minnesota					
Mississippi					7/9
Missouri		86			
Montana					
Nebraska					

	Birds	Mosquito Pools	Sentinels	Horses	Humans
Nevada					
New Hampshire					
New Jersey		7			
New Mexico		2			
New York	9	1/2			
North Carolina					
North Dakota				1	3/5
Ohio		1			
Oklahoma					2/3
Oregon					
Pennsylvania		5/21			
Rhode Island					
South Carolina	2				
South Dakota	1	3			1
Tennessee		6/15			1
Texas		17/23			3/6
Utah	1/2	14/21			1
Vermont					
Virginia					
Washington					
West Virginia	2	3		1	
Wisconsin	1/2			1	
Wyoming					

Protocol: New Jersey Department of Health and Senior Services tests mosquito pools using RT-PCR Taqman techniques.

Mosquito Species Submitted for West Nile Virus Testing through 16 July 2008

Species	Pools	Mosquitoes	Positives	MFIR
<i>Aedes abserratus</i>	1	9		
<i>Aedes albopictus</i>	71	520		
<i>Aedes atlanticus</i>	1	4		
<i>Aedes canadensis canadensis</i>	44	1139		
<i>Aedes cantator</i>	22	346		
<i>Aedes cinereus</i>	1	3		
<i>Aedes communis</i>	1	1		
<i>Aedes grossbecki</i>	3	4		
<i>Aedes japonicus</i>	72	400		
<i>Aedes sollicitans</i>	7	113		
<i>Aedes sticticus</i>	5	85		
<i>Aedes taeniorhynchus</i>	4	17		
<i>Aedes thibaulti</i>	4	12		
<i>Aedes triseriatus</i>	42	153		

<i>Aedes vexans</i>	49	1103		
<i>Anopheles bradleyi</i>	18	518		
<i>Anopheles crucians</i>	1	2		
<i>Anopheles punctipennis</i>	44	270		
<i>Anopheles quadrimaculatus</i>	23	502		
<i>Coquillettidia perturbans</i>	39	439		
<i>Culex erraticus</i>	4	6		
<i>Culex pipiens</i>	124	3240	3	0.926
<i>Culex restuans</i>	127	2465		
<i>Culex salinarius</i>	57	1268		
<i>Culex spp.</i>	526	22825	4	0.175
<i>Culex territans</i>	9	17		
<i>Culiseta inornata</i>	1	3		
<i>Culiseta melanura</i>	123	870		
<i>Orthopodomyia signifera</i>	4	12		
<i>Psorophora ciliata</i>	1	1		
<i>Psorophora columbiae</i>	1	2		
<i>Psorophora ferox</i>	7	86		
<i>Psorophora howardii</i>	1	4		
<i>Uranotaenia sapphirina</i>	2	3		
Grand Total	1,439	36,442	7	0.192

Remarks: Submitted pools (1,439) comprised of 36,442 individual mosquitoes produced seven positive pools from five different counties. The counties were located primarily through the suburbanized corridor running between the Philadelphia and New York Metropolitan areas. Involvement of *Culex pipiens* and mixed *Culex* pools are expected at this time as the West Nile virus goes through amplification within avian hosts. Submissions are from 33 different species and are from all 21 counties.

Humans, Horses and Wild Birds: No vertebrate cases have been reported. To date, there have been 63 dead birds submitted for West Nile virus testing, none positive. By this time last year, there had been 81 birds submitted for testing with two positive birds.

2008 Positive Mosquito pools to date / Total Mosquito Pools Submitted	This time last year
7 / 1,439	4 / 1,210

WNV Results by County through 16 July 2008

County	Species	Pools	Mosquitoes	Positives	MFIR
Atlantic		92	1867	0	
	<i>Aedes albopictus</i>	3	66		
	<i>Aedes canadensis canadensis</i>	3	12		
	<i>Aedes cantator</i>	1	15		
	<i>Aedes japonicus</i>	1	2		
	<i>Aedes taeniorhynchus</i>	2	9		
	<i>Aedes thibaulti</i>	3	7		
	<i>Aedes triseriatus</i>	3	12		
	<i>Aedes vexans</i>	2	33		
	<i>Anopheles bradleyi</i>	3	6		
	<i>Anopheles punctipennis</i>	1	1		
	<i>Coquillettidia perturbans</i>	2	23		
	<i>Culex restuans</i>	3	33		
	<i>Culex salinarius</i>	1	1		
	<i>Culex sp.</i>	34	1528		

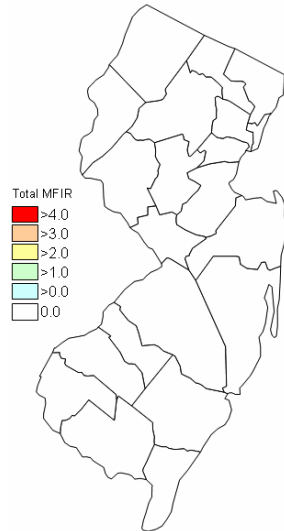
	<i>Culex territans</i>	2	5		
	<i>Culiseta melanura</i>	27	102		
	<i>Psorophora ferox</i>	1	12		
Bergen		109	2675	1	0.374
	<i>Aedes albopictus</i>	5	49		
	<i>Aedes canadensis canadensis</i>	1	6		
	<i>Aedes japonicus</i>	8	63		
	<i>Aedes triseriatus</i>	5	18		
	<i>Aedes vexans</i>	7	75		
	<i>Anopheles punctipennis</i>	2	29		
	<i>Coquillettidia perturbans</i>	10	143		
	<i>Culex pipiens</i>	24	441	1	2.267
	<i>Culex restuans</i>	15	162		
	<i>Culex salinarius</i>	17	584		
	<i>Culex spp.</i>	15	1105		
Burlington		146	1541	0	
	<i>Aedes albopictus</i>	6	21		
	<i>Aedes canadensis canadensis</i>	18	525		
	<i>Aedes cantator</i>	4	148		
	<i>Aedes cinereus</i>	1	3		
	<i>Aedes grossbecki</i>	1	1		
	<i>Aedes japonicus</i>	4	12		
	<i>Aedes sollicitans</i>	1	18		
	<i>Aedes sticticus</i>	2	5		
	<i>Aedes triseriatus</i>	7	28		
	<i>Aedes vexans</i>	16	168		
	<i>Anopheles bradleyi</i>	1	2		
	<i>Anopheles crucians</i>	1	2		
	<i>Anopheles punctipennis</i>	9	24		
	<i>Anopheles quadrimaculatus</i>	2	4		
	<i>Coquillettidia perturbans</i>	13	191		
	<i>Culex erraticus</i>	1	1		
	<i>Culex pipiens</i>	2	18		
	<i>Culex restuans</i>	4	27		
	<i>Culex salinarius</i>	1	1		
	<i>Culex sp.</i>	17	209		
	<i>Culex territans</i>	3	6		
	<i>Culiseta inornata</i>	1	3		
	<i>Culiseta melanura</i>	24	107		
	<i>Orthopodomyia signifera</i>	2	10		
	<i>Psorophora ciliata</i>	1	1		
	<i>Psorophora ferox</i>	2	3		
	<i>Uranotaenia sapphirina</i>	2	3		
Camden		63	1214	0	
	<i>Aedes albopictus</i>	7	77		
	<i>Aedes canadensis canadensis</i>	1	19		
	<i>Aedes cantator</i>	1	22		
	<i>Aedes japonicus</i>	7	20		
	<i>Aedes triseriatus</i>	1	1		
	<i>Aedes vexans</i>	3	43		
	<i>Anopheles punctipennis</i>	4	18		
	<i>Anopheles quadrimaculatus</i>	1	1		
	<i>Coquillettidia perturbans</i>	2	14		

<i>Culex pipiens</i>	5	162		
<i>Culex restuans</i>	14	436		
<i>Culex salinarius</i>	3	14		
<i>Culex sp.</i>	12	385		
<i>Culiseta melanura</i>	1	1		
<i>Orthopodomyia signifera</i>	1	1		
Cape_May	141	3190	0	
<i>Aedes canadensis canadensis</i>	4	71		
<i>Aedes cantator</i>	8	82		
<i>Aedes japonicus</i>	5	13		
<i>Aedes sollicitans</i>	3	81		
<i>Aedes taeniorhynchus</i>	2	8		
<i>Aedes triseriatus</i>	1	1		
<i>Aedes vexans</i>	2	13		
<i>Anopheles bradleyi</i>	11	416		
<i>Anopheles punctipennis</i>	5	100		
<i>Anopheles quadrimaculatus</i>	8	426		
<i>Coquillettidia perturbans</i>	3	27		
<i>Culex erraticus</i>	1	2		
<i>Culex pipiens</i>	17	405		
<i>Culex restuans</i>	33	753		
<i>Culex salinarius</i>	11	425		
<i>Culex sp.</i>	3	16		
<i>Culex territans</i>	1	2		
<i>Culiseta melanura</i>	23	349		
Cumberland	15	331		
<i>Aedes albopictus</i>	1	1		
<i>Aedes japonicus</i>	2	2		
<i>Aedes triseriatus</i>	1	1		
<i>Culex erraticus</i>	1	1		
<i>Culex spp.</i>	10	326		
Essex	30	472		
<i>Aedes albopictus</i>	7	75		
<i>Aedes japonicus</i>	2	2		
<i>Aedes triseriatus</i>	1	2		
<i>Anopheles quadrimaculatus</i>	1	1		
<i>Culex spp.</i>	19	392		
Gloucester	96	2722	0	
<i>Aedes abserratus</i>	1	9		
<i>Aedes albopictus</i>	2	10		
<i>Aedes canadensis canadensis</i>	6	237		
<i>Aedes communis</i>	1	1		
<i>Aedes japonicus</i>	6	30		
<i>Aedes thibaulti</i>	1	5		
<i>Aedes vexans</i>	2	7		
<i>Anopheles bradleyi</i>	1	1		
<i>Anopheles punctipennis</i>	6	13		
<i>Culex pipiens</i>	3	5	2	1.089
<i>Culex restuans</i>	47	1836		

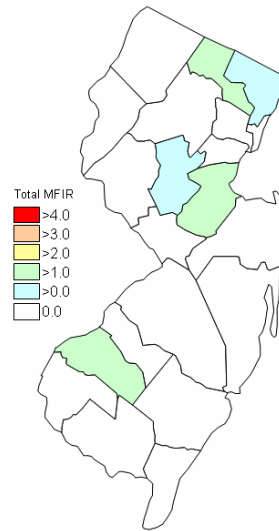
<i>Culex salinarius</i>	12	540		
<i>Culiseta melanura</i>	4	11		
Hudson	26	1181	0	
<i>Culex spp.</i>	26	1181		
Hunterdon	50	2500	0	
<i>Culex spp.</i>	50	2500		
Mercer	21	194	0	
<i>Aedes albopictus</i>	10	59		
<i>Aedes japonicus</i>	3	6		
<i>Aedes triseriatus</i>	3	9		
<i>Culex pipiens</i>	2	104		
<i>Culex restuans</i>	2	14		
<i>Culex spp.</i>	1	2		
Middlesex	71	1686	2	1.186
<i>Aedes albopictus</i>	5	32		
<i>Aedes japonicus</i>	3	11		
<i>Aedes triseriatus</i>	2	7		
<i>Culex pipiens</i>	6	78		
<i>Culex restuans</i>	5	59		
<i>Culex spp.</i>	50	1499	2	1.334
Monmouth	115	1236	0	
<i>Aedes albopictus</i>	4	7		
<i>Aedes canadensis canadensis</i>	3	18		
<i>Aedes cantator</i>	4	5		
<i>Aedes japonicus</i>	4	5		
<i>Aedes sollicitans</i>	2	13		
<i>Aedes triseriatus</i>	2	6		
<i>Aedes vexans</i>	6	86		
<i>Anopheles punctipennis</i>	4	7		
<i>Coquillettidia perturbans</i>	3	4		
<i>Culex pipiens</i>	17	97		
<i>Culex restuans</i>	18	159		
<i>Culex salinarius</i>	6	7		
<i>Culex spp.</i>	23	766		
<i>Culex territans</i>	2	2		
<i>Culiseta melanura</i>	17	54		
Morris	30	1412	0	
<i>Aedes japonicus</i>	1	6		
<i>Culex spp.</i>	29	1406		
Ocean	99	2253	0	
<i>Aedes albopictus</i>	16	100		
<i>Aedes canadensis canadensis</i>	3	72		
<i>Aedes japonicus</i>	6	11		
<i>Aedes triseriatus</i>	3	15		
<i>Aedes vexans</i>	2	3		
<i>Anopheles punctipennis</i>	1	4		
<i>Coquillettidia perturbans</i>	1	3		
<i>Culex pipiens</i>	4	75		

	<i>Culex restuans</i>	12	159		
	<i>Culex salinarius</i>	8	56		
	<i>Culex sp.</i>	38	1690		
	<i>Culiseta melanura</i>	5	65		
Passaic		17	675	1	1.481
	<i>Culex spp.</i>	17	675	1	1.481
Salem		93	1727	0	
	<i>Aedes albopictus</i>	1	4		
	<i>Aedes atlanticus</i>	1	4		
	<i>Aedes canadensis canadensis</i>	5	179		
	<i>Aedes cantator</i>	4	74		
	<i>Aedes grossbecki</i>	2	3		
	<i>Aedes japonicus</i>	1	3		
	<i>Aedes sollicitans</i>	1	1		
	<i>Aedes sticticus</i>	3	80		
	<i>Aedes triseriatus</i>	4	14		
	<i>Aedes vexans</i>	9	675		
	<i>Anopheles bradleyi</i>	2	93		
	<i>Anopheles punctipennis</i>	10	72		
	<i>Anopheles quadrimaculatus</i>	7	64		
	<i>Coquillettidia perturbans</i>	3	26		
	<i>Culex erraticus</i>	1	2		
	<i>Culex pipiens</i>	1	2		
	<i>Culex restuans</i>	3	8		
	<i>Culex salinarius</i>	6	169		
	<i>Culex territans</i>	1	2		
	<i>Culiseta melanura</i>	22	175		
	<i>Psorophora columbiae</i>	1	2		
	<i>Psorophora ferox</i>	4	71		
	<i>Psorophora howardii</i>	1	4		
Somerset		15	507	1	0.643
	<i>Aedes albopictus</i>	2	4		
	<i>Aedes japonicus</i>	14	149		
	<i>Aedes triseriatus</i>	9	39		
	<i>Anopheles punctipennis</i>	2	2		
	<i>Anopheles quadrimaculatus</i>	1	1		
	<i>Culex pipiens</i>	2	22		
	<i>Culex restuans</i>	2	19		
	<i>Culex spp.</i>	30	1319	1	0.758
	<i>Orthopodomyia signifera</i>	1	1		
Sussex		90	3919		
	<i>Aedes japonicus</i>	3	16		
	<i>Coquillettidia perturbans</i>	2	8		
	<i>Culex restuans</i>	4	96		
	<i>Culex spp.</i>	81	3799		
Union		18	815	0	
	<i>Aedes albopictus</i>	2	15		
	<i>Culex spp.</i>	16	800		

Warren	61	3276	0	
<i>Aedes japonicus</i>	2	49		
<i>Culex spp.</i>	59	3227		
Grand Total	1,446	36,424	7	0.192



Cumulative activity to last week



Cumulative activity to this week

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 sent in by the counties to PHEL equal the number of RAMP tests done.

RAMP Results for 16 July 2008

County	Species	Pools	Mosquitoes	Positives	PHEL (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 sollicitans</i>	1	1		
	<i>Aedes triseriatus</i>	3	6		
	<i>Aedes trivittatus</i>	1	1		
	<i>Anopheles punctipennis</i>	2	2		
	<i>Coquillettidia perturbans</i>	1	1		
	<i>Culex spp.</i>	28	467		
	<i>Culex pipiens</i>	12	88		
	<i>Culiseta melanura</i>	1	1		
Warren		42	1608		
	<i>Culex restuans</i>	1	4		
	<i>Culex spp.</i>	39	1754	2	9/0/2