

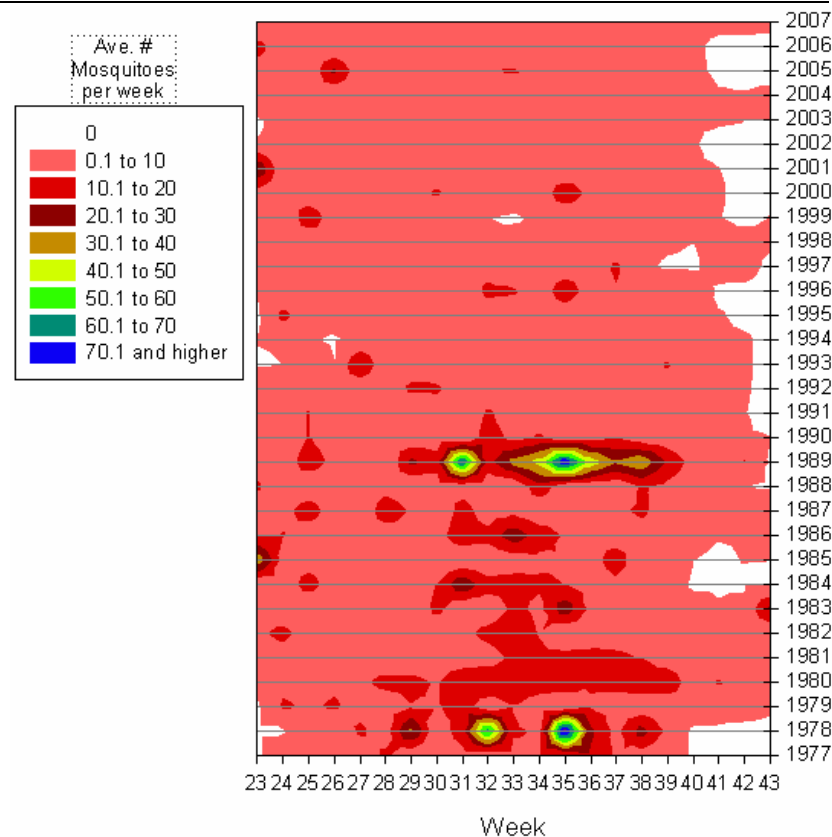
Culiseta melanura and Eastern Equine Encephalitis

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.)	3.1	< 0.1	18	12	0	Waterford (Camden Co.)	1.8	0	0	0	0
Corbin City (Atlantic Co.)	0.9	0.3	93	23	0	Centerton (Salem Co.)	1.9	0.6	107	18	0
Dennisville (Cape May Co.)	4.0	0.2	333	19	0	Turkey Swamp (Monmouth Co.)	1.0	< 0.1	42	14	0

*Including trial run last week in May.

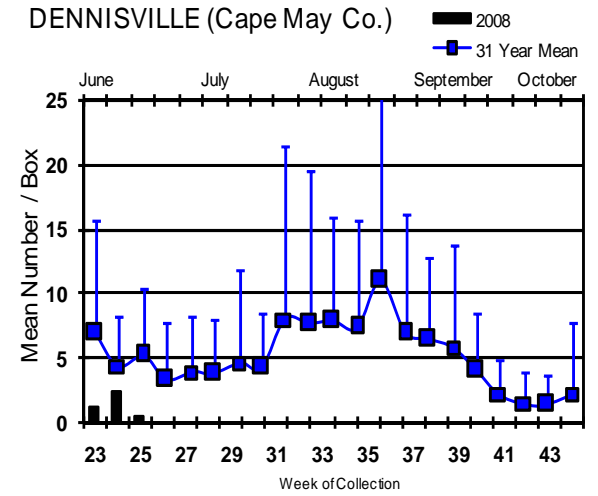
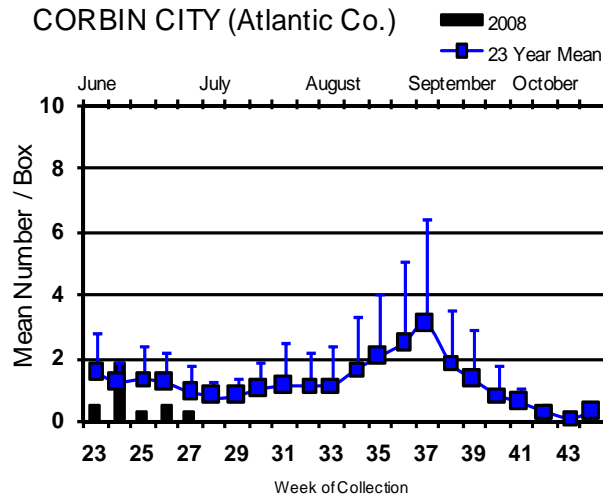
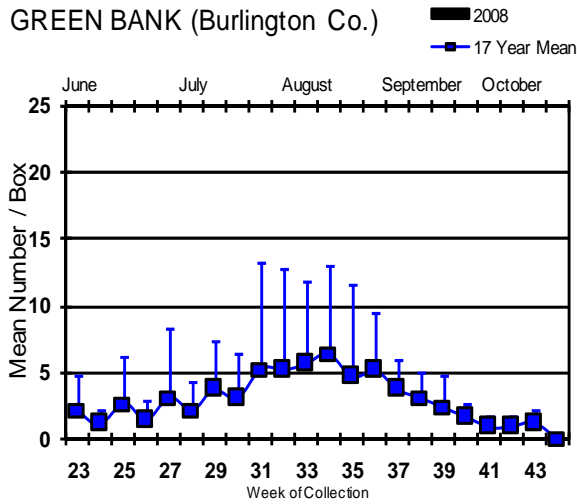
Remarks: The population graphs on the second page indicate only one week at one site (the coastal Corbin City) to date where *Culiseta melanura* populations were at or above historical trends, continuing the low mosquito population levels this year. The figure to the right shows mosquito abundance at the Dennisville site over the preceding 30 years by week. Highest population levels occurred in 1978 and 1989. For the past several years, population abundances at the Dennisville site, traditionally one of the more abundant monitoring sites has been on the decline. This change, possibly due to encroaching salt marsh habitat or changes in control practices, have contributed to the considerable variation seen in the historical pattern. Note that in 1984, 26 horse cases of EEE occurred, twice that of 1989, when 13 cases occurred.

To date, 86 pools from 593 *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 81 pools of 913 individual mosquitoes from 23 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. grossbecki*, *Ae. japonicus*, *Ae. sollicitans*, *Ae. sticticus*, *Ae. triseriatus*, *Ae. vexans*, *Anopheles bradleyi*, *An. crucians*, *An. punctipennis*, *Coquillettidia perturbans*, *Culiseta inornata*, *Culex erraticus*, *Cx. pipiens*, *Cx. restuans*, *Mixed Culex*, *Cx. territans*, *Orthopodomyia signifera*, *Psorophora ciliata*, *Ps.*, *ferox*, and *Uranotaenia sapphirina*.

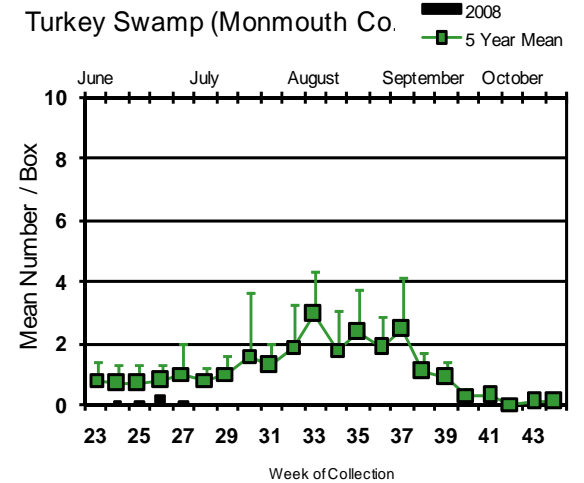
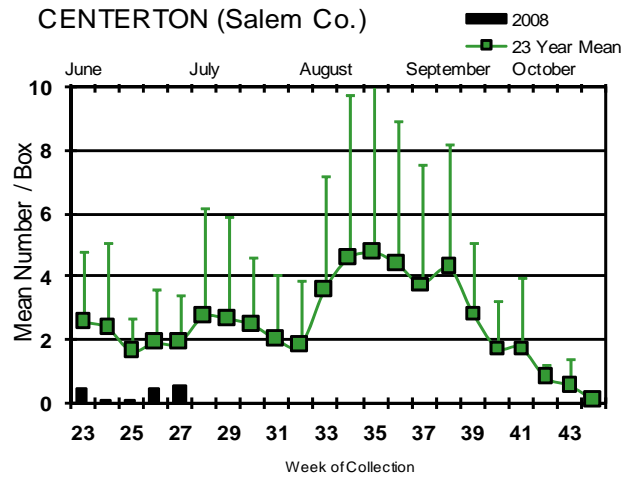
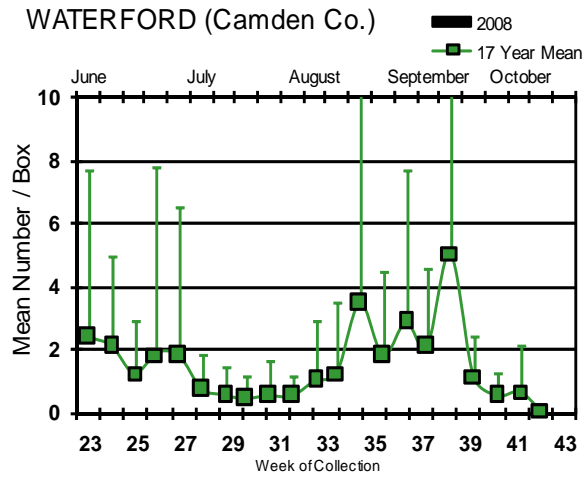


Culiseta melanura Population Graphs

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.

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

- equine: 2(AL), 45(FL), 10(GA)
- mosquito: 4(FL)
- sentinel: 3(AL), 46(FL), 31 wild)
- human:

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	
Alaska					
Arizona		2	9		1
Arkansas				1	
California	160/184	41/57	2	1	1
Colorado					2
Connecticut		1/2			
Delaware					
Florida	2 live		2	1	
Georgia					
Hawaii					
Idaho					
Illinois		5/8			
Indiana		2			
Iowa					
Kansas					
Kentucky					
Louisiana		251			
Maine					
Maryland					
Mass.					
Michigan	*				
Minnesota					
Mississippi					4/7
Missouri		86			
Montana					
Nebraska					

	Birds	Mosquito Pools	Sentinels	Horses	Humans
Nevada					
New Hampshire					
New Jersey					
New Mexico					
New York		1			
North Carolina					
North Dakota				1	1/3
Ohio		1			
Oklahoma					2
Oregon					
Pennsylvania		1/5			
Rhode Island					
South Carolina	2				
South Dakota	1				1
Tennessee		4/6			1
Texas		11/17			3
Utah	1/2	7/14			
Vermont					
Virginia					
Washington					
West Virginia	2	3		1	
Wisconsin	1			1	
Wyoming					

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

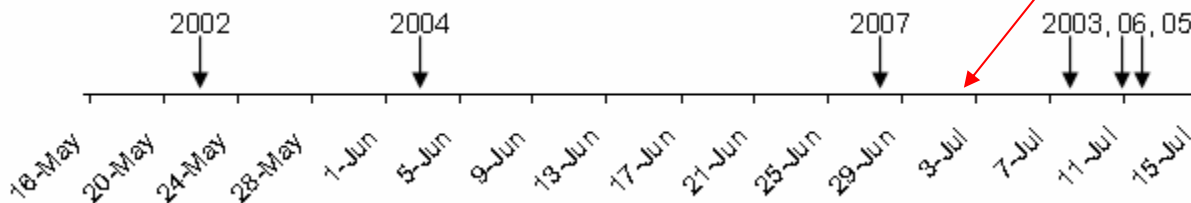
Mosquito Species Submitted for West Nile Virus Testing through 07 July 2008

Species	Pools	Mosquitoes	Positives	MFIR
<i>Aedes abserratus</i>	1	9		
<i>Aedes albopictus</i>	32	154		
<i>Aedes atlanticus</i>	1	4		
<i>Aedes canadensis canadensis</i>	37	1042		
<i>Aedes cantator</i>	21	345		
<i>Aedes cinereus</i>	1	3		
<i>Aedes grossbecki</i>	3	4		
<i>Aedes japonicus</i>	35	120		
<i>Aedes sollicitans</i>	6	110		
<i>Aedes sticticus</i>	5	85		
<i>Aedes taeniorhynchus</i>	3	13		
<i>Aedes thibaulti</i>	3	11		
<i>Aedes triseriatus</i>	19	79		
<i>Aedes vexans</i>	41	1009		

<i>Anopheles bradleyi</i>	16	510
<i>Anopheles crucians</i>	1	2
<i>Anopheles punctipennis</i>	32	218
<i>Anopheles quadrimaculatus</i>	15	417
<i>Coquillettidia perturbans</i>	30	368
<i>Culex erraticus</i>	3	5
<i>Culex pipiens</i>	90	2250
<i>Culex restuans</i>	107	2314
<i>Culex salinarius</i>	49	1183
<i>Culex spp.</i>	276	11850
<i>Culex territans</i>	5	10
<i>Culiseta inornata</i>	1	3
<i>Culiseta melanura</i>	104	749
<i>Orthopodomyia signifera</i>	3	11
<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	952	22,974

Remarks: Submitted pools (952) comprised of 22,974 individual mosquitoes continue to test negative for the presence of West Nile virus. Submissions are from 32 different species and are from 11 counties.

Figure below indicates the dates when the first positive mosquitoes were found for each of the past six years. The year 2002 was a very active year and began early. However, it is difficult to determine the significance of start date and activity as later years were generally under a fiscal restraint such that samples began testing at the beginning of the fiscal year (July 1) while earlier years were not under such constraints.



Humans, Horses and Wild Birds: No vertebrate cases have been reported. To date, there have been 48 dead birds submitted for West Nile virus testing, none positive. By this time last year, there had been 55 birds submitted for testing with one positive corvid (a Blue Jay) found on the 18th of June in Ocean County.

2008 Positive Mosquito pools to date / Total Mosquito Pools Submitted	This time last year
0 / 952	2 / 711

WNV Results by County through 07 July 2008

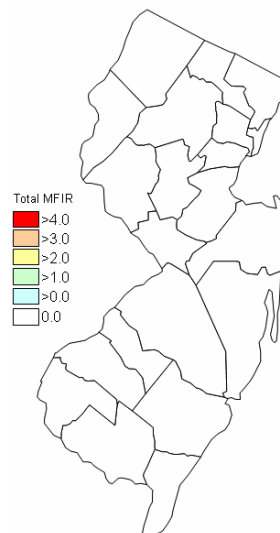
County	Species	Pools	Mosquitoes	Positives
Atlantic		73	1516	0
	<i>Aedes albopictus</i>	2	20	
	<i>Aedes canadensis canadensis</i>	2	10	
	<i>Aedes cantator</i>	1	15	
	<i>Aedes taeniorhynchus</i>	1	5	
	<i>Aedes thibaulti</i>	2	6	
	<i>Aedes triseriatus</i>	2	9	

<i>Aedes vexans</i>	1	24	
<i>Anopheles bradleyi</i>	2	2	
<i>Anopheles punctipennis</i>	1	1	
<i>Coquillettidia perturbans</i>	1	21	
<i>Culex restuans</i>	2	32	
<i>Culex salinarius</i>	1	1	
<i>Culex sp.</i>	28	1257	
<i>Culex territans</i>	1	4	
<i>Culiseta melanura</i>	25	97	
<i>Psorophora ferox</i>	1	12	
Bergen	51	991	0
<i>Aedes albopictus</i>	1	1	
<i>Aedes vexans</i>	4	10	
<i>Coquillettidia perturbans</i>	8	139	
<i>Culex pipiens</i>	16	243	
<i>Culex restuans</i>	10	94	
<i>Culex salinarius</i>	12	504	
Burlington	113	1260	0
<i>Aedes albopictus</i>	3	5	
<i>Aedes canadensis canadensis</i>	14	452	
<i>Aedes cantator</i>	4	148	
<i>Aedes cinereus</i>	1	3	
<i>Aedes grossbecki</i>	1	1	
<i>Aedes japonicus</i>	3	6	
<i>Aedes sollicitans</i>	1	18	
<i>Aedes sticticus</i>	2	5	
<i>Aedes triseriatus</i>	5	21	
<i>Aedes vexans</i>	14	151	
<i>Anopheles bradleyi</i>	1	2	
<i>Anopheles crucians</i>	1	2	
<i>Anopheles punctipennis</i>	6	16	
<i>Anopheles quadrimaculatus</i>	1	1	
<i>Coquillettidia perturbans</i>	9	134	
<i>Culex erraticus</i>	1	1	
<i>Culex pipiens</i>	2	18	
<i>Culex restuans</i>	3	26	
<i>Culex sp.</i>	13	153	
<i>Culex territans</i>	2	3	
<i>Culiseta inornata</i>	1	3	
<i>Culiseta melanura</i>	18	74	
<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	54	1012	0
<i>Aedes albopictus</i>	5	18	
<i>Aedes canadensis canadensis</i>	1	19	
<i>Aedes cantator</i>	1	22	
<i>Aedes japonicus</i>	6	14	
<i>Aedes triseriatus</i>	1	1	
<i>Aedes vexans</i>	3	43	
<i>Anopheles punctipennis</i>	4	18	
<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>	7	249	
	<i>Culiseta melanura</i>	1	1	
	<i>Orthopodomyia signifera</i>	1	1	
Cape_May		126	2920	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>	10	412	
	<i>Anopheles punctipennis</i>	5	100	
	<i>Anopheles quadrimaculatus</i>	7	374	
	<i>Coquillettidia perturbans</i>	3	27	
	<i>Culex erraticus</i>	1	2	
	<i>Culex pipiens</i>	12	240	
	<i>Culex restuans</i>	28	715	
	<i>Culex salinarius</i>	10	423	
	<i>Culex sp.</i>	3	16	
	<i>Culex territans</i>	1	2	
	<i>Culiseta melanura</i>	21	340	
Essex		14	214	
	<i>Aedes albopictus</i>	2	18	
	<i>Aedes japonicus</i>	1	1	
	<i>Anopheles quadrimaculatus</i>	1	1	
	<i>Culex spp.</i>	10	194	
Gloucester		68	2197	0
	<i>Aedes abserratus</i>	1	9	
	<i>Aedes albopictus</i>	1	3	
	<i>Aedes canadensis canadensis</i>	6	237	
	<i>Aedes japonicus</i>	4	10	
	<i>Aedes thibaulti</i>	1	5	
	<i>Aedes vexans</i>	2	7	
	<i>Anopheles bradleyi</i>	1	1	
	<i>Anopheles punctipennis</i>	3	7	
	<i>Culex pipiens</i>	31	1352	
	<i>Culex restuans</i>	12	540	
	<i>Culex salinarius</i>	4	11	
	<i>Culiseta melanura</i>	2	15	
Hudson		12	543	0
	<i>Culex spp.</i>	12	543	
Hunterdon		15	750	0
	<i>Culex spp.</i>	15	750	

Middlesex	48	1281	0
<i>Aedes albopictus</i>	3	12	
<i>Aedes japonicus</i>	3	11	
<i>Aedes triseriatus</i>	2	7	
<i>Culex pipiens</i>	4	73	
<i>Culex restuans</i>	4	56	
<i>Culex spp.</i>	32	1122	
Monmouth	83	681	0
<i>Aedes albopictus</i>	2	2	
<i>Aedes canadensis canadensis</i>	2	2	
<i>Aedes cantator</i>	3	4	
<i>Aedes japonicus</i>	2	3	
<i>Aedes sollicitans</i>	1	10	
<i>Aedes triseriatus</i>	1	4	
<i>Aedes vexans</i>	5	85	
<i>Anopheles punctipennis</i>	3	4	
<i>Coquillettidia perturbans</i>	3	4	
<i>Culex pipiens</i>	15	85	
<i>Culex restuans</i>	16	154	
<i>Culex salinarius</i>	6	7	
<i>Culex spp.</i>	9	274	
<i>Culex territans</i>	1	1	
<i>Culiseta melanura</i>	14	42	
Morris	15	706	0
<i>Aedes albopictus</i>	1	6	
<i>Culex spp.</i>	14	700	
Ocean	84	2113	0
<i>Aedes albopictus</i>	12	71	
<i>Aedes canadensis canadensis</i>	3	72	
<i>Aedes japonicus</i>	4	9	
<i>Aedes triseriatus</i>	1	7	
<i>Aedes vexans</i>	1	1	
<i>Anopheles punctipennis</i>	1	4	
<i>Coquillettidia perturbans</i>	1	3	
<i>Culex pipiens</i>	4	75	
<i>Culex restuans</i>	11	157	
<i>Culex salinarius</i>	7	54	
<i>Culex sp.</i>	34	1595	
<i>Culiseta melanura</i>	5	65	
Passaic	7	253	0
<i>Culex spp.</i>	7	253	
Salem	86	1638	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>	9	68	
<i>Anopheles quadrimaculatus</i>	6	41	
<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>Culiseta melanura</i>	18	115	
<i>Psorophora columbiae</i>	1	2	
<i>Psorophora ferox</i>	4	71	
<i>Psorophora howardii</i>	1	4	
Somerset	15	507	
<i>Aedes albopictus</i>	4	42	
<i>Aedes triseriatus</i>	2	15	
<i>Culex spp.</i>	9	450	
Sussex	55	2568	
<i>Aedes japonicus</i>	1	2	
<i>Culex restuans</i>	4	96	
<i>Culex spp.</i>	50	2470	
Union	8	400	0
<i>Culex spp.</i>	8	400	
Warren	11	600	0
<i>Culex spp.</i>	11	600	
Grand Total	952	22974	0



Activity 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 07 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		39	1608		
	<i>Culex restuans</i>	1	4		
	<i>Culex spp.</i>	38	1604	2	9/0/2