

VECTOR SURVEILLANCE SUMMARY SHEET
EEE and WNV in New Jersey
WEEK 14: September 2 to September 8, 2007



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.)	5.3	2.0	429	46	1	Waterford (Camden Co.)	1.9	0.4	529	39	-
Corbin City (Atlantic Co.)	2.6	0.1	349	45	-	Centerton (Salem Co.)	4.6	1.3	538	49	-
Dennisville (Cape May Co.)	7.2	0.2	1178	61	-	Turkey Swamp (Monmouth Co.)	1.7	2.6	1204	65	-

*Including trial run last week in May.

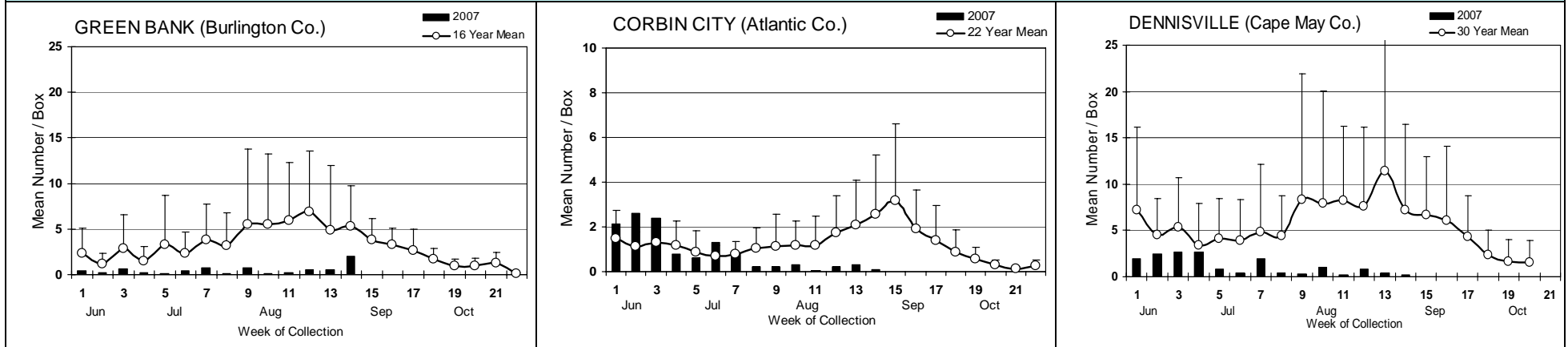
Remarks: Populations of *Culiseta melanura* increased at both Green Bank and Centerton, but decreased at all other sites in comparison to the previous week's averages. Abundances continue to remain low at most monitoring sites, with the exception of Turkey Swamp, the most northerly site. The low abundance is reflected in the adult mosquito surveillance program as well, with counties in the southern half of New Jersey with the most noticeable drops in population levels. But despite the decreased numbers of mosquitoes, bird-mosquito transmission of EEE virus occurred this year (in addition to West Nile activity).

To date, 305 pools from 4227 mosquitoes have been tested for EEE with one positive pool at the Green Bank site and one positive pool in Cumberland. There have been no reported human or horses cases to this date.

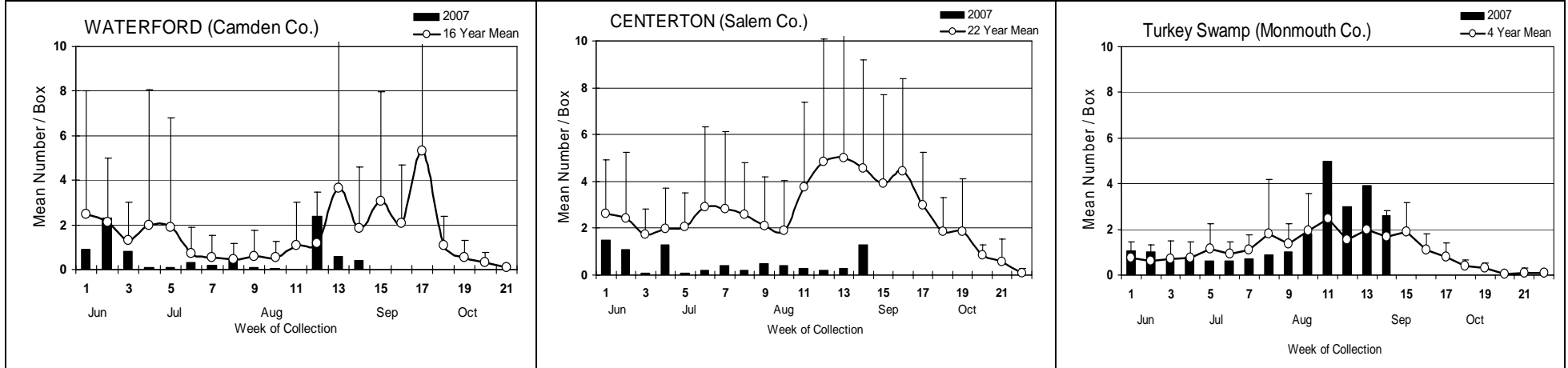
Summary Prepared by Lisa M. Reed, Scott Crans and Dina Fonseca at the Center for Vector Biology, Rutgers University. Supported by funding from the NJ State Mosquito Control Commission.

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 (2007 cumulative cases): New Reports are in red.

- equine: 5(AL) 1(AR) 15(FL) 2(GA) 16(LA) 21(MS) 1(NH) 1(TX) 2(VA)
- mosquito: 3(CT) 2(LA) 23(MA) 2(NH) 1(NY) 1(NJ) 18(VA)
- sentinel: 6(AL) 62(97live wild bird)(FL) 8(NC) 11(VA)
- human: 2(NH)

Mosquito Species Submitted for West Nile Virus Testing through 7 September 2007

Species	Pools	Mosquitoes	Positives	MFIR
<i>Aedes abserratus</i>	1	2		
<i>Aedes albopictus</i>	409	5089	3	0.59
<i>Aedes atlanticus</i>	3	3		
<i>Aedes atropalpus</i>	6	9		
<i>Aedes canadensis</i>				
<i>canadensis</i>	47	1178		
<i>Aedes cantator</i>	13	61		
<i>Aedes cinereus</i>	3	18		
<i>Aedes grossbecki</i>	1	1		
<i>Aedes japonicus</i>	253	1461	2	1.37
<i>Aedes sollicitans</i>	17	190		
<i>Aedes sticticus</i>	10	262		
<i>Aedes stimulans</i>	1	3		
<i>Aedes taeniorhynchus</i>	8	71		
<i>Aedes thibaulti</i>	3	4		
<i>Aedes triseriatus</i>	121	363		
<i>Aedes trivittatus</i>	9	15		
<i>Aedes vexans</i>	106	816		
<i>Anopheles barberi</i>	4	4		
<i>Anopheles bradleyi</i>	36	311		
<i>Anopheles crucians</i>	1	1		
<i>Anopheles punctipennis</i>	90	399		
<i>Anopheles quadrimaculatus</i>	110	2183		
<i>Anopheles walkeri</i>	7	11		
<i>Coquillettidia perturbans</i>	82	1386		
<i>Culex erraticus</i>	45	851		
<i>Culex pipiens</i>	360	6287	38	6.04
<i>Culex restuans</i>	164	2720	6	2.21
<i>Culex salinarius</i>	96	1732	5	2.89
<i>Culex sp.</i>	1542	57078	142	2.49
<i>Culex territans</i>	33	190		
<i>Culiseta melanura</i>	339	4416	1	0.23
<i>Orthopodomyia signifera</i>	4	5		
<i>Psorophora ciliata</i>	1	2		
<i>Psorophora columbiae</i>	18	149		
<i>Psorophora ferox</i>	13	113		
<i>Psorophora howardii</i>	3	3		
<i>Uranotaenia sapphirina</i>	11	60		
Grand Total	3970	87447	197	2.25

Remarks: To date, there have been 87,447 mosquitoes submitted for testing in 3,970 pools. Submissions are from 36 different species, including mixed *Culex* pools and are from 21 counties. At this time last year, all five people who had been diagnosed with West Nile virus had onset of symptoms by 10 September, four of which began in August. This year, despite the early involvement of bridge vectors, neither positive humans nor horses have yet been reported.

At this point in time, there have been 145 dead birds submitted for West Nile virus testing. Twenty-three have been found positive.

2007 Positive Mosquito pools to date / Total Mosquito Pools Submitted	This time last year
197/3970	216 / 3644

West Nile in US (2007 cumulative cases): Old/New reports

	Birds	Mosqs.	Sentinels	Horses	Humans
Alabama	1				8/13
Alaska					
Arizona	3/4	144/214	5/24	6/8	16/27
Arkansas	22/25	4/6			3/5
California	798/832	761/819	189/231	18/19	172/198
Colorado	41/44	582		16/17	216/298
Connecticut		25/32			4
Delaware	3/4 (~24 live)		7		
Florida	11 live		14/17		3
Georgia	4	35/50		2	11/16
Hawaii					
Idaho	12	17		8/10	57/71
Illinois	5/27	368/809		1	11/19
Indiana	2/3	75/89			2
Iowa		2/3	5	2	9/12
Kansas				1	6/10
Kentucky	1	3			1
Louisiana	58 (wild live)	38		3/5	2/4
Maine	11				
Maryland		1			1
Massachusetts	24/28	36/46			1
Michigan	3	2		2	1
Minnesota		73		9	50
Mississippi	4	18		2/5	44/59
Missouri		197/224		9/11	15/16
Montana		110		19/24	50/100
Nebraska	29/36	81/153		4	46/73

	Birds	Mosqs.	Sentinels	Horses	Humans
Nevada	4	14			3/6
New Hampshire					
New Jersey	16/20	179/197			
New Mexico		41/42		3/9	11/18
New York	28/37	149/194			1
North Carolina					
North Dakota	9	4	2/5	3/4	152/217
Ohio	5	177/207			3
Oklahoma	4	15/40		3/4	8/41
Oregon	24	28	9	6	11
Pennsylvania	4/5	119/151			1
Rhode Island		2			
South Carolina	1/3	12/29			2
South Dakota	5	96		7/8	129/161
Tennessee	4	119/383		1	3
Texas	48/54	174		10/15	18/47
Utah	5/6	97/118	27/46	10	11/14
Vermont	1/2				
Virginia		187	8/11	1	1
Washington				2/4	
West Virginia		1			
Wisconsin	19/27			5	3
Wyoming		1			119/126

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

Submission for West Nile Testing by County through 7 September 2007

County	Species	Pools	Mosquitoes	Positives	MFIR
Atlantic		164	2248	6	2.67
	<i>Aedes albopictus</i>	24	307		
	<i>Aedes canadensis canadensis</i>	2	27		
	<i>Aedes cantator</i>	3	21		
	<i>Aedes grossbecki</i>	1	1		
	<i>Aedes japonicus</i>	4	6		
	<i>Aedes sollicitans</i>	6	145		
	<i>Aedes taeniorhynchus</i>	4	47		
	<i>Aedes triseriatus</i>	3	6		
	<i>Aedes vexans</i>	8	52		
	<i>Anopheles bradleyi</i>	2	3		
	<i>Anopheles quadrimaculatus</i>	2	2		
	<i>Coquillettidia perturbans</i>	4	10		
	<i>Culex erraticus</i>	2	27		
	<i>Culex restuans</i>	2	2		
	<i>Culex salinarius</i>	2	60		
	<i>Culex sp.</i>	39	1126	6	5.33
	<i>Culex territans</i>	4	4		
	<i>Culiseta melanura</i>	46	366		
	<i>Orthopodomyia signifera</i>	1	1		
	<i>Psorophora columbiae</i>	2	2		
	<i>Psorophora ferox</i>	2	32		
	<i>Psorophora howardii</i>	1	1		
Bergen		177	10327	55	5.33
	<i>Aedes albopictus</i>	7	39		
	<i>Aedes japonicus</i>	5	72		

	<i>Aedes triseriatus</i>	1	64		
	<i>Aedes vexans</i>	3	10		
	<i>Anopheles punctipennis</i>	1	1		
	<i>Coquillettidia perturbans</i>	4	8		
	<i>Culex pipiens</i>	17	625	6	9.60
	<i>Culex restuans</i>	3	3		
	<i>Culex salinarius</i>	14	588	2	3.40
	<i>Culex sp.</i>	120	8915	47	5.27
	<i>Culex territans</i>	1	1		
	<i>Orthopodomyia signifera</i>	1	1		
Burlington		287	2452	0	
	<i>Aedes albopictus</i>	34	480		
	<i>Aedes atropalpus</i>	4	7		
	<i>Aedes canadensis canadensis</i>	8	23		
	<i>Aedes cantator</i>	1	12		
	<i>Aedes japonicus</i>	20	137		
	<i>Aedes sollicitans</i>	3	9		
	<i>Aedes sticticus</i>	1	1		
	<i>Aedes taeniorhynchus</i>	1	4		
	<i>Aedes triseriatus</i>	15	51		
	<i>Aedes vexans</i>	18	106		
	<i>Anopheles barberi</i>	2	2		
	<i>Anopheles bradleyi</i>	4	13		
	<i>Anopheles crucians</i>	1	1		
	<i>Anopheles punctipennis</i>	13	39		
	<i>Anopheles quadrimaculatus</i>	11	53		
	<i>Coquillettidia perturbans</i>	20	135		
	<i>Culex erraticus</i>	3	22		
	<i>Culex pipiens</i>	12	62		
	<i>Culex restuans</i>	10	174		
	<i>Culex salinarius</i>	8	29		
	<i>Culex sp.</i>	31	566		
	<i>Culex territans</i>	3	11		
	<i>Culiseta melanura</i>	56	504		
	<i>Psorophora columbiae</i>	3	5		
	<i>Psorophora ferox</i>	2	2		
	<i>Psorophora howardii</i>	2	2		
	<i>Uranotaenia sapphirina</i>	1	2		
Camden		289	3726	10	2.68
	<i>Aedes albopictus</i>	61	1321		
	<i>Aedes atlanticus</i>	1	1		
	<i>Aedes canadensis canadensis</i>	1	1		
	<i>Aedes japonicus</i>	29	93	1	10.75
	<i>Aedes triseriatus</i>	11	17		
	<i>Aedes trivittatus</i>	5	7		
	<i>Aedes vexans</i>	12	35		
	<i>Anopheles bradleyi</i>	1	1		
	<i>Anopheles punctipennis</i>	17	54		
	<i>Anopheles quadrimaculatus</i>	12	14		
	<i>Coquillettidia perturbans</i>	8	12		
	<i>Culex pipiens</i>	28	495	7	14.14
	<i>Culex restuans</i>	12	44	1	22.73
	<i>Culex salinarius</i>	7	12		
	<i>Culex sp.</i>	45	1115	1	0.90
	<i>Culex territans</i>	2	3		
	<i>Culiseta melanura</i>	36	500		

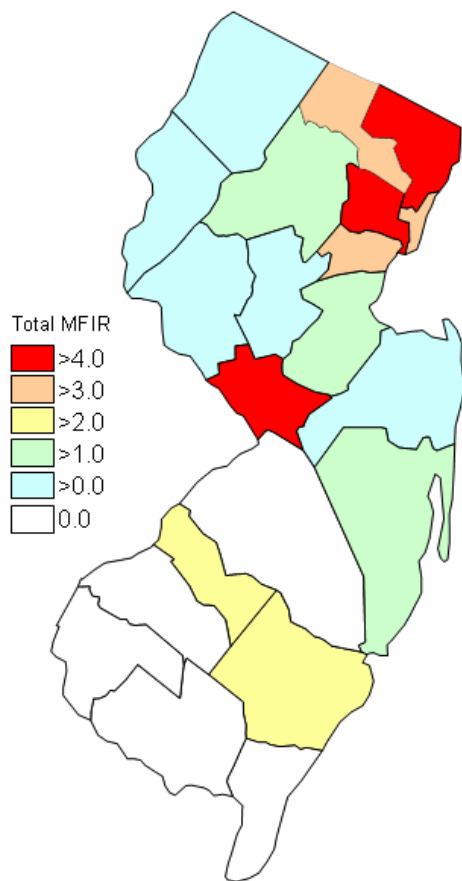
	<i>Uranotaenia sapphirina</i>	1	1		
Cape May		222	3840	0	
	<i>Aedes albopictus</i>	2	6		
	<i>Aedes cantator</i>	1	2		
	<i>Aedes japonicus</i>	4	8		
	<i>Aedes sollicitans</i>	1	1		
	<i>Anopheles bradleyi</i>	11	155		
	<i>Anopheles punctipennis</i>	1	1		
	<i>Anopheles quadrimaculatus</i>	30	1641		
	<i>Coquillettidia perturbans</i>	1	2		
	<i>Culex erraticus</i>	2	10		
	<i>Culex pipiens</i>	38	379		
	<i>Culex restuans</i>	18	57		
	<i>Culex salinarius</i>	7	31		
	<i>Culex sp.</i>	38	331		
	<i>Culex territans</i>	6	18		
	<i>Culiseta melanura</i>	61	1196		
	<i>Uranotaenia sapphirina</i>	1	2		
Cumberland		95	1557	0	
	<i>Aedes abserratus</i>	1	2		
	<i>Aedes albopictus</i>	16	136		
	<i>Aedes japonicus</i>	6	16		
	<i>Aedes sollicitans</i>	1	4		
	<i>Aedes taeniorhynchus</i>	1	16		
	<i>Aedes triseriatus</i>	1	2		
	<i>Anopheles bradleyi</i>	5	71		
	<i>Anopheles quadrimaculatus</i>	4	8		
	<i>Culex erraticus</i>	8	34		
	<i>Culex pipiens</i>	10	284		
	<i>Culex restuans</i>	3	54		
	<i>Culex salinarius</i>	3	102		
	<i>Culex sp.</i>	36	959	1	1.04
	<i>Culiseta melanura</i>	14	146		
	<i>Psorophora columbiae</i>	1	32		
Essex		88	780	4	5.13
	<i>Aedes albopictus</i>	10	44		
	<i>Aedes canadensis canadensis</i>	2	4		
	<i>Aedes japonicus</i>	6	22		
	<i>Aedes sticticus</i>	2	13		
	<i>Aedes stimulans</i>	1	3		
	<i>Aedes triseriatus</i>	7	9		
	<i>Aedes trivittatus</i>	3	7		
	<i>Aedes vexans</i>	5	59		
	<i>Anopheles punctipennis</i>	3	3		
	<i>Anopheles quadrimaculatus</i>	5	15		
	<i>Coquillettidia perturbans</i>	2	2		
	<i>Culex sp.</i>	36	522	4	7.66
	<i>Psorophora ciliata</i>	1	2		
	<i>Psorophora ferox</i>	5	75		
Gloucester		146	1927	1	0.52
	<i>Aedes albopictus</i>	8	48		
	<i>Aedes japonicus</i>	18	40		
	<i>Anopheles punctipennis</i>	1	1		
	<i>Anopheles quadrimaculatus</i>	2	2		

	<i>Anopheles walkeri</i>	5	9		
	<i>Culex pipiens</i>	103	1723		
	<i>Culiseta melanura</i>	9	104	1	9.62
Hudson		263	8755	35	4.00
	<i>Aedes albopictus</i>	75	490		
	<i>Aedes atropalpus</i>	1	1		
	<i>Aedes triseriatus</i>	3	3		
	<i>Aedes trivittatus</i>	1	1		
	<i>Culex sp.</i>	183	8260	35	4.24
Hunterdon		161	7253	3	0.41
	<i>Aedes japonicus</i>	3	66		
	<i>Aedes triseriatus</i>	1	8		
	<i>Anopheles punctipennis</i>	1	2		
	<i>Culex pipiens</i>	9	380		
	<i>Culex restuans</i>	12	643		
	<i>Culex sp.</i>	133	6145	3	0.49
	<i>Culex territans</i>	2	9		
Mercer		294	4808	29	6.03
	<i>Aedes albopictus</i>	59	1327	1	0.75
	<i>Aedes atropalpus</i>	1	1		
	<i>Aedes canadensis canadensis</i>	2	9		
	<i>Aedes japonicus</i>	19	46		
	<i>Aedes sticticus</i>	1	3		
	<i>Aedes triseriatus</i>	12	27		
	<i>Aedes vexans</i>	8	13		
	<i>Anopheles punctipennis</i>	6	25		
	<i>Anopheles quadrimaculatus</i>	4	7		
	<i>Coquillettidia perturbans</i>	3	63		
	<i>Culex erraticus</i>	12	521		
	<i>Culex pipiens</i>	90	1532	19	12.40
	<i>Culex restuans</i>	41	494	3	6.07
	<i>Culex salinarius</i>	13	90	1	11.11
	<i>Culex sp.</i>	22	649	5	7.70
	<i>Culex territans</i>	1	1		
Middlesex		237	6585	13	1.97
	<i>Aedes albopictus</i>	11	93	1	10.75
	<i>Aedes canadensis canadensis</i>	5	35		
	<i>Aedes japonicus</i>	16	92		
	<i>Aedes sollicitans</i>	1	1		
	<i>Aedes triseriatus</i>	6	22		
	<i>Aedes vexans</i>	8	74		
	<i>Anopheles barberi</i>	1	1		
	<i>Anopheles bradleyi</i>	3	29		
	<i>Anopheles punctipennis</i>	1	8		
	<i>Anopheles quadrimaculatus</i>	4	9		
	<i>Coquillettidia perturbans</i>	9	377		
	<i>Culex pipiens</i>	11	228		
	<i>Culex restuans</i>	14	448		
	<i>Culex salinarius</i>	9	85		
	<i>Culex sp.</i>	133	5069	12	2.37
	<i>Culex territans</i>	1	2		
	<i>Culiseta melanura</i>	3	11		
	<i>Psorophora columbiae</i>	1	1		

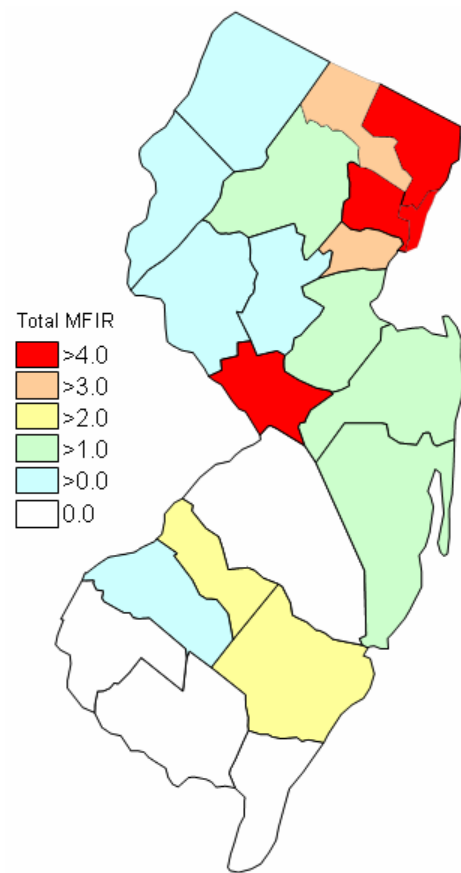
Monmouth	316	3546	5	1.41
<i>Aedes albopictus</i>	27	70		
<i>Aedes atlanticus</i>	2	2		
<i>Aedes canadensis canadensis</i>	5	244		
<i>Aedes cantator</i>	7	25		
<i>Aedes japonicus</i>	21	83	1	12.05
<i>Aedes sollicitans</i>	4	29		
<i>Aedes sticticus</i>	1	7		
<i>Aedes taeniorhynchus</i>	2	4		
<i>Aedes triseriatus</i>	15	27		
<i>Aedes vexans</i>	16	160		
<i>Anopheles barberi</i>	1	1		
<i>Anopheles punctipennis</i>	13	22		
<i>Anopheles quadrimaculatus</i>	5	6		
<i>Coquillettidia perturbans</i>	3	31		
<i>Culex pipiens</i>	15	235	2	8.51
<i>Culex restuans</i>	20	276		
<i>Culex salinarius</i>	8	80		
<i>Culex sp.</i>	75	1006	2	1.99
<i>Culex territans</i>	10	138		
<i>Culiseta melanura</i>	62	1096		
<i>Psorophora ferox</i>	2	2		
<i>Uranotaenia sapphirina</i>	2	2		
Morris	146	2894	5	1.73
<i>Aedes canadensis canadensis</i>	13	485		
<i>Aedes cinereus</i>	1	13		
<i>Aedes japonicus</i>	33	161		
<i>Aedes triseriatus</i>	2	3		
<i>Aedes vexans</i>	1	1		
<i>Anopheles punctipennis</i>	4	13		
<i>Anopheles quadrimaculatus</i>	3	3		
<i>Anopheles walkeri</i>	1	1		
<i>Coquillettidia perturbans</i>	9	339		
<i>Culex pipiens</i>	5	37		
<i>Culex restuans</i>	5	254		
<i>Culex salinarius</i>	2	7		
<i>Culex sp.</i>	62	1526	5	3.28
<i>Psorophora columbiae</i>	4	50		
<i>Psorophora ferox</i>	1	1		
Ocean	207	5152	9	1.75
<i>Aedes albopictus</i>	30	425		
<i>Aedes canadensis canadensis</i>	8	347		
<i>Aedes japonicus</i>	23	183		
<i>Aedes sticticus</i>	1	17		
<i>Aedes triseriatus</i>	16	58		
<i>Aedes vexans</i>	7	24		
<i>Anopheles punctipennis</i>	4	17		
<i>Coquillettidia perturbans</i>	4	8		
<i>Culex pipiens</i>	5	152	3	19.74
<i>Culex restuans</i>	10	218	2	9.17
<i>Culex salinarius</i>	6	13		
<i>Culex sp.</i>	82	3657	4	1.09
<i>Culiseta melanura</i>	7	28		
<i>Orthopodomyia signifera</i>	1	2		
<i>Psorophora columbiae</i>	2	2		
<i>Psorophora ferox</i>	1	1		

Passaic		82	2398	8	3.34
	<i>Aedes albopictus</i>	5	45		
	<i>Aedes japonicus</i>	4	34		
	<i>Aedes triseriatus</i>	1	8		
	<i>Culex sp.</i>	72	2311	8	3.46
Salem		187	2149	0	
	<i>Aedes albopictus</i>	11	31		
	<i>Aedes canadensis canadensis</i>	1	3		
	<i>Aedes japonicus</i>	3	12		
	<i>Aedes thibaulti</i>	3	4		
	<i>Aedes triseriatus</i>	6	10		
	<i>Aedes vexans</i>	7	179		
	<i>Anopheles bradleyi</i>	10	39		
	<i>Anopheles punctipennis</i>	18	194		
	<i>Anopheles quadrimaculatus</i>	23	416		
	<i>Anopheles walkeri</i>	1	1		
	<i>Coquillettidia perturbans</i>	1	3		
	<i>Culex erraticus</i>	18	237		
	<i>Culex pipiens</i>	7	80		
	<i>Culex restuans</i>	6	10		
	<i>Culex salinarius</i>	10	317		
	<i>Culex sp.</i>	9	93		
	<i>Culex territans</i>	2	2		
	<i>Culiseta melanura</i>	45	465		
	<i>Uranotaenia sapphirina</i>	6	53		
Somerset		173	4004	3	0.75
	<i>Aedes albopictus</i>	4	5		
	<i>Aedes cinereus</i>	2	5		
	<i>Aedes japonicus</i>	24	320		
	<i>Aedes sticticus</i>	4	221		
	<i>Aedes triseriatus</i>	13	36		
	<i>Aedes vexans</i>	5	58		
	<i>Anopheles punctipennis</i>	6	17		
	<i>Anopheles quadrimaculatus</i>	2	3		
	<i>Coquillettidia perturbans</i>	1	1		
	<i>Culex pipiens</i>	1	3		
	<i>Culex restuans</i>	3	21		
	<i>Culex salinarius</i>	1	2		
	<i>Culex sp.</i>	106	3311	3	0.91
	<i>Culex territans</i>	1	1		
Sussex		156	4985	1	0.20
	<i>Aedes japonicus</i>	1	2		
	<i>Coquillettidia perturbans</i>	8	388		
	<i>Culex salinarius</i>	1	6		
	<i>Culex sp.</i>	146	4589	1	0.22
Union		131	2394	8	3.34
	<i>Aedes albopictus</i>	25	222	1	4.50
	<i>Aedes cantator</i>	1	1		
	<i>Aedes japonicus</i>	13	48		
	<i>Aedes sollicitans</i>	1	1		
	<i>Aedes triseriatus</i>	8	12		
	<i>Aedes vexans</i>	8	45		
	<i>Anopheles quadrimaculatus</i>	3	4		
	<i>Coquillettidia perturbans</i>	4	6		
	<i>Culex pipiens</i>	7	69	1	14.49

	<i>Culex restuans</i>	2	3		
	<i>Culex salinarius</i>	5	310	2	6.45
	<i>Culex sp.</i>	48	1615	4	2.48
	<i>Orthopodomyia signifera</i>	1	1		
	<i>Psorophora columbiae</i>	5	57		
Warren		134	5358	1	0.19
	<i>Aedes japonicus</i>	1	20		
	<i>Anopheles punctipennis</i>	1	2		
	<i>Coquillettidia perturbans</i>	1	1		
	<i>Culex pipiens</i>	2	3		
	<i>Culex restuans</i>	3	19		
	<i>Culex sp.</i>	126	5313	1	0.19
Grand Total		3970	87447	197	2.25



Last Week



This Week