

VECTOR SURVEILLANCE SUMMARY SHEET
EEE and WNV in New Jersey
WEEK 15: September 9 to September 15, 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.)	3.8	1.5	516	50	1	Waterford (Camden Co.)	3.0	0.2	541	42	-
Corbin City (Atlantic Co.)	3.2	0.2	355	48	-	Centerton (Salem Co.)	3.9	1.8	647	53	-
Dennisville (Cape May Co.)	6.7	0.6	1215	64	-	Turkey Swamp (Monmouth Co.)	1.9	4.8	1443	71	-

*Including trial run last week in May.

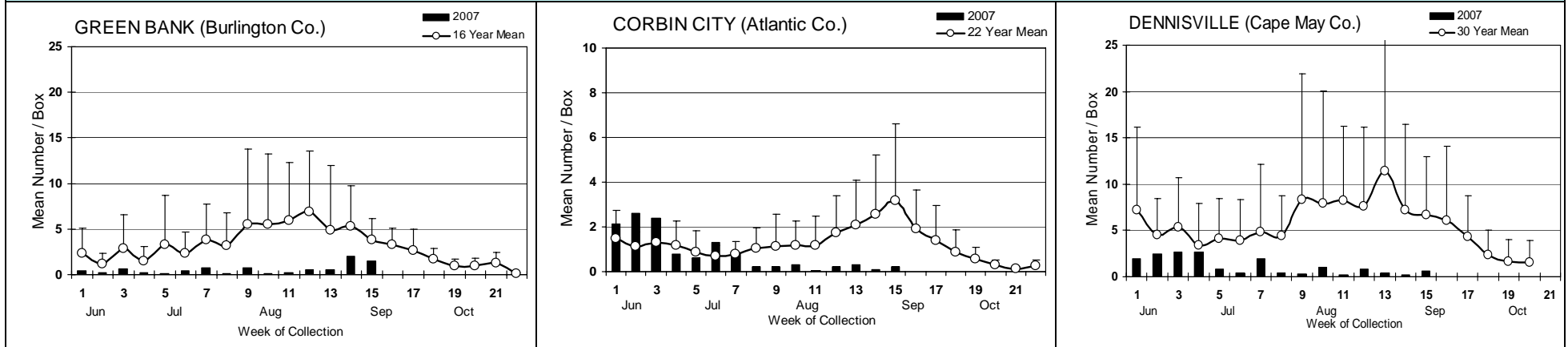
Remarks: Populations of *Culiseta melanura* increased at four of the six monitoring sites. Turkey Swamp remains the only site to have numbers higher than historical values. All other sites remain well below their associated historical trends.

To date, 328 pools from 4717 mosquitoes have been tested for EEE with one positive pool at the Green Bank site and one positive pool in Cumberland County. There have been no reported human or horses cases to this date, nor reports of pending cases.

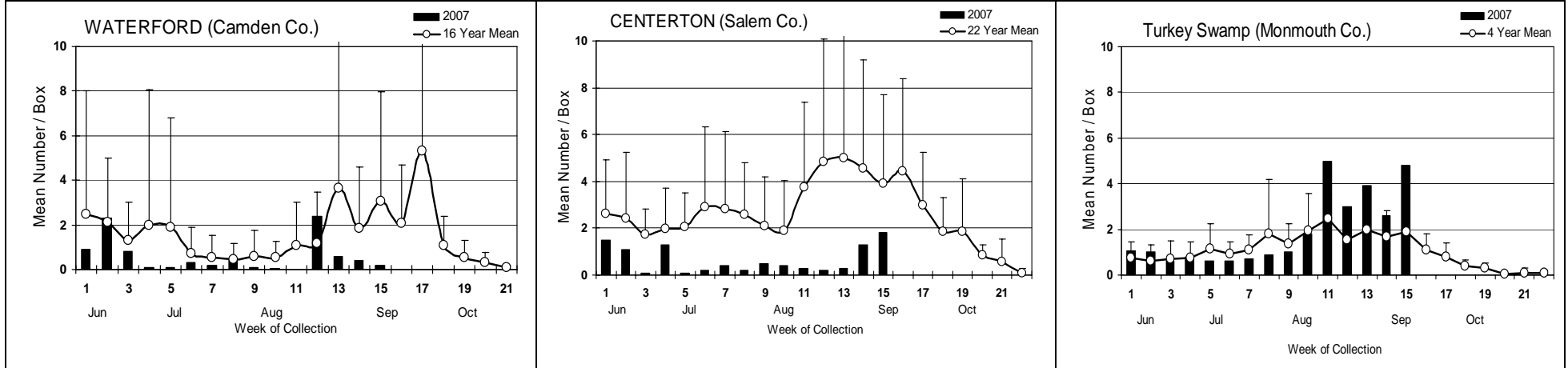
Summary Prepared by Lisa M. Reed, Scott Crans and Dina Fonseca at the Center for Vector Biology, Rutgers University. Supported by funding from the NJ State Mosquito Control Commission.

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: 7(AL) 1(AR) 15(FL) 5(GA) 13(LA) 2(MI) 23(MS) 1(NH) 1(SC) 5(TX) 2(VA)
- mosquito: 3(CT) 2(LA) 24(MA) 1(MD) 2(NH) 1(NY) 2(NJ) 18(VA)
- sentinel: 6(AL) 2(DE live wild bird) 62(99live wild bird)(FL) 8(NC) 13(VA)
- human: 1(AL) 2(NH)

Mosquito Species Submitted for West Nile Virus Testing through 14 September 2007

Species	Pools	Mosquitoes	Positives	MFIR
<i>Aedes abserratus</i>	1	2		
<i>Aedes albopictus</i>	463	5520	3	0.54
<i>Aedes atlanticus</i>	3	3		
<i>Aedes atropalpus</i>	6	9		
<i>Aedes canadensis canadensis</i>	47	1178		
<i>Aedes cantator</i>	14	62		
<i>Aedes cinereus</i>	3	18		
<i>Aedes grossbecki</i>	1	1		
<i>Aedes japonicus</i>	273	1526	2	1.31
<i>Aedes sollicitans</i>	23	382		
<i>Aedes sticticus</i>	11	273		
<i>Aedes stimulans</i>	1	3		
<i>Aedes taeniorhynchus</i>	9	114		
<i>Aedes thibaulti</i>	3	4		
<i>Aedes triseriatus</i>	141	410		
<i>Aedes trivittatus</i>	11	82		
<i>Aedes vexans</i>	121	1031		
<i>Anopheles barberi</i>	5	5		
<i>Anopheles bradleyi</i>	40	377		
<i>Anopheles crucians</i>	1	1		
<i>Anopheles punctipennis</i>	99	435		
<i>Anopheles quadrimaculatus</i>	122	2261		
<i>Anopheles walkeri</i>	7	11		
<i>Coquillettidia perturbans</i>	88	1419		
<i>Culex erraticus</i>	56	1019		
<i>Culex pipiens</i>	407	7037	41	5.83
<i>Culex restuans</i>	174	2747	6	2.18
<i>Culex salinarius</i>	111	1869	6	3.21
<i>Culex sp.</i>	1690	62147	170	2.74
<i>Culex territans</i>	37	213		
<i>Culiseta melanura</i>	370	4845	1	0.21
<i>Orthopodomyia signifera</i>	4	5		
<i>Psorophora ciliata</i>	2	6		
<i>Psorophora columbiae</i>	21	172		
<i>Psorophora ferox</i>	24	572		
<i>Psorophora howardii</i>	3	3		
<i>Uranotaenia sapphirina</i>	13	67		
Grand Total	4405	95829	229	2.39

Remarks: To date, there have been 95,829 mosquitoes submitted for testing in 4,405 pools. Submissions are from 36 different species, including mixed *Culex* pools and are from 21 counties. During this time last year, the only bridge vector found positive for West Nile was *Aedes albopictus*. Mixed *Culex* pools were positive, but 148 pools of *Cx. salinarius* were not. This year to date, 105 *Cx. salinarius* pools have been tested with 6 pools found positive. In addition, *Aedes japonicus* have also been found positive for West Nile this year.

At this point in time, there have been 150 dead birds submitted for West Nile virus testing. Twenty-seven have been found positive. At this time last year, there were 173 tested with 37 positive birds.

2007 Positive Mosquito pools to date / Total Mosquito Pools Submitted	This time last year
229/4405	236 / 4052

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

	Birds	Mosqs.	Sentinels	Horses	Humans
Alabama	1				13
Alaska					
Arizona	4	214	24	8	27
Arkansas	25/32	6/15	6		5/6
California	832/915	819/891	231/273	19/22	172/198
Colorado	44/46	582/609		17	298/373
Connecticut		32/49			4
Delaware	4 (-24 live)		7		1
Florida	11 live		17		3
Georgia	4/7	50/51			16/20
Hawaii					
Idaho	12/13	17 cnty		10/13	71/84
Illinois	27/31	809/949		1/2	19/28
Indiana	3/6	89/103			2/7
Iowa		3	5/6	2	12
Kansas				1/4	10/21
Kentucky	1/2	3/5			1/2
Louisiana	58 (wild live)	38		5	4
Maine					
Maryland		1			1/3
Massachusetts	28/33	46/51			1
Michigan	3/4	2/3		2	1/2
Minnesota		73/94		9	50/75
Mississippi	4	18		5/9	59/76
Missouri		224/227		11/13	16/18
Montana		110		24	100
Nebraska	36/42	153/176		4/7	73/82

	Birds	Mosqs.	Sentinels	Horses	Humans
Nevada	4/7	14/21		1	6
New Hampshire					
New Jersey	20/27	197/229			
New Mexico		42/68		9/12	18/27
New York	37/54	194/229			1/4
North Carolina					
North Dakota	9	4	5	4	217/260
Ohio	5/10	207/264			3/5
Oklahoma		40		4/6	41/51
Oregon	24/32	28	9/14	6/8	11/13
Pennsylvania	5/7	151/166			1
Rhode Island		2/5 cnty			
South Carolina	3/4	29/40			2/3
South Dakota	5	96		8	161
Tennessee	4/5	383/491		1	3
Texas	54/60	174/189		15	47
Utah	6/11	118/166	46/52	12	14/28
Vermont	2				
Virginia		187/447	1	1	1/2
Washington				4/7	
West Virginia		1			
Wisconsin	27			5/7	3
Wyoming		1			126/155

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 14 September 2007

County	Species	Pools	Mosquitoes	Positives	MFIR
Atlantic		183	2548	6	2.67
	<i>Aedes albopictus</i>	28	332		
	<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>	10	312		
	<i>Aedes taeniorhynchus</i>	5	90		
	<i>Aedes triseriatus</i>	3	6		
	<i>Aedes vexans</i>	10	71		
	<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>	43	1168	6	5.14
	<i>Culex territans</i>	5	5		
	<i>Culiseta melanura</i>	49	369		
	<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		200	11191	61	5.45

	<i>Aedes albopictus</i>	8	44		
	<i>Aedes japonicus</i>	6	79		
	<i>Aedes triseriatus</i>	3	74		
	<i>Aedes vexans</i>	4	22		
	<i>Anopheles barberi</i>	1	1		
	<i>Anopheles bradleyi</i>	1	1		
	<i>Anopheles punctipennis</i>	1	1		
	<i>Coquillettidia perturbans</i>	5	22		
	<i>Culex pipiens</i>	21	736	7	9.51
	<i>Culex restuans</i>	3	3		
	<i>Culex salinarius</i>	17	701	3	4.28
	<i>Culex sp.</i>	128	9505	51	5.37
	<i>Culex territans</i>	1	1		
	<i>Orthopodomyia signifera</i>	1	1		
Burlington		316	2870		
	<i>Aedes albopictus</i>	38	496		
	<i>Aedes atropalpus</i>	4	7		
	<i>Aedes canadensis canadensis</i>	8	23		
	<i>Aedes cantator</i>	1	12		
	<i>Aedes japonicus</i>	22	140		
	<i>Aedes sollicitans</i>	3	9		
	<i>Aedes sticticus</i>	1	1		
	<i>Aedes taeniorhynchus</i>	1	4		
	<i>Aedes triseriatus</i>	16	54		
	<i>Aedes vexans</i>	20	157		
	<i>Anopheles barberi</i>	2	2		
	<i>Anopheles bradleyi</i>	4	13		
	<i>Anopheles crucians</i>	1	1		
	<i>Anopheles punctipennis</i>	14	43		
	<i>Anopheles quadrimaculatus</i>	11	53		
	<i>Coquillettidia perturbans</i>	20	135		
	<i>Culex erraticus</i>	4	37		
	<i>Culex pipiens</i>	13	70		
	<i>Culex restuans</i>	11	180		
	<i>Culex salinarius</i>	8	29		
	<i>Culex sp.</i>	33	588		
	<i>Culex territans</i>	3	11		
	<i>Culiseta melanura</i>	62	620		
	<i>Psorophora ciliata</i>	1	4		
	<i>Psorophora columbiae</i>	4	14		
	<i>Psorophora ferox</i>	2	2		
	<i>Psorophora howardii</i>	2	2		
	<i>Uranotaenia sapphirina</i>	1	2		
Camden		319	3901	12	3.08
	<i>Aedes albopictus</i>	68	1366		
	<i>Aedes atlanticus</i>	1	1		
	<i>Aedes canadensis canadensis</i>	1	1		
	<i>Aedes japonicus</i>	31	96	1	10.42
	<i>Aedes triseriatus</i>	11	17		
	<i>Aedes trivittatus</i>	5	7		
	<i>Aedes vexans</i>	15	59		
	<i>Anopheles bradleyi</i>	1	1		
	<i>Anopheles punctipennis</i>	19	58		

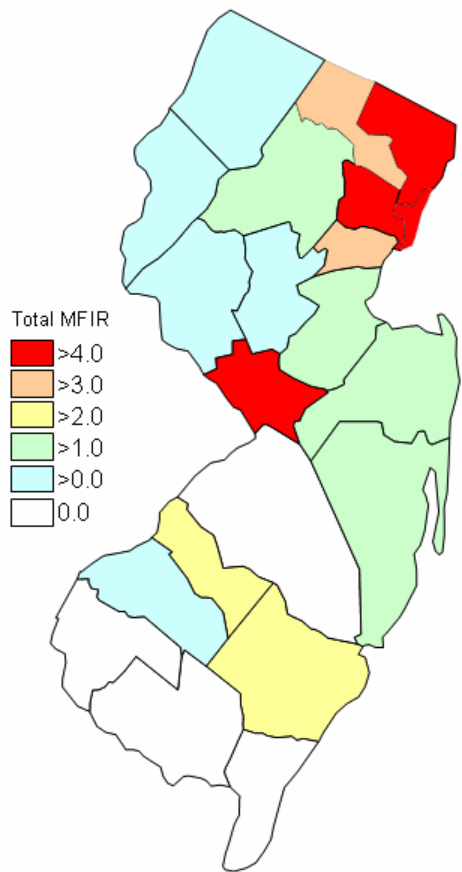
<i>Anopheles quadrimaculatus</i>	14	22		
<i>Coquillettidia perturbans</i>	8	12		
<i>Culex erraticus</i>	2	2		
<i>Culex pipiens</i>	32	544	9	16.54
<i>Culex restuans</i>	13	47	1	21.28
<i>Culex salinarius</i>	9	16		
<i>Culex sp.</i>	47	1119	1	0.89
<i>Culex territans</i>	2	3		
<i>Culiseta melanura</i>	39	529		
<i>Uranotaenia sapphirina</i>	1	1		
Cape May	238	3973	0	
<i>Aedes albopictus</i>	3	9		
<i>Aedes cantator</i>	1	2		
<i>Aedes japonicus</i>	4	8		
<i>Aedes sollicitans</i>	1	1		
<i>Anopheles bradleyi</i>	12	180		
<i>Anopheles punctipennis</i>	1	1		
<i>Anopheles quadrimaculatus</i>	31	1662		
<i>Coquillettidia perturbans</i>	1	2		
<i>Culex erraticus</i>	2	10		
<i>Culex pipiens</i>	45	445		
<i>Culex restuans</i>	21	64		
<i>Culex salinarius</i>	8	33		
<i>Culex sp.</i>	38	331		
<i>Culex territans</i>	6	18		
<i>Culiseta melanura</i>	63	1205		
<i>Uranotaenia sapphirina</i>	1	2		
Cumberland	125	2177	1	0.46
<i>Aedes abserratus</i>	1	2		
<i>Aedes albopictus</i>	19	141		
<i>Aedes japonicus</i>	6	16		
<i>Aedes sollicitans</i>	2	28		
<i>Aedes taeniorhynchus</i>	1	16		
<i>Aedes triseriatus</i>	1	2		
<i>Anopheles bradleyi</i>	6	105		
<i>Anopheles quadrimaculatus</i>	5	11		
<i>Culex erraticus</i>	9	37		
<i>Culex pipiens</i>	10	284		
<i>Culex restuans</i>	3	54		
<i>Culex salinarius</i>	3	102		
<i>Culex sp.</i>	43	1180	1	0.85
<i>Culiseta melanura</i>	15	167		
<i>Psorophora columbiae</i>	1	32		
Essex	115	1364	4	2.93
<i>Aedes albopictus</i>	12	52		
<i>Aedes canadensis canadensis</i>	2	4		
<i>Aedes japonicus</i>	7	24		
<i>Aedes sticticus</i>	3	24		
<i>Aedes stimulans</i>	1	3		
<i>Aedes triseriatus</i>	10	14		
<i>Aedes trivittatus</i>	5	74		
<i>Aedes vexans</i>	6	64		
<i>Anopheles punctipennis</i>	3	3		

	<i>Anopheles quadrimaculatus</i>	7	25		
	<i>Coquillettidia perturbans</i>	3	3		
	<i>Culex sp.</i>	39	538	4	7.43
	<i>Psorophora ciliata</i>	1	2		
	<i>Psorophora ferox</i>	16	534		
Gloucester		177	2442	1	0.41
	<i>Aedes albopictus</i>	8	48		
	<i>Aedes japonicus</i>	20	43		
	<i>Aedes vexans</i>	1	15		
	<i>Anopheles punctipennis</i>	3	3		
	<i>Anopheles quadrimaculatus</i>	3	3		
	<i>Anopheles walkeri</i>	5	9		
	<i>Coquillettidia perturbans</i>	1	7		
	<i>Culex pipiens</i>	123	2182		
	<i>Culiseta melanura</i>	13	144	1	7.69
	<i>Uranotaenia sapphirina</i>	1	2		
Hudson		303	10267	52	5.06
	<i>Aedes albopictus</i>	90	704		
	<i>Aedes atropalpus</i>	1	1		
	<i>Aedes triseriatus</i>	5	10		
	<i>Aedes trivittatus</i>	1	1		
	<i>Culex sp.</i>	206	9551	52	5.44
Hunterdon		176	8003	4	0.50
	<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>	148	6895	4	0.58
	<i>Culex territans</i>	2	9		
Mercer		309	4880	29	5.94
	<i>Aedes albopictus</i>	62	1331	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>	4	72		
	<i>Culex erraticus</i>	14	548		
	<i>Culex pipiens</i>	94	1549	19	12.27
	<i>Culex restuans</i>	42	496	3	6.05
	<i>Culex salinarius</i>	14	92	1	10.87
	<i>Culex sp.</i>	24	654	5	7.65
	<i>Culex territans</i>	1	1		
	<i>Psorophora columbiae</i>	1	6		
Middlesex		252	7022	16	2.28
	<i>Aedes albopictus</i>	13	104	1	9.62
	<i>Aedes canadensis canadensis</i>	5	35		

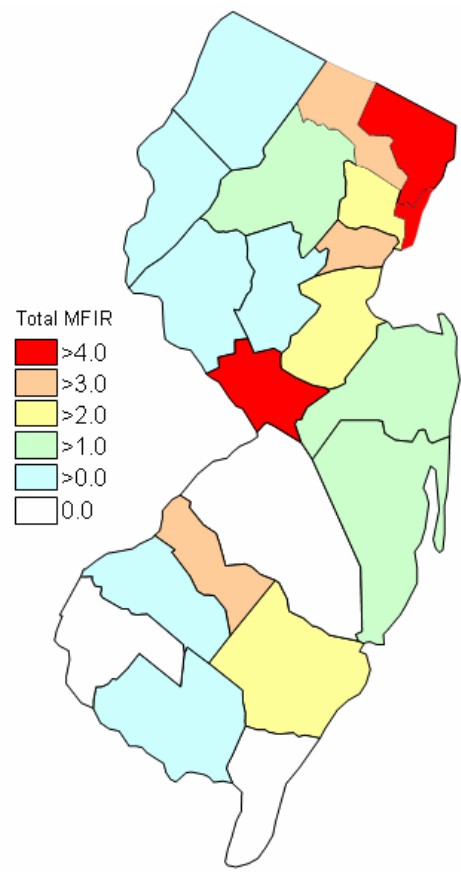
	<i>Aedes japonicus</i>	16	92		
	<i>Aedes sollicitans</i>	1	1		
	<i>Aedes triseriatus</i>	6	22		
	<i>Aedes vexans</i>	8	74		
	<i>Anopheles barberi</i>	1	1		
	<i>Anopheles bradleyi</i>	3	29		
	<i>Anopheles punctipennis</i>	1	8		
	<i>Anopheles quadrimaculatus</i>	4	9		
	<i>Coquillettidia perturbans</i>	9	377		
	<i>Culex pipiens</i>	11	228		
	<i>Culex restuans</i>	14	448		
	<i>Culex salinarius</i>	9	85		
	<i>Culex sp.</i>	146	5495	15	2.73
	<i>Culex territans</i>	1	2		
	<i>Culiseta melanura</i>	3	11		
	<i>Psorophora columbiae</i>	1	1		
Monmouth		344	3798	5	1.32
	<i>Aedes albopictus</i>	30	79		
	<i>Aedes atlanticus</i>	2	2		
	<i>Aedes canadensis canadensis</i>	5	244		
	<i>Aedes cantator</i>	8	26		
	<i>Aedes japonicus</i>	22	84	1	11.90
	<i>Aedes sollicitans</i>	4	29		
	<i>Aedes sticticus</i>	1	7		
	<i>Aedes taeniorhynchus</i>	2	4		
	<i>Aedes triseriatus</i>	17	29		
	<i>Aedes vexans</i>	17	161		
	<i>Anopheles barberi</i>	1	1		
	<i>Anopheles punctipennis</i>	14	23		
	<i>Anopheles quadrimaculatus</i>	6	7		
	<i>Coquillettidia perturbans</i>	3	31		
	<i>Culex pipiens</i>	18	255	2	7.84
	<i>Culex restuans</i>	20	276		
	<i>Culex salinarius</i>	11	88		
	<i>Culex sp.</i>	81	1067	2	1.87
	<i>Culex territans</i>	11	153		
	<i>Culiseta melanura</i>	67	1228		
	<i>Psorophora ferox</i>	2	2		
	<i>Uranotaenia sapphirina</i>	2	2		
Morris		158	2999	5	1.67
	<i>Aedes canadensis canadensis</i>	13	485		
	<i>Aedes cinereus</i>	1	13		
	<i>Aedes japonicus</i>	34	164		
	<i>Aedes triseriatus</i>	3	6		
	<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>	72	1625	5	3.08
	<i>Psorophora columbiae</i>	4	50		

	<i>Psorophora ferox</i>	1	1		
Ocean		222	5238	9	1.72
	<i>Aedes albopictus</i>	33	464		
	<i>Aedes canadensis canadensis</i>	8	347		
	<i>Aedes japonicus</i>	26	192		
	<i>Aedes sticticus</i>	1	17		
	<i>Aedes triseriatus</i>	19	62		
	<i>Aedes vexans</i>	7	24		
	<i>Anopheles punctipennis</i>	4	17		
	<i>Coquillettidia perturbans</i>	5	9		
	<i>Culex pipiens</i>	5	152	3	19.74
	<i>Culex restuans</i>	10	218	2	9.17
	<i>Culex salinarius</i>	7	14		
	<i>Culex sp.</i>	84	3685	4	1.09
	<i>Culiseta melanura</i>	9	32		
	<i>Orthopodomyia signifera</i>	1	2		
	<i>Psorophora columbiae</i>	2	2		
	<i>Psorophora ferox</i>	1	1		
Passaic		86	2450	9	3.67
	<i>Aedes albopictus</i>	5	45		
	<i>Aedes japonicus</i>	4	34		
	<i>Aedes triseriatus</i>	1	8		
	<i>Culex sp.</i>	76	2363	9	3.81
Salem		224	2555	0	
	<i>Aedes albopictus</i>	13	38		
	<i>Aedes canadensis canadensis</i>	1	3		
	<i>Aedes japonicus</i>	5	16		
	<i>Aedes thibaulti</i>	3	4		
	<i>Aedes triseriatus</i>	8	12		
	<i>Aedes vexans</i>	9	263		
	<i>Anopheles bradleyi</i>	11	45		
	<i>Anopheles punctipennis</i>	21	219		
	<i>Anopheles quadrimaculatus</i>	26	449		
	<i>Anopheles walkeri</i>	1	1		
	<i>Coquillettidia perturbans</i>	1	3		
	<i>Culex erraticus</i>	23	358		
	<i>Culex pipiens</i>	11	100		
	<i>Culex restuans</i>	7	14		
	<i>Culex salinarius</i>	13	322		
	<i>Culex sp.</i>	9	93		
	<i>Culex territans</i>	4	9		
	<i>Culiseta melanura</i>	50	540		
	<i>Psorophora columbiae</i>	1	8		
	<i>Uranotaenia sapphirina</i>	7	58		
Somerset		188	4136	3	0.73
	<i>Aedes albopictus</i>	5	6		
	<i>Aedes cinereus</i>	2	5		
	<i>Aedes japonicus</i>	29	350		
	<i>Aedes sticticus</i>	4	221		
	<i>Aedes triseriatus</i>	15	45		
	<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>	113	3403	3	0.88
	<i>Culex territans</i>	1	1		
Sussex		171	5287	1	0.19
	<i>Aedes japonicus</i>	1	2		
	<i>Coquillettidia perturbans</i>	8	388		
	<i>Culex salinarius</i>	2	8		
	<i>Culex sp.</i>	160	4889	1	0.20
Union		146	2530	10	3.95
	<i>Aedes albopictus</i>	28	261	1	3.83
	<i>Aedes cantator</i>	1	1		
	<i>Aedes japonicus</i>	13	48		
	<i>Aedes sollicitans</i>	2	2		
	<i>Aedes triseriatus</i>	10	14		
	<i>Aedes vexans</i>	10	49		
	<i>Anopheles quadrimaculatus</i>	4	5		
	<i>Coquillettidia perturbans</i>	5	7		
	<i>Culex pipiens</i>	7	69	1	14.49
	<i>Culex restuans</i>	5	8		
	<i>Culex salinarius</i>	5	310	2	6.45
	<i>Culex sp.</i>	50	1698	6	3.53
	<i>Orthopodomyia signifera</i>	1	1		
	<i>Psorophora columbiae</i>	5	57		
Warren		158	6345	1	0.16
	<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>	150	6300	1	0.16
Grand Total		4405	95815	229	2.39



Last Week



This Week