

# VECTOR SURVEILLANCE IN NEW JERSEY

## EEE, WNV, SLE and LAC

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CDC WEEK 37: September 8 – September 14, 2013

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### *Culiseta melanura* and Eastern Equine Encephalitis

SITE/Boxes	Inland or Coastal	Historic Population Mean	Current Weekly Mean	Total Tested* (Collected)	Total Pools Tested* (Submitted)	EEE Isolation Pools	MFIR
Bass River (Burlington Co.)/5	Coastal	1.10	2.20	42 (53)	11 (12)		
Green Bank (Burlington Co.)/25	Coastal	2.66	1.88	405 (452)	16 (17)	3	7.41
Corbin City (Atlantic Co.)/25	Coastal	1.69	3.40	266 (351)	15 (17)	1	3.76
Dennisville (Cape May Co.)/50	Coastal	5.13	0.04	233 (235)	13 (14)	1	4.29
Winslow (Camden Co.)/50	Inland	1.11	2.10	1519 (1624)	37 (40)	1	0.66
Centerton (Salem Co.)/50	Inland	3.72	0.82	832 (873)	24 (25)		
Turkey Swamp (Monmouth Co.)/44	Inland	0.84	3.61	1310 (1469)	35 (39)	8	6.11
Glassboro (Gloucester Co.)/50	Inland	1.17	0.56	316 (344)	15 (16)		

\*Current week (in parentheses) results pending.

**Remarks:** EEE activity continued to increase from the previous week by three pools with new detections in *Culiseta melanura* at both traditional resting box sites and other county sites. To date, 27 positive EEE pools (*Cs. melanura*, *Coquillettidia perturbans*, *Culex erraticus* and *Cx. salinarius*) have been collected in New Jersey. Three presumptive horse cases have been reported.

**NOTE:** Last week, a *Cs. melanura* pool was reported at the Winslow resting box site as a positive EEE pool when it was positive for WNV. This week, a positive EEE pool WAS detected at the Winslow site.

**Traditional Resting Box Sites:** To date 4737 *Cs. melanura* from 160 pools have been tested from the traditional resting box sites with an additional 14 pools of 478 mosquitoes to be tested. Fourteen pools have been detected positive for an overall MFIR of 2.96 for the traditional resting box sites. New positives were detected at Green Bank and Winslow.

**Additional Cs. melanura:** Two hundred ninety-one additional pools containing 6634 *Cs. melanura* have been tested from other sites using other

<b>Additional Cs. melanura trapped by counties</b>				
*traps with positives indicated in <b>BOLD</b> .				
<b>County</b>	<b>Trap types*</b>	<b>Number collected (pools)</b>	<b>Number of positives pools</b>	<b>MFIR</b>
Atlantic	CO <sub>2</sub>	1 (1)		
Burlington	<b>CO<sub>2</sub></b>	4399 (75)	2	0.45
Cape May	CO <sub>2</sub> , <b>Gravid, RB</b>	1171 (105)	5	4.27
Gloucester	RB	691 (55)		
Monmouth	CO <sub>2</sub> , <b>Other</b>	93 (7)	1	10.75
Ocean	<b>CO<sub>2</sub>, RB</b>	247 (42)	2	8.10
Salem	CO <sub>2</sub>	32 (6)		
<b>TOTAL</b>		<b>6634 (291)</b>	<b>10</b>	<b>1.51*</b>

traps in addition to resting boxes. A total of 10 positive *Cs. melanura* pools from non-traditional sites have been detected to date. Note that MFIR value is a “rough estimate” as other data already completed may be pending for entry to the West Nile database and not reflected in the tables below.

While *Cs. melanura* is primarily a bird feeder, it is not exclusively ornithophilic and may on occasion take a meal from a mammal. The appropriate precautions should

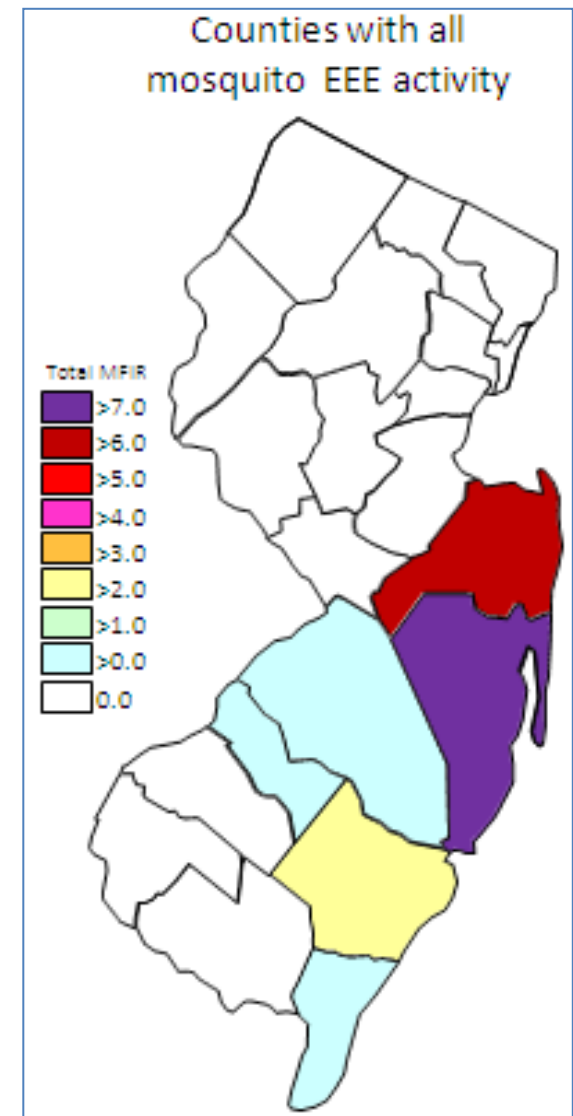
be taken in its habitat.

<b>Species other than Cs. melanura</b>	<b>Pools</b>	<b>Mosquitoes</b>	<b>Positives</b>	<b>MFIR</b>
<i>Aedes albopictus</i>	4	9		
<i>Aedes atlanticus</i>	3	75		
<i>Aedes canadensis canadensis</i>	4	83		
<i>Aedes cantator</i>	19	24		
<i>Aedes japonicus</i>	3	4		
<i>Aedes sollicitans</i>	4	19		
<i>Aedes sticticus</i>	2	3		
<i>Aedes taeniorhynchus</i>	1	2		
<i>Aedes triseriatus</i>	3	19		
<i>Aedes vexans</i>	1	32		
<i>Anopheles bradleyi</i>	16	95		
<i>Anopheles crucians</i>	1	10		
<i>Anopheles punctipennis</i>	4	52		
<i>Anopheles quadrimaculatus</i>	2	20		
<i>Coquillettidia perturbans</i>	20	332	1	3.012
<i>Culex erraticus</i>	84	2737	1	0.365
<i>Culex pipiens</i>	360	4766		
<i>Culex restuans</i>	2	2		
<i>Culex salinarius</i>	78	748	1	1.337
<i>Culex spp.</i>	65	383		
<i>Psorophora columbiae</i>	2	5		
State Total	<b>678</b>	<b>9420</b>	<b>3</b>	<b>0.318</b>

**Additional Species:** The table to the left indicates non-*Cs. melanura* mosquitoes tested for EEE. First positive in a non-*Cs. melanura* species was a pool of *Cx. salinarius* collected 3 August in Cape May County. *Coquillettidia perturbans*, a suspected inland vector of EEE, was found positive in Ocean County. *Culex erraticus*, an indiscriminant feeder that will bite both birds and mammals was found positive in Monmouth County.

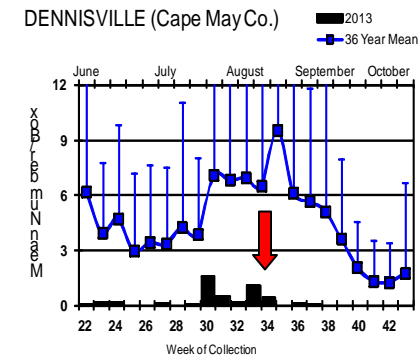
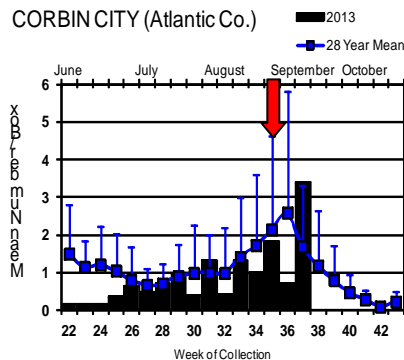
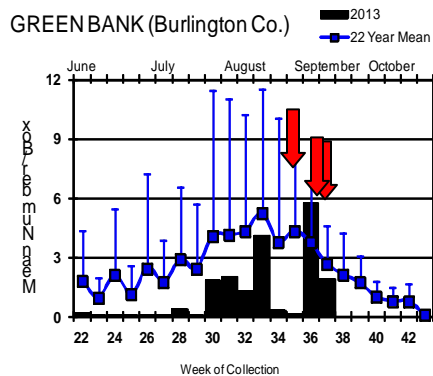
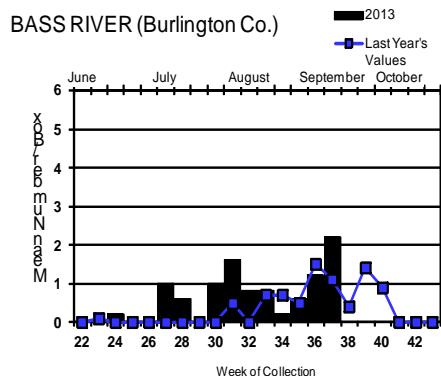
**Horses and Humans:** Currently there are no reported human cases. Three presumptive horse cases are reported. The first was in Cape May County. This 7 yo gelding had a date of onset 2 August and was euthanized the following day. Vaccination history is unknown. The second horse, a 7 month old unvaccinated colt, was in Monmouth County with an onset date of 27 August. This horse died two days later. The third horse case is a 9 year old mare from Ocean County with an unknown vaccination history and date of onset of 10 September and euthanized 11 September.

**Horses and Vaccinations:** The fate of unvaccinated equids reinforces the necessity of maintaining a vaccination schedule for arboviruses. For vaccination schedules recommended by the American Association of Equine Practices, see: [http://www.aaep.org/vaccination\\_guidelines.htm](http://www.aaep.org/vaccination_guidelines.htm)

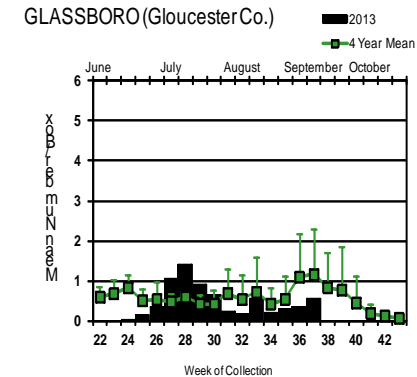
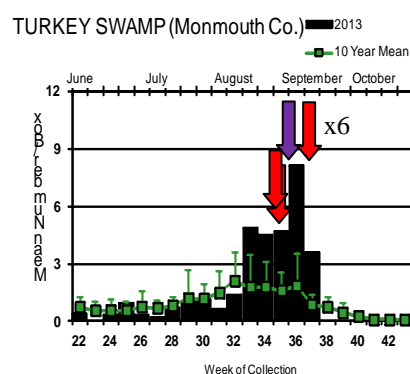
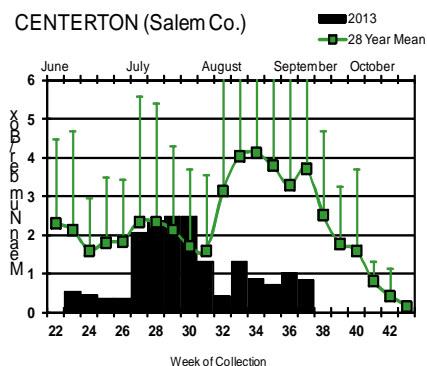
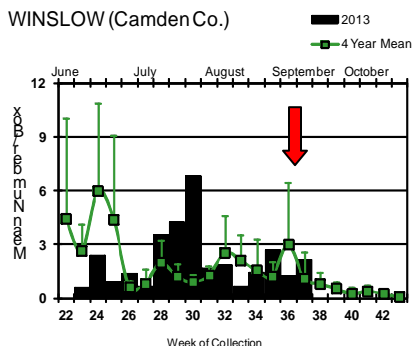


# Culiseta melanura Population Graphs

## Coastal



## Inland



*Cs. melanura* populations at Bass River, Corbin City and Turkey Swamp continue to be elevated above historical trends. Winslow populations have also increased, but are within error while populations at Centerton, Dennisville and Glassboro are below historical averages. Viral activity continues to be present in southern New Jersey.

Note axis change (from 12 to 6) on Bass River, Corbin City, Centerton and Glassboro sites. Note axis change on Turkey Swamp *back* to original numbers to accommodate increased population activity.

= Positive pool(s) detected (red = *melanura*, purple = other).

EEE in US (2013 cumulative cases): (Black or Red = previous + new reported cases occurring)

- equine: 4(AL) 1(AR) 31(FL) 20(GA) 1(KY) 6(LA) 3(MA) 2(ME) 1(MD) 1(MI) 7(MS) 10(NC) 1(NH) 3(NJ) 1(TX) 36(SC) 1(VA) 2(VT)
- mosquito pools: 29(CT) 1(GA) 48(MA) 5(MD) 21(ME) 1(NC) 15(NH) 27(NJ) 39(NY) 3(RI) 98(VA) 19(VT)
- sentinel: 3(AL) 1(DE) 128/4 wild(FL) 1(GA) 1pheasant(ME) 1(NC) 25(VA)
- human: 2(FL) 1(GA) 1(MA)

## West Nile Virus in US

West Nile in US (2013 cumulative cases): Single black values indicate no change from previous week. Black values / red values equals previous week/**New totals**.

Note: Data reported by all states should be considered provisional and subject to change. Sources for this table can be found [here](#).

	Birds	Mosquito Pools	Sentinels	Horses	Humans
Alabama					3/5
Alaska					
Arizona	0	164/169	4	1	16/23
Arkansas				1	3/4
California	982/1018	2085/2175	316/330	8	101/117
Colorado	10	417/439		2/3	113/139
Connecticut		73/76			2
Delaware	7		12	1	
DC		21/23			
Florida			65/78	2	1
Georgia	0	64		0	2
Hawaii					
Idaho		66		5/8	13/20
Illinois	50/57	1588/1888		2/4	3/9
Indiana	0	305/353		1	4/5
Iowa		14/18	3/4	5	8/13
Kansas		1/5			4/5
Kentucky				2/3	2
Louisiana		157/166	53/55	1	21/31
Maine		1		0	0
Maryland		5/7			6/8
Mass.		259/289		0	2/3
Michigan	30/34	6/10		2	6/11
Minnesota	1	34/48		1/2	46/49
Mississippi		35/42		1	27/30
Missouri		4		3	1/3

	Birds	Mosquito Pools	Sentinels	Horses	Humans
Montana	1	16		9/17	1/10
Nebraska	1/4	123/150		2/4	29/42
Nevada	1	42			7
New Hampshire		7/10			1
New Jersey	22/29	473/534		0	6/9
New Mexico		1		3	7
New York		389/458		3	4/7
North Carolina					1
North Dakota	6	20		0	39/57
Ohio		93/130		1	4/6
Oklahoma		18/28		1/5	3/13
Oregon	1	64/82	0	2	8/11
Pennsylvania	15/21	1140/1377		0	4/7
Rhode Island		4/5			
South Carolina	1			1	1
South Dakota	8	368		2	71/87
Tennessee	1	519/579		0	7/12
Texas	1/3	261/333		7/9	31/36
Utah		57/63	0	4	3
Vermont		16/19		1	1
Virginia		11/98	2		1
Washington	0	12/17		0	1
West Virginia		20/25			
Wisconsin	53	19		0	5/6
Wyoming	5	52		11/14	17/21

\* Can include other species (e.g., dogs, cows) reported positive.

Protocol: New Jersey Department of Health (NJDH Public Health Environmental and Agricultural Laboratories, PHEAL) and the Cape May County Department of Mosquito Control tests mosquito pools using RT-PCR Taqman techniques.

## Mosquito Species Submitted and Tested for West Nile Virus Testing through 13 September 2013

Species	Pools	Mosquitoes	Positives	MFIR
<i>Aedes albopictus</i>	645	5242	1	0.191
<i>Aedes atlanticus</i>	6	80		
<i>Aedes atropalpus</i>	4	7		
<i>Aedes canadensis canadensis</i>	48	839		
<i>Aedes cantator</i>	31	114		
<i>Aedes grossbecki</i>	1	1		
<i>Aedes japonicus</i>	344	2045	2	0.978
<i>Aedes sollicitans</i>	10	47		
<i>Aedes sticticus</i>	3	5		
<i>Aedes taeniorhynchus</i>	14	123		
<i>Aedes triseriatus</i>	95	240		
<i>Aedes trivittatus</i>	7	59		
<i>Aedes vexans</i>	67	694		
<i>Anopheles bradleyi</i>	24	130		
<i>Anopheles crucians</i>	2	47		
<i>Anopheles punctipennis</i>	33	224	1	4.464
<i>Anopheles quadrimaculatus</i>	91	1844		
<i>Coquillettidia perturbans</i>	34	448		
<i>Culex erraticus</i>	89	2747		
<i>Culex pipiens</i>	754	19345	62	3.205
<i>Culex restuans</i>	530	6183	20	3.235
<i>Culex salinarius</i>	82	766		
<i>Culex spp.</i>	2876	122747	434	3.536
<i>Culex territans</i>	14	17		
<i>Culiseta melanura</i>	467	11459	14	1.222
<i>Orthopodomyia signifera</i>	4	4		
<i>Psorophora ciliata</i>	3	4		
<i>Psorophora columbiae</i>	21	165		
<i>Psorophora ferox</i>	29	363		
<i>Psorophora howardii</i>	1	10		
<i>Uranotaenia sapphirina</i>	1	1		
<b>State Total</b>	<b>6320</b>	<b>175740</b>	<b>534</b>	<b>3.039</b>

**Remarks:** To date, 6320 pools of 175740 mosquitoes from 30 species have been tested, with 534 positive pools detected. First positive was detected in a pool collected on 26 June in Middlesex County. Positive pools continue to be detected primarily in the enzootic vectors. Potential bridge vectors are also being detected, with positive pools in *Aedes albopictus*, *Aedes japonicus* and *Anopheles punctipennis*.

**Humans, Horses and Wild Birds:** To date, nine human cases have been reported by the NJ Department of Health. The first case was from Burlington County with onset date of 5 August. Cases are from Bergen (1), Burlington (2), Camden (4), Gloucester (1) and Morris (1) counties. See <http://www.state.nj.us/health/cd/westnile/techinfo.shtml> for further information.

Last year the first horse was detected in mid July. No horse or other livestock have been reported positive in 2013 to date.

Bird testing began in mid-April. Twenty-nine positive birds have been reported, mostly corvids. First American Crow positive has been detected. To date, 112 birds have been tested. Testing includes: American Crow (*Corvus brachyrhynchos* 1/6), Fish Crow (*C. ossifragus* 6/17), unidentified Crow (*Corvus* spp. 2/4), Blue Jay (*Cyanocitta cristata* 14/20), Hawk/Raptor (0/8) and other avian species (6/57). Counties (positives) submitting birds are Atlantic, Bergen,

Burlington, Cape May, Cumberland, Essex, Gloucester, Hunterdon, Mercer, Middlesex, Monmouth, Morris, Ocean, Salem, Sussex, Union and Warren (previous positive in error).

2013 Positive Mosquito pools to date / Total Mosquito Pools Submitted (PHEL)	This time last year (PHEL)
534 / 6320 (0.084)	944 / 6322 (0.149)
2013 Positive Birds to date / Total Birds Submitted	This time last year
29 / 112 (0.259)	112 / 261 (0.429)

### WNV Results by County through 13 September 2013

County	Species	Pools	Mosquitoes	Positives	MFIR
<b>Atlantic</b>		<b>150</b>	<b>2851</b>	<b>1</b>	<b>0.351</b>
	<i>Aedes albopictus</i>	13	140		
	<i>Aedes canadensis canadensis</i>	4	81		
	<i>Aedes cantator</i>	3	36		
	<i>Aedes grossbecki</i>	1	1		
	<i>Aedes japonicus</i>	7	26		
	<i>Aedes sollicitans</i>	2	23		
	<i>Aedes sticticus</i>	2	3		
	<i>Aedes taeniorhynchus</i>	6	30		
	<i>Aedes triseriatus</i>	4	11		
	<i>Aedes vexans</i>	12	280		
	<i>Anopheles bradleyi</i>	6	27		
	<i>Anopheles punctipennis</i>	2	12		
	<i>Anopheles quadrimaculatus</i>	3	11		
	<i>Coquillettidia perturbans</i>	6	37		
	<i>Culex erraticus</i>	5	101		
	<i>Culex spp.</i>	43	1565	1	0.639
	<i>Culiseta melanura</i>	22	308		
	<i>Psorophora ciliata</i>	1	1		
	<i>Psorophora columbiae</i>	2	2		
	<i>Psorophora ferox</i>	4	145		
	<i>Psorophora howardii</i>	1	10		
	<i>Uranotaenia sapphirina</i>	1	1		
<b>Bergen</b>		<b>179</b>	<b>10696</b>	<b>84</b>	<b>7.853</b>
	<i>Aedes albopictus</i>	1	6		
	<i>Aedes japonicus</i>	4	36		
	<i>Culex spp.</i>	174	10654	84	7.884
<b>Burlington</b>		<b>224</b>	<b>8506</b>	<b>20</b>	<b>2.351</b>
	<i>Aedes albopictus</i>	13	198		
	<i>Aedes atlanticus</i>	2	53		
	<i>Aedes canadensis canadensis</i>	2	69		
	<i>Aedes japonicus</i>	10	72		
	<i>Aedes taeniorhynchus</i>	1	2		
	<i>Aedes triseriatus</i>	1	17		
	<i>Aedes vexans</i>	2	10		
	<i>Anopheles crucians</i>	2	47		
	<i>Coquillettidia perturbans</i>	5	216		
	<i>Culex erraticus</i>	2	4		
	<i>Culex pipiens</i>	2	15		
	<i>Culex restuans</i>	1	1		

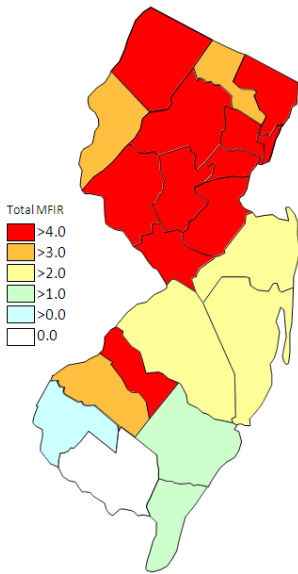
	<i>Culex salinarius</i>	3	97		
	<i>Culex</i> spp.	74	2854	13	4.555
	<i>Culiseta melanura</i>	102	4846	7	1.444
	<i>Psorophora ciliata</i>	1	1		
	<i>Psorophora columbiae</i>	1	4		
<b>Camden</b>		<b>236</b>	<b>7251</b>	<b>30</b>	<b>4.137</b>
	<i>Aedes albopictus</i>	34	172		
	<i>Aedes japonicus</i>	28	93	1	10.753
	<i>Anopheles punctipennis</i>	1	1		
	<i>Culex</i> spp.	139	5577	28	5.021
	<i>Culiseta melanura</i>	34	1408	1	0.710
<b>Cape May</b>		<b>1737</b>	<b>17177</b>	<b>19</b>	<b>1.106</b>
	<i>Aedes albopictus</i>	172	370		
	<i>Aedes atlanticus</i>	1	2		
	<i>Aedes atropalpus</i>	4	7		
	<i>Aedes canadensis canadensis</i>	6	7		
	<i>Aedes cantator</i>	20	25		
	<i>Aedes japonicus</i>	87	168		
	<i>Aedes sollicitans</i>	4	19		
	<i>Aedes taeniorhynchus</i>	6	90		
	<i>Aedes triseriatus</i>	43	69		
	<i>Aedes vexans</i>	19	32		
	<i>Anopheles bradleyi</i>	16	95		
	<i>Anopheles punctipennis</i>	1	1		
	<i>Anopheles quadrimaculatus</i>	70	1730		
	<i>Coquillettidia perturbans</i>	4	8		
	<i>Culex erraticus</i>	71	2506		
	<i>Culex pipiens</i>	468	6179	17	2.751
	<i>Culex restuans</i>	462	3628	1	0.276
	<i>Culex salinarius</i>	74	601		
	<i>Culex</i> spp.	61	204	1	4.902
	<i>Culex territans</i>	14	17		
	<i>Culiseta melanura</i>	117	1396	1	0.716
	<i>Orthopodomyia signifera</i>	4	4		
	<i>Psorophora columbiae</i>	5	8		
	<i>Psorophora ferox</i>	8	11		
<b>Essex</b>		<b>183</b>	<b>2823</b>	<b>4</b>	<b>1.417</b>
	<i>Aedes albopictus</i>	73	493		
	<i>Aedes japonicus</i>	46	431		
	<i>Culex</i> spp.	64	1899	4	2.106
<b>Gloucester</b>		<b>377</b>	<b>14764</b>	<b>43</b>	<b>2.912</b>
	<i>Aedes albopictus</i>	16	516		
	<i>Aedes japonicus</i>	15	205		
	<i>Aedes triseriatus</i>	1	30		
	<i>Aedes vexans</i>	4	139		
	<i>Anopheles punctipennis</i>	7	152	1	6.579
	<i>Anopheles quadrimaculatus</i>	4	51		
	<i>Coquillettidia perturbans</i>	3	71		
	<i>Culex pipiens</i>	251	12492	42	3.362
	<i>Culiseta melanura</i>	73	1020		
	<i>Psorophora ferox</i>	3	88		



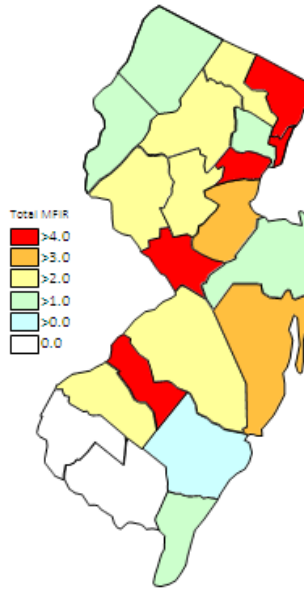
<b>Hudson</b>		<b>172</b>	<b>9098</b>	<b>56</b>	<b>6.155</b>
	<i>Culex</i> spp.	172	9098	56	6.155
<b>Hunterdon</b>		<b>279</b>	<b>13384</b>	<b>35</b>	<b>2.615</b>
	<i>Culex</i> spp.	279	13384	35	2.615
<b>Mercer</b>		<b>220</b>	<b>6246</b>	<b>40</b>	<b>6.404</b>
	<i>Aedes albopictus</i>	56	427		
	<i>Aedes japonicus</i>	11	48	1	20.833
	<i>Aedes triseriatus</i>	2	4		
	<i>Aedes vexans</i>	5	124		
	<i>Culex erraticus</i>	1	3		
	<i>Culex pipiens</i>	31	657	4	6.088
	<i>Culex restuans</i>	63	2550	19	7.451
	<i>Culex salinarius</i>	1	5		
	<i>Culex</i> spp.	50	2428	16	6.590
<b>Middlesex</b>		<b>233</b>	<b>7171</b>	<b>27</b>	<b>3.765</b>
	<i>Aedes albopictus</i>	13	173		
	<i>Aedes japonicus</i>	4	20		
	<i>Culex</i> spp.	216	6978	27	3.869
<b>Monmouth</b>		<b>284</b>	<b>4196</b>	<b>6</b>	<b>1.430</b>
	<i>Aedes albopictus</i>	53	662		
	<i>Aedes atlanticus</i>	3	25		
	<i>Aedes canadensis canadensis</i>	16	257		
	<i>Aedes cantator</i>	6	20		
	<i>Aedes japonicus</i>	24	94		
	<i>Aedes sollicitans</i>	1	1		
	<i>Aedes taeniorhynchus</i>	1	1		
	<i>Aedes triseriatus</i>	15	40		
	<i>Aedes trivittatus</i>	6	9		
	<i>Aedes vexans</i>	7	21		
	<i>Anopheles punctipennis</i>	13	29		
	<i>Anopheles quadrimaculatus</i>	1	1		
	<i>Coquillettidia perturbans</i>	2	6		
	<i>Culex erraticus</i>	4	43		
	<i>Culex restuans</i>	2	2		
	<i>Culex salinarius</i>	1	50		
	<i>Culex</i> spp.	73	1433	2	1.396
	<i>Culiseta melanura</i>	47	1390	4	2.878
	<i>Psorophora columbiae</i>	3	68		
	<i>Psorophora ferox</i>	6	44		
<b>Morris</b>		<b>335</b>	<b>13753</b>	<b>36</b>	<b>2.618</b>
	<i>Culex</i> spp.	335	13753	36	2.618
<b>Ocean</b>		<b>321</b>	<b>4185</b>	<b>13</b>	<b>3.106</b>
	<i>Aedes albopictus</i>	88	1120	1	0.893
	<i>Aedes canadensis canadensis</i>	19	412		
	<i>Aedes cantator</i>	2	33		
	<i>Aedes japonicus</i>	32	105		
	<i>Aedes sollicitans</i>	1	2		
	<i>Aedes triseriatus</i>	4	7		
	<i>Aedes vexans</i>	15	22		

<i>Anopheles punctipennis</i>	2	3		
<i>Coquillettidia perturbans</i>	8	72		
<i>Culex erraticus</i>	2	8		
<i>Culex salinarius</i>	3	13		
<i>Culex</i> spp.	103	2141	11	5.138
<i>Culiseta melanura</i>	42	247	1	4.049
<b>Passaic</b>	<b>180</b>	<b>6218</b>	<b>14</b>	<b>2.252</b>
<i>Aedes albopictus</i>	20	83		
<i>Aedes japonicus</i>	18	168		
<i>Aedes triseriatus</i>	7	12		
<i>Aedes trivittatus</i>	1	50		
<i>Aedes vexans</i>	1	50		
<i>Anopheles punctipennis</i>	2	4		
<i>Anopheles quadrimaculatus</i>	1	15		
<i>Coquillettidia perturbans</i>	1	2		
<i>Culex</i> spp.	127	5832	14	2.401
<i>Psorophora ferox</i>	2	2		
<b>Salem</b>	<b>224</b>	<b>4441</b>		
<i>Aedes albopictus</i>	31	137		
<i>Aedes japonicus</i>	23	87		
<i>Aedes sollicitans</i>	2	2		
<i>Aedes sticticus</i>	1	2		
<i>Aedes triseriatus</i>	13	36		
<i>Anopheles bradleyi</i>	2	8		
<i>Anopheles punctipennis</i>	2	5		
<i>Anopheles quadrimaculatus</i>	11	31		
<i>Coquillettidia perturbans</i>	5	36		
<i>Culex erraticus</i>	4	82		
<i>Culex pipiens</i>	2	2		
<i>Culex restuans</i>	2	2		
<i>Culex</i> spp.	80	3039		
<i>Culiseta melanura</i>	29	814		
<i>Psorophora ciliata</i>	1	2		
<i>Psorophora columbiae</i>	10	83		
<i>Psorophora ferox</i>	6	73		
<b>Somerset</b>	<b>237</b>	<b>5582</b>	<b>14</b>	<b>2.508</b>
<i>Aedes albopictus</i>	26	144		
<i>Aedes japonicus</i>	16	161		
<i>Aedes triseriatus</i>	5	14		
<i>Aedes vexans</i>	2	16		
<i>Culex</i> spp.	188	5247	14	2.668
<b>Sussex</b>	<b>255</b>	<b>11553</b>	<b>14</b>	<b>1.212</b>
<i>Aedes japonicus</i>	7	184		
<i>Culex</i> spp.	247	11339	14	1.235
<i>Culiseta melanura</i>	1	30		
<b>Union</b>	<b>237</b>	<b>12887</b>	<b>63</b>	<b>4.889</b>
<i>Aedes albopictus</i>	31	479		
<i>Aedes japonicus</i>	9	137		
<i>Culex</i> spp.	197	12271	63	5.134

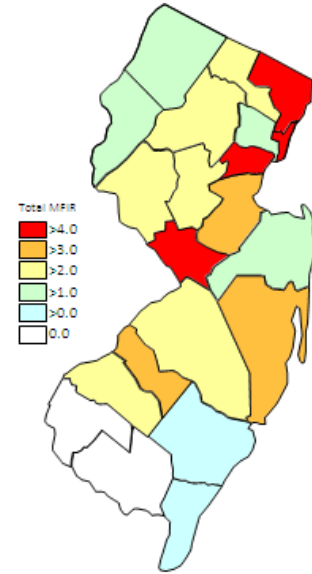
Warren	267	13218	15	1.135
<i>Aedes albopictus</i>	5	122		
<i>Aedes canadensis canadensis</i>	1	13		
<i>Aedes japonicus</i>	3	10		
<i>Anopheles punctipennis</i>	3	17		
<i>Anopheles quadrimaculatus</i>	1	5		
<i>Culex</i> spp.	254	13051	15	1.149
<b>Grand Total</b>	<b>6320</b>	<b>175740</b>	<b>534</b>	<b>3.039</b>



Cumulative WNV activity in 2012.



WNV activity to 13 September 2013.



WNV activity last week, 2013.

### Saint Louis Encephalitis (SLE) to 13 September 2013.

New Jersey will be selectively testing for SLE this year. SLE has had previous activity in New Jersey, most notably in 1964 and 1975 (CDC's SLE [website](#)), the latter prompting the surveillance reporting by Rutgers. SLE is a flavivirus and has a similar transmission pattern to West Nile, with *Culex* species as the predominant vectors.

No pools have been detected positive for SLE in 2013.

County	Species	Pools	Mosquitoes	Positives	MFIR
<b>Burlington</b>		<b>39</b>	<b>1231</b>		
	<i>Aedes albopictus</i>	5	81		
	<i>Aedes japonicus</i>	2	13		
	<i>Culex erraticus</i>	1	2		
	<i>Culex pipiens</i>	31	1135		
<b>Cape May</b>		<b>368</b>	<b>4782</b>		
	<i>Culex pipiens</i>	356	4748		
	<i>Culex</i> spp.	12	34		
<b>Salem</b>		<b>2</b>	<b>16</b>		
	<i>Aedes triseriatus</i>	2	16		

<b>Grand Total</b>		<b>409</b>	<b>6029</b>	

### La Crosse Encephalitis (LAC) through 13 September 2013.

New Jersey will be selectively testing for La Crosse (LAC) virus this year. New Jersey has had 3 cases of this encephalitic disease since 1964 (see CDC's LAC [website](#)). The mortality is low but like other encephalitides, LAC can have both personal (lasting neurological sequelae) and economic impacts. LAC is a bunyavirus with a transmission cycle involving mosquitoes such as *Aedes triseriatus* and small mammals such as squirrels and chipmunks. LAC can not only infect *Aedes albopictus* but transovarial transmission was also demonstrated. (Tesh and Gubler 1975 Laboratory studies of transovarial transmission of La Crosse and other arboviruses by *Aedes albopictus* and *Culex fatigans*. American Journal of Tropical Medicine and Hygiene 24(5):876-880).

No pools have been detected positive for LAC in 2013.

County	Species	Pools	Mosquitoes	Positives	MFIR
<b>Burlington</b>		<b>1</b>	<b>17</b>		
	<i>Aedes triseriatus</i>	1	17		
<b>Cape May</b>		<b>39</b>	<b>65</b>		
	<i>Aedes triseriatus</i>	39	65		
<b>Salem</b>		<b>9</b>	<b>18</b>		
	<i>Aedes triseriatus</i>	9	18		
<b>Grand Total</b>		<b>49</b>	<b>100</b>		