

# VECTOR SURVEILLANCE IN NEW JERSEY

## EEE, WNV, SLE and LAC

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CDC WEEK 44: October 27 – November 2, 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	nd	0.00	81	17		
Green Bank (Burlington Co.)/25	Coastal	nd	0.04	588	24	3	5.11
Corbin City (Atlantic Co.)/25	Coastal	nd	nd	507	23	3	5.92
Dennisville (Cape May Co.)/50	Coastal	nd	0.00	277	21	1	3.61
Winslow (Camden Co.)/50	Inland	nd	0.14	1867	48	3	1.61
Centerton (Salem Co.)/50	Inland	nd	0.00	1063	32	1	0.94
Turkey Swamp (Monmouth Co.)/44	Inland	nd	nd	1612	44	11	6.82
Glassboro (Gloucester Co.)/50	Inland	nd	0.00	406	19	3	7.39

\*Current week (in parentheses) results pending.

**Remarks:** No additional EEE pools were detected at any site. To date, 50 positive EEE pools (*Cs. melanura*, *Anopheles bradleyi*, *Coquillettidia perturbans*, *Culex erraticus* and *Cx. salinarius*) have been collected in New Jersey. Five presumptive horse cases have been reported, up from three reported in the previous report. Eighty-eight percent of the positive pools were found in *Cs. melanura*, with half detected at the traditional resting box sites. First pool detected was in July and there were multiple horse cases. MFIR for all mosquitoes for the state was 1.993.

This is the last report of the 2013 season.

**Traditional Resting Box Sites:** To date 6401 *Cs. melanura* from 228 pools have been tested from the traditional resting box. Twenty-five pools have been detected positive for an overall MFIR of 3.91 for the traditional resting box sites. No new positives pools were detected this past week.

Additional <i>Cs. melanura</i> trapped by counties *traps with positives indicated in <b>BOLD</b> .				
County	Trap types*	Number collected (pools)	Number of positive pools	MFIR
Atlantic	CO <sub>2</sub>	14 (4)	1	71.43
Burlington	CO <sub>2</sub>	5401 (105)	5	0.93
Cape May	CO <sub>2</sub> , <b>Gravid, RB</b>	1311 (111)	8	6.10
Gloucester	<b>RB</b>	969 (79)	1	1.03
Monmouth	CO <sub>2</sub> , <b>Other</b>	291 (23)	2	6.87
Ocean	<b>CO<sub>2</sub>, Gravid, RB</b>	404 (65)	2	4.99
Salem	CO <sub>2</sub>	33 (7)		
<b>TOTAL</b>		<b>8423 (394)</b>	<b>19</b>	2.26*

**Additional *Cs. melanura*:** Three hundred and ninety-four additional pools containing 8423 *Cs. melanura* have been tested from other sites using other traps in addition to resting boxes. A total of 19 positive *Cs. melanura* pools from non-traditional sites have been detected to date. No additional pools were detected, this past week. 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.

Species other than <i>Cs. melanura</i>	Pools	Mosquitoes	Positives	MFIR
<i>Aedes albopictus</i>	22	168		
<i>Aedes atlanticus</i>	3	75		
<i>Aedes canadensis canadensis</i>	14	138		
<i>Aedes cantator</i>	19	24		
<i>Aedes infirmatus</i>	1	1		
<i>Aedes japonicus</i>	13	28		
<i>Aedes sollicitans</i>	4	19		
<i>Aedes sticticus</i>	2	3		
<i>Aedes taeniorhynchus</i>	1	2		
<i>Aedes triseriatus</i>	8	26		
<i>Aedes vexans</i>	3	38		
<i>Anopheles bradleyi</i>	27	284	1	3.521
<i>Anopheles crucians</i>	4	16		
<i>Anopheles punctipennis</i>	20	145		
<i>Anopheles quadrimaculatus</i>	13	57		
<i>Coquillettidia perturbans</i>	24	338	1	2.959
<i>Culex erraticus</i>	117	2905	2	0.688
<i>Culex pipiens</i>	382	5215	1	0.192
<i>Culex restuans</i>	4	4		
<i>Culex salinarius</i>	86	812	1	1.232
<i>Culex spp.</i>	85	641		
<i>Psorophora columbiae</i>	3	7		
State Total	<b>855</b>	<b>10946</b>	<b>6</b>	<b>0.548</b>

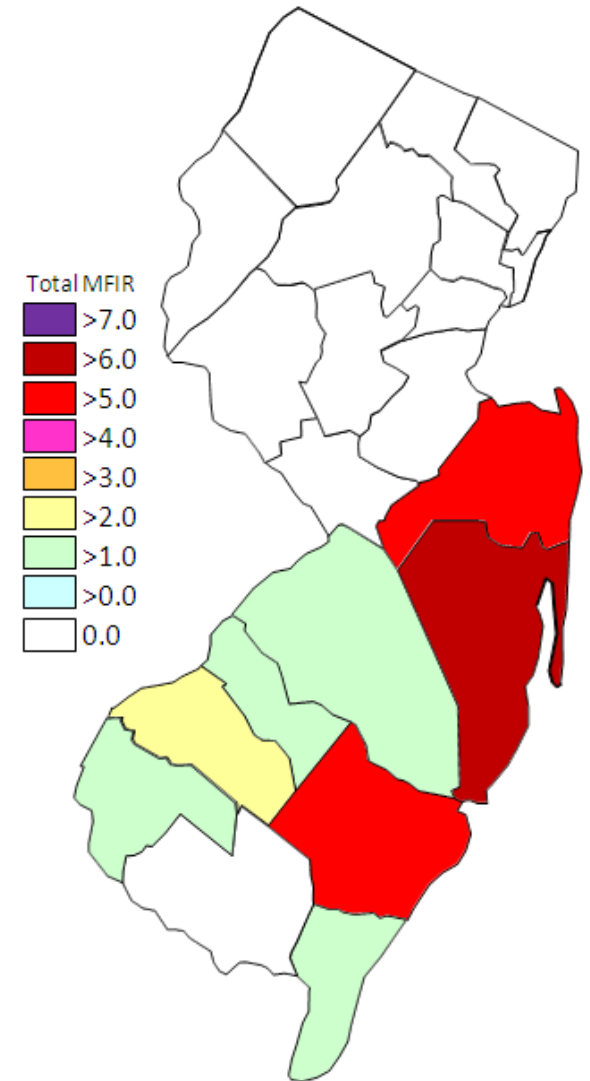
While *Cs. melanura* is primarily a bird feeder, it is not exclusively ornithophilic and may on occasion take a bloodmeal from a mammal. The appropriate precautions should be taken in its habitat.

**Additional Species:** The table to the left indicates non-*Cs. melanura* mosquitoes tested for EEE. No additional non-melanura pools were found positive this past week. 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 both Monmouth and Ocean County. One pool of *Anopheles bradleyi* from Burlington County, collected 17 Sep was positive.

**Horses and Humans:** Currently there are no reported human cases. Two new horse cases have been detected for a total of 5 horse cases in New Jersey. The two cases include a 2.5 yo filly from Salem County, with date of onset 20 October, died 22 October. This horse was vaccinated on 23 April with EWT (EEE, WNV, Tetanus). The second horse was an 18 yo stallion in Camden County with an unknown vaccination history and a date on onset on 24 October, euthanized 27 October. Three previous horse cases have been 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 yo 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)

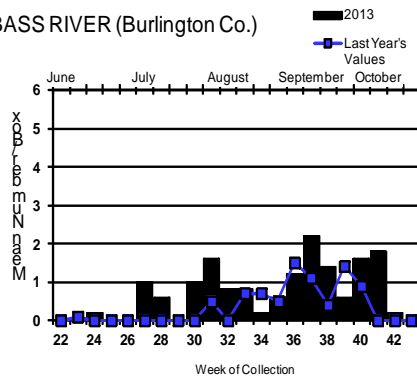
Counties with all mosquito EEE activity



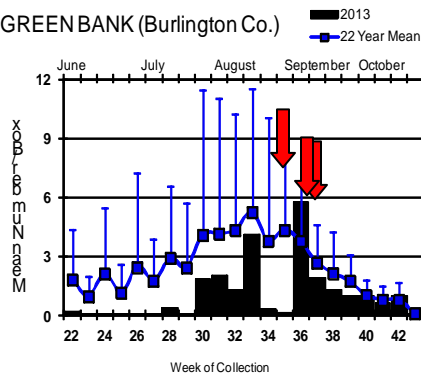
# Culiseta melanura Population Graphs

## Coastal

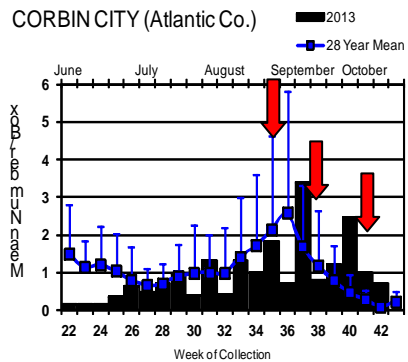
BASS RIVER (Burlington Co.)



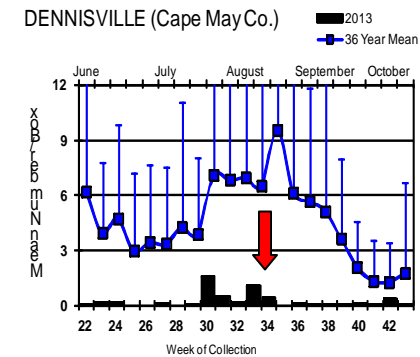
GREEN BANK (Burlington Co.)



CORBIN CITY (Atlantic Co.)

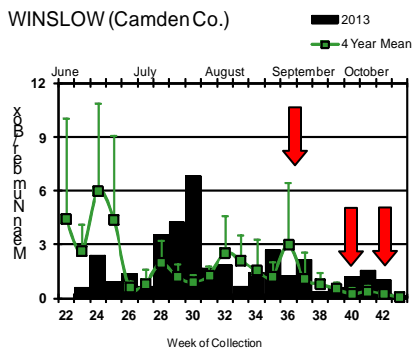


DENNISVILLE (Cape May Co.)

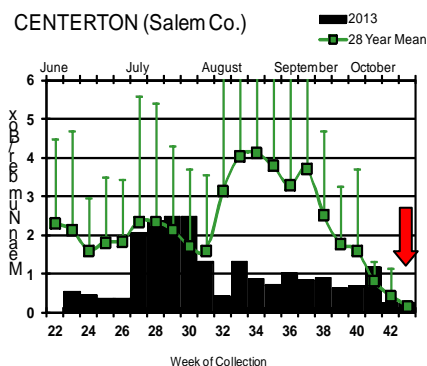


## Inland

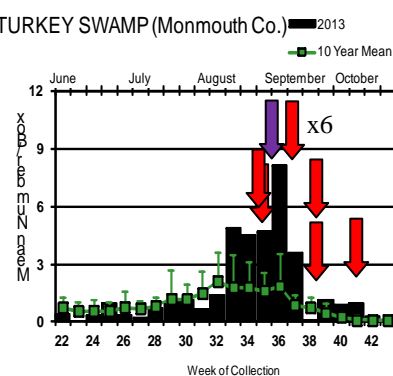
WINSLOW (Camden Co.)



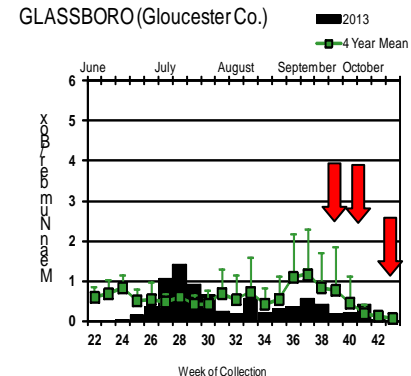
CENTERTON (Salem Co.)



TURKEY SWAMP (Monmouth Co.)





GLASSBORO (Gloucester Co.)



The traditional resting box sites monitoring continued for most sites this 44<sup>th</sup> week, but populations were mostly at zero. This was the last week of monitoring for the season. No additional positives were detected in the few mosquitoes collected at the sites.

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) 5(AR) 1(CT) 2(DE) 34(FL) 24(GA) 2(KY) 8(LA) 4(MA) 3(ME) 1(MD) 1(MI) 12(MS) 13(NC) 3(NH) 5(NJ) 1(NY) 1(RI) 49(SC) 2(TX) 1(VA) 2(VT)
- mosquito pools: 57(CT) 1(GA) 61(MA) 9(MD) 26(ME) 1(NC) 24(NH) 50(NJ) 53(NY) 4(RI) 116(VA) 22(VT)
- sentinel: 3(AL) 1(DE) 150/4 wild(FL) 1(GA) 1pheasant1emu(ME) 2(NC) 30(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					7
Alaska					
Arizona	1	199	6	2	39/52
Arkansas				2	6
California	1200/1210	2507/2511	478	11/13	297/319
Colorado	11	441		13	303/305
Connecticut		90			4
Delaware	8		16	2	2
DC		38/39			
Florida	1		191/209	5/6	3/4
Georgia	0	138		4	9
Hawaii					
Idaho		180		10	39/40
Illinois	87/88	2686/2704		13	91/98
Indiana	0	482		1	20
Iowa		47	15	10	44
Kansas		13/15		9/10	55/62
Kentucky	1			11	2/3
Louisiana		171/194	66/108	2/4	35/51
Maine		3		0	0
Maryland		10		2	14/16
Mass.		335		2	8
Michigan	60	23		3	32/33
Minnesota	1	77		5	79
Mississippi		46		3	43
Missouri		11		13/14	20

	Birds	Mosquito Pools	Sentinels	Horses	Humans
Montana	1	19		27	36/38
Nebraska	9	243		6	184/187
Nevada	1	47			11
New Hampshire		14		1	1
New Jersey	36	657/658		1	11/12
New Mexico		1/9		3/4	30/36
New York		583/589	1	13	24/25
North Carolina				2	1
North Dakota	9	20		1	111/121
Ohio		169/188		3	11/21
Oklahoma		41		14/19	49/56
Oregon	1	85/87	0	2/5	14/16
Pennsylvania	27/28	1499/1505		2	11
Rhode Island		8			1
South Carolina	5	4		3	6
South Dakota	8	392		3	135/144
Tennessee	1	768/824		1	15/20
Texas	4	453/458		18/27	118/136
Utah	1	69	2	7	9
Vermont		28		1	1/2
Virginia		126/182	10	1	5
Washington	0	18		2	1
West Virginia		26			
Wisconsin	62	20		0	14/17
Wyoming	6	52		19	40/41

\* 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 4 November 2013

Species	Pools	Mosquitoes	Positives	MFIR
<i>Aedes albopictus</i>	829	6965	3	0.431
<i>Aedes atlanticus</i>	6	80		
<i>Aedes atropalpus</i>	4	7		
<i>Aedes canadensis canadensis</i>	59	882		
<i>Aedes cantator</i>	31	114		
<i>Aedes grossbecki</i>	1	1		
<i>Aedes infirmatus</i>	1	1		
<i>Aedes japonicus</i>	466	2524	2	0.792
<i>Aedes sollicitans</i>	10	47		
<i>Aedes sticticus</i>	3	5		
<i>Aedes taeniorhynchus</i>	14	123		
<i>Aedes triseriatus</i>	122	345	1	2.899
<i>Aedes trivittatus</i>	9	64		
<i>Aedes vexans</i>	85	778		
<i>Anopheles bradleyi</i>	40	340		
<i>Anopheles crucians</i>	10	117		
<i>Anopheles punctipennis</i>	59	345	1	2.899
<i>Anopheles quadrimaculatus</i>	120	1977		
<i>Coquillettidia perturbans</i>	38	455		
<i>Culex erraticus</i>	132	2929	1	0.341
<i>Culex pipiens</i>	908	22317	87	3.898
<i>Culex restuans</i>	572	6372	23	3.610
<i>Culex salinarius</i>	93	882	1	1.134
<i>Culex spp.</i>	3511	136112	515	3.784
<i>Culex territans</i>	14	17		
<i>Culiseta melanura</i>	604	14181	24	1.692
<i>Orthopodomyia signifera</i>	4	4		
<i>Psorophora ciliata</i>	3	4		
<i>Psorophora columbiae</i>	22	167		
<i>Psorophora ferox</i>	30	364		
<i>Psorophora howardii</i>	1	10		
<i>Uranotaenia sapphirina</i>	2	10		
<b>State Total</b>	<b>7803</b>	<b>198539</b>	<b>658</b>	<b>3.314</b>

**Remarks:** To date, 7803 pools of 198539 mosquitoes from 31 species have been tested, with 658 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*, *Aedes triseriatus*, *Anopheles punctipennis*, *Culex erraticus* and *Culex salinarius*.

**Humans, Horses and Wild Birds:** To date, twelve human cases have been reported by the NJ Department of Health. One additional case from last week was reported in Essex County with date of onset 15 October. The first case was from Burlington County with onset date of 5 August. Cases are from Bergen (1), Burlington (2), Camden (5), Essex (1), Gloucester (1), Morris (1) and Ocean (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. This year, the first reported horse was a 33 yo gelding from Cumberland County, with date of onset at 4 Oct. There was no vaccination history. This is the only WNV horse case to date.

Bird testing began in mid-April. Thirty-six positive birds have been reported, mostly corvids. No new positive birds were detected this past week. First American Crow positive has been detected. To date, 123 birds have been tested. Testing includes: American Crow (*Corvus brachyrhynchos* 3/8), Fish Crow (*C. ossifragus* 7/18), unidentified Crow (*Corvus* spp. 4/7), Blue Jay (*Cyanocitta cristata* 15/21), Hawk/Raptor (0/9) and other avian species (7/60). Counties (positives) submitting birds are Atlantic, Bergen, Burlington, Cape May, Cumberland, Essex, Gloucester, Hunterdon, Mercer, Middlesex, Monmouth, Morris, Ocean, Salem, Sussex, Union and Warren.

2013 Positive Mosquito pools to date / Total Mosquito Pools Submitted (PHEL)	This time last year (PHEL)
658 / 7803 (0.084)	1004 / 7586 (0.132)
2013 Positive Birds to date / Total Birds Submitted	This time last year
36 / 123 (0.293)	132 / 310 (0.426)

### WNV Results by County through 4 November 2013

County	Species	Pools	Mosquitoes	Positives	MFIR
<b>Atlantic</b>		<b>207</b>	<b>3493</b>	<b>1</b>	<b>0.286</b>
	<i>Aedes albopictus</i>	20	196		
	<i>Aedes canadensis canadensis</i>	5	82		
	<i>Aedes cantator</i>	3	36		
	<i>Aedes grossbecki</i>	1	1		
	<i>Aedes japonicus</i>	9	29		
	<i>Aedes sollicitans</i>	2	23		
	<i>Aedes sticticus</i>	2	3		
	<i>Aedes taeniorhynchus</i>	6	30		
	<i>Aedes triseriatus</i>	6	14		
	<i>Aedes vexans</i>	17	314		
	<i>Anopheles bradleyi</i>	9	43		
	<i>Anopheles crucians</i>	2	50		
	<i>Anopheles punctipennis</i>	5	15		
	<i>Anopheles quadrimaculatus</i>	4	12		
	<i>Coquillettidia perturbans</i>	6	37		
	<i>Culex erraticus</i>	10	115		
	<i>Culex</i> spp.	56	1769	1	0.565
	<i>Culiseta melanura</i>	34	564		
	<i>Psorophora ciliata</i>	1	1		
	<i>Psorophora columbiae</i>	2	2		
	<i>Psorophora ferox</i>	5	146		
	<i>Psorophora howardii</i>	1	10		
	<i>Uranotaenia sapphirina</i>	1	1		
<b>Bergen</b>		<b>185</b>	<b>10833</b>	<b>86</b>	<b>7.939</b>
	<i>Aedes albopictus</i>	1	6		
	<i>Aedes japonicus</i>	5	42		
	<i>Anopheles punctipennis</i>	1	1		
	<i>Culex</i> spp.	178	10784	86	7.975
<b>Burlington</b>		<b>333</b>	<b>10645</b>	<b>25</b>	<b>2.349</b>
	<i>Aedes albopictus</i>	19	271		
	<i>Aedes atlanticus</i>	2	53		
	<i>Aedes canadensis canadensis</i>	7	101		
	<i>Aedes infirmatus</i>	1	1		
	<i>Aedes japonicus</i>	17	95		
	<i>Aedes taeniorhynchus</i>	1	2		

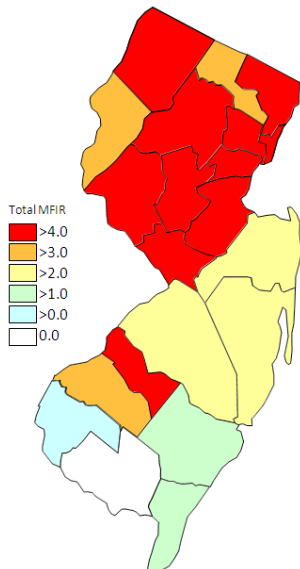


<i>Aedes triseriatus</i>	2	44		
<i>Aedes vexans</i>	3	15		
<i>Anopheles bradleyi</i>	8	182		
<i>Anopheles crucians</i>	2	47		
<i>Anopheles punctipennis</i>	2	3		
<i>Coquillettidia perturbans</i>	5	216		
<i>Culex erraticus</i>	4	6		
<i>Culex pipiens</i>	6	30		
<i>Culex restuans</i>	3	4		
<i>Culex salinarius</i>	9	159		
<i>Culex</i> spp.	93	3332	15	4.502
<i>Culiseta melanura</i>	146	6070	10	1.647
<i>Psorophora ciliata</i>	1	1		
<i>Psorophora columbiae</i>	1	4		
<i>Uranotaenia sapphirina</i>	1	9		
<b>Camden</b>	<b>357</b>	<b>9153</b>	<b>35</b>	<b>3.824</b>
<i>Aedes albopictus</i>	56	569		
<i>Aedes japonicus</i>	50	146	1	6.849
<i>Aedes triseriatus</i>	1	2		
<i>Anopheles punctipennis</i>	1	1		
<i>Anopheles quadrimaculatus</i>	1	1		
<i>Culex erraticus</i>	1	1		
<i>Culex salinarius</i>	1	50		
<i>Culex</i> spp.	208	6807	32	4.701
<i>Culiseta melanura</i>	38	1576	2	1.269
<b>Cape May</b>	<b>1852</b>	<b>18260</b>	<b>39</b>	<b>2.136</b>
<i>Aedes albopictus</i>	177	390	1	2.564
<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>	18	101		
<i>Anopheles punctipennis</i>	1	1		
<i>Anopheles quadrimaculatus</i>	78	1788		
<i>Coquillettidia perturbans</i>	4	8		
<i>Culex erraticus</i>	76	2537		
<i>Culex pipiens</i>	526	6821	30	4.398
<i>Culex restuans</i>	490	3758	3	0.798
<i>Culex salinarius</i>	75	602	1	1.661
<i>Culex</i> spp.	62	209	1	4.785
<i>Culex territans</i>	14	17		
<i>Culiseta melanura</i>	124	1586	3	1.892
<i>Orthopodomyia signifera</i>	4	4		
<i>Psorophora columbiae</i>	5	8		
<i>Psorophora ferox</i>	8	11		
<b>Essex</b>	<b>269</b>	<b>3241</b>	<b>4</b>	<b>1.234</b>
<i>Aedes albopictus</i>	109	717		
<i>Aedes japonicus</i>	65	468		

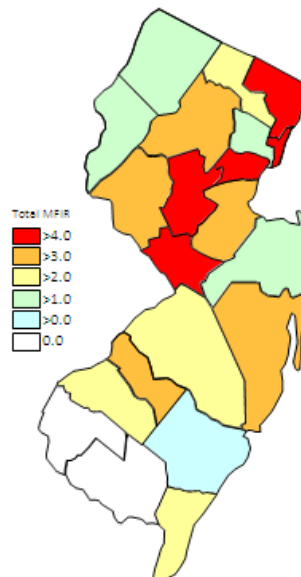
<i>Culex</i> spp.	95	2056	4	1.946
<b>Gloucester</b>	<b>497</b>	<b>17535</b>	<b>52</b>	<b>2.965</b>
<i>Aedes albopictus</i>	26	702		
<i>Aedes japonicus</i>	18	238		
<i>Aedes triseriatus</i>	3	37		
<i>Aedes vexans</i>	6	149		
<i>Anopheles punctipennis</i>	1	2		
<i>Anopheles bradleyi</i>	10	207	1	4.831
<i>Anopheles quadrimaculatus</i>	6	72		
<i>Coquillettidia perturbans</i>	5	76		
<i>Culex pipiens</i>	322	14655	50	3.412
<i>Culiseta melanura</i>	97	1309	1	0.764
<i>Psorophora ferox</i>	3	88		
<b>Hudson</b>	<b>242</b>	<b>11805</b>	<b>63</b>	<b>5.337</b>
<i>Culex</i> spp.	242	11805	63	5.337
<b>Hunterdon</b>	<b>407</b>	<b>16825</b>	<b>58</b>	<b>3.447</b>
<i>Culex</i> spp.	407	16825	58	3.447
<b>Mercer</b>	<b>291</b>	<b>7111</b>	<b>47</b>	<b>6.609</b>
<i>Aedes albopictus</i>	71	615		
<i>Aedes japonicus</i>	21	78	1	12.821
<i>Aedes triseriatus</i>	5	12		
<i>Aedes vexans</i>	5	124		
<i>Culex erraticus</i>	7	16		
<i>Culex pipiens</i>	51	808	7	8.663
<i>Culex restuans</i>	72	2603	20	7.683
<i>Culex salinarius</i>	1	5		
<i>Culex</i> spp.	58	2850	19	6.667
<b>Middlesex</b>	<b>247</b>	<b>7251</b>	<b>27</b>	<b>3.724</b>
<i>Aedes albopictus</i>	14	189		
<i>Aedes japonicus</i>	4	20		
<i>Culex</i> spp.	229	7042	27	3.834
<b>Monmouth</b>	<b>364</b>	<b>4926</b>	<b>9</b>	<b>1.827</b>
<i>Aedes albopictus</i>	64	707		
<i>Aedes atlanticus</i>	3	25		
<i>Aedes canadensis canadensis</i>	17	260		
<i>Aedes cantator</i>	6	20		
<i>Aedes japonicus</i>	33	117		
<i>Aedes sollicitans</i>	1	1		
<i>Aedes taeniorhynchus</i>	1	1		
<i>Aedes triseriatus</i>	18	44		
<i>Aedes trivittatus</i>	6	9		
<i>Aedes vexans</i>	9	23		
<i>Anopheles crucians</i>	1	1		
<i>Anopheles punctipennis</i>	20	63		
<i>Anopheles quadrimaculatus</i>	7	13		
<i>Coquillettidia perturbans</i>	3	7		
<i>Culex erraticus</i>	10	84		
<i>Culex restuans</i>	2	2		
<i>Culex salinarius</i>	1	50		

	<i>Culex</i> spp.	85	1571	3	1.910
	<i>Culiseta melanura</i>	67	1814	6	3.308
	<i>Psorophora columbiae</i>	4	70		
	<i>Psorophora ferox</i>	6	44		
<b>Morris</b>		<b>415</b>	<b>14555</b>	<b>45</b>	<b>3.092</b>
	<i>Culex</i> spp.	415	14555	45	3.092
<b>Ocean</b>		<b>451</b>	<b>4945</b>	<b>16</b>	<b>3.236</b>
	<i>Aedes albopictus</i>	113	1329	1	0.752
	<i>Aedes canadensis canadensis</i>	23	419		
	<i>Aedes cantator</i>	2	33		
	<i>Aedes japonicus</i>	42	134		
	<i>Aedes sollicitans</i>	1	2		
	<i>Aedes triseriatus</i>	6	12		
	<i>Aedes vexans</i>	20	27		
	<i>Anopheles bradleyi</i>	1	1		
	<i>Anopheles crucians</i>	5	19		
	<i>Anopheles punctipennis</i>	5	6		
	<i>Anopheles quadrimaculatus</i>	3	8		
	<i>Coquillettidia perturbans</i>	9	73		
	<i>Culex erraticus</i>	16	64	1	15.625
	<i>Culex restuans</i>	2	2		
	<i>Culex salinarius</i>	6	16		
	<i>Culex</i> spp.	131	2395	12	5.010
	<i>Culiseta melanura</i>	66	405	2	4.938
<b>Passaic</b>		<b>232</b>	<b>7079</b>	<b>18</b>	<b>2.543</b>
	<i>Aedes albopictus</i>	31	147		
	<i>Aedes japonicus</i>	27	202		
	<i>Aedes triseriatus</i>	9	15		
	<i>Aedes trivittatus</i>	2	51		
	<i>Aedes vexans</i>	2	51		
	<i>Anopheles punctipennis</i>	3	5		
	<i>Anopheles quadrimaculatus</i>	2	20		
	<i>Coquillettidia perturbans</i>	1	2		
	<i>Culex</i> spp.	153	6584	18	2.734
	<i>Psorophora ferox</i>	2	2		
<b>Salem</b>		<b>279</b>	<b>4973</b>		
	<i>Aedes albopictus</i>	41	176		
	<i>Aedes japonicus</i>	26	94		
	<i>Aedes sollicitans</i>	2	2		
	<i>Aedes sticticus</i>	1	2		
	<i>Aedes triseriatus</i>	14	38		
	<i>Aedes vexans</i>	1	22		
	<i>Anopheles bradleyi</i>	3	11		
	<i>Anopheles punctipennis</i>	7	24		
	<i>Anopheles quadrimaculatus</i>	18	58		
	<i>Coquillettidia perturbans</i>	5	36		
	<i>Culex erraticus</i>	8	106		
	<i>Culex pipiens</i>	3	3		
	<i>Culex restuans</i>	3	3		
	<i>Culex</i> spp.	99	3413		
	<i>Culiseta melanura</i>	31	827		
	<i>Psorophora ciliata</i>	1	2		

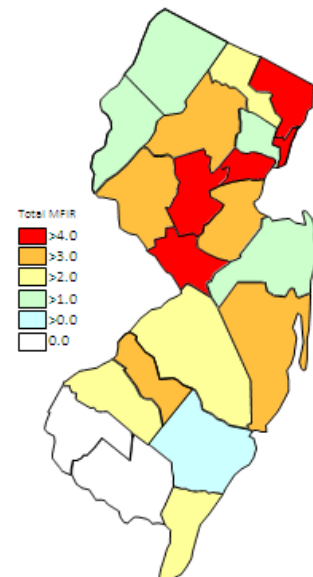
<i>Psorophora columbiae</i>	10	83		
<i>Psorophora ferox</i>	6	73		
<b>Somerset</b>	<b>306</b>	<b>6438</b>	<b>30</b>	<b>4.660</b>
<i>Aedes albopictus</i>	26	144		
<i>Aedes japonicus</i>	18	173		
<i>Aedes triseriatus</i>	6	16		
<i>Aedes vexans</i>	2	16		
<i>Anopheles punctipennis</i>	1	2		
<i>Culex</i> spp.	253	6087	30	4.929
<b>Sussex</b>	<b>279</b>	<b>12005</b>	<b>16</b>	<b>1.333</b>
<i>Aedes japonicus</i>	20	338		
<i>Culex</i> spp.	258	11637	16	1.375
<i>Culiseta melanura</i>	1	30		
<b>Union</b>	<b>257</b>	<b>13652</b>	<b>68</b>	<b>4.981</b>
<i>Aedes albopictus</i>	39	582		
<i>Aedes japonicus</i>	9	137		
<i>Culex</i> spp.	209	12933	68	5.258
<b>Warren</b>	<b>333</b>	<b>13814</b>	<b>19</b>	<b>1.375</b>
<i>Aedes albopictus</i>	22	225	1	4.444
<i>Aedes canadensis canadensis</i>	1	13		
<i>Aedes japonicus</i>	15	45		
<i>Aedes triseriatus</i>	9	42	1	23.810
<i>Aedes trivittatus</i>	1	4		
<i>Aedes vexans</i>	1	5		
<i>Anopheles punctipennis</i>	3	17		
<i>Anopheles quadrimaculatus</i>	1	5		
<i>Culex</i> spp.	280	13458	17	1.263
<b>Grand Total</b>	<b>7803</b>	<b>198539</b>	<b>658</b>	<b>3.314</b>



Cumulative WNV activity in 2012.



WNV activity to 4 November 2013.



WNV activity last week, 2013.

## Saint Louis Encephalitis (SLE) to 4 November 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>62</b>	<b>1627</b>		
	<i>Aedes albopictus</i>	7	85		
	<i>Aedes japonicus</i>	3	16		
	<i>Culex erraticus</i>	1	2		
	<i>Culex pipiens</i>	3	11		
	<i>Culex restuans</i>	1	2		
	<i>Culex</i> spp.	47	1511		
<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>3</b>	<b>128</b>		
	<i>Culex</i> spp.	3	128		
<b>Grand Total</b>		<b>433</b>	<b>6537</b>		

## La Crosse Encephalitis (LAC) through 4 November 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>2</b>	<b>44</b>		
	<i>Aedes triseriatus</i>	2	44		
<b>Cape May</b>		<b>39</b>	<b>65</b>		
	<i>Aedes triseriatus</i>	39	65		
<b>Salem</b>		<b>14</b>	<b>52</b>		
	<i>Aedes triseriatus</i>	14	52		
<b>Grand Total</b>		<b>55</b>	<b>161</b>		