

VECTOR SURVEILLANCE IN NEW JERSEY

EEE, WNV, SLE and LAC

Prepared by Lisa M. Reed, Scott Crans and Mark Robson
 Center for Vector Biology, Rutgers University
 CDC WEEK 38: September 15 – September 21, 2013
 Data Downloaded 1:15 pm 23 September 2013



This New Jersey Agricultural Experiment Station report is supported by Rutgers University, Hatch funds, funding from the NJ State Mosquito Control Commission and with the participation of the Department of Health, Department of Agriculture and of the 21 county mosquito control agencies of New Jersey.

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	0.40	1.40	53 (60)	12 (13)		
Green Bank (Burlington Co.)/25	Coastal	2.13	1.32	452 (480)	17 (18)	3	6.64
Corbin City (Atlantic Co.)/25	Coastal	1.18	0.80	351 (371)	17 (18)	2	5.70
Dennisville (Cape May Co.)/50	Coastal	3.64	0.06	235 (248)*	15 (16)	1	4.26
Winslow (Camden Co.)/50	Inland	0.80	0.36	1624 (1648)	39 (40)	1	0.62
Centerton (Salem Co.)/50	Inland	2.52	0.88	873 (917)	26 (27)		
Turkey Swamp (Monmouth Co.)/44	Inland	0.73	0.07	1469 (1472)	39 (40)	10	6.81
Glassboro (Gloucester Co.)/50	Inland	0.84	0.40	344 (364)	16 (17)		

*Current week (in parentheses) results pending.

Remarks: EEE activity continues with additional positive pools being detected at the traditional resting box sites as well as other county sites. To date, 31 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.

Traditional Resting Box Sites: To date 5401 *Cs. melanura* from 181 pools have been tested from the traditional resting box sites with an additional 8 pools of 148 mosquitoes to be tested. Seventeen pools have been detected positive for an overall MFIR of 3.33 for the traditional resting box sites. New positives were detected at Corbin City and Turkey Swamp.

Additional <i>Cs. melanura</i> trapped by counties *traps with positives indicated in BOLD .				
County	Trap types*	Number collected (pools)	Number of positives pools	MFIR
Atlantic	CO ₂	1 (1)		
Burlington	CO₂	4399 (75)	2	0.45
Cape May	CO ₂ , Gravid, RB	1275 (108)	6	4.71
Gloucester	RB	729 (59)		
Monmouth	CO ₂ , Other	139 (11)	1	7.19
Ocean	CO₂, RB	280 (46)	2	7.14
Salem	CO ₂	32 (6)		
TOTAL		6871 (307)	11	1.60*

Additional *Cs. melanura*:
 Three hundred seven additional pools containing 6871 *Cs. melanura* have been tested from other sites using other traps in addition to resting boxes. A total of 11 positive *Cs. melanura* pools from non-traditional sites have been detected to date, with one new positive pool in Cape May County. 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.

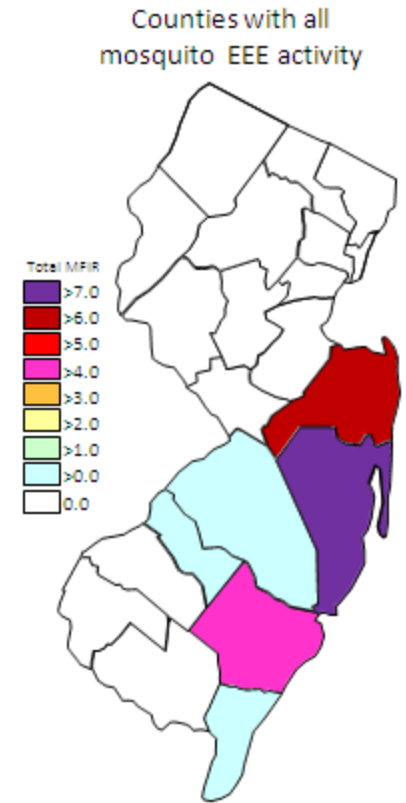
Species other than <i>Cs. melanura</i>	Pools	Mosquitoes	Positives	MFIR
<i>Aedes albopictus</i>	6	12		
<i>Aedes atlanticus</i>	3	75		
<i>Aedes canadensis canadensis</i>	7	101		
<i>Aedes cantator</i>	19	24		
<i>Aedes japonicus</i>	3	4		
<i>Aedes sollicitans</i>	4	19		
<i>Aedes sticticus</i>	2	3		
<i>Aedes taeniorhynchus</i>	1	2		
<i>Aedes triseriatus</i>	4	21		
<i>Aedes vexans</i>	1	32		
<i>Anopheles bradleyi</i>	16	95		
<i>Anopheles crucians</i>	1	10		
<i>Anopheles punctipennis</i>	8	63		
<i>Anopheles quadrimaculatus</i>	3	22		
<i>Coquillettidia perturbans</i>	23	337	1	2.967
<i>Culex erraticus</i>	92	2783	1	0.359
<i>Culex pipiens</i>	360	4766		
<i>Culex restuans</i>	2	2		
<i>Culex salinarius</i>	78	748	1	1.337
<i>Culex</i> spp.	69	473		
<i>Psorophora columbiae</i>	3	7		
State Total	705	9599	3	0.313

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.

Additional Species: The table to the left indicates non-*Cs. melanura* mosquitoes tested for EEE. No new positive pools from other species were detected 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 Monmouth County.

Horses and Humans: Currently there are no reported human cases nor new horse cases. Three presumptive 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.

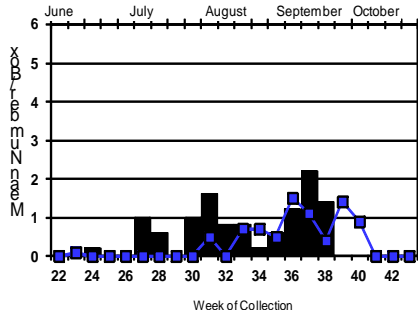
Horses and Vaccinations: The fate of unvaccinated equids reinforces the necessity of maintaining a vaccination schedule for arboviruses. For vaccination schedules recommended by the American Association of Equine Practices, see: http://www.aaep.org/vaccination_guidelines.htm



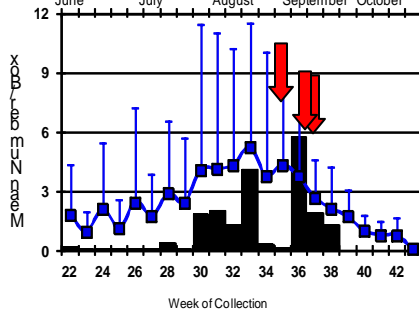
Culiseta melanura Population Graphs

Coastal

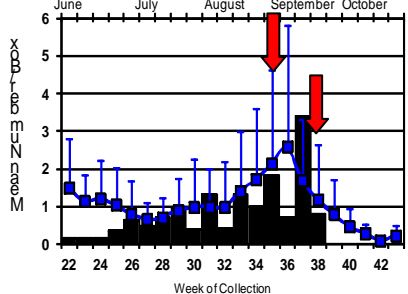
BASS RIVER (Burlington Co.) 2013
Last Year's Values



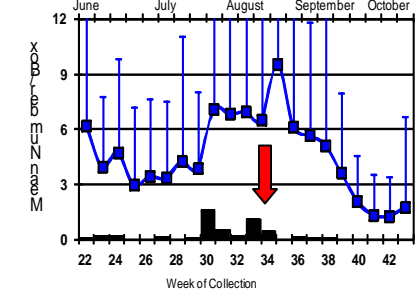
GREEN BANK (Burlington Co.) 2013
22 Year Mean



CORBIN CITY (Atlantic Co.) 2013
28 Year Mean

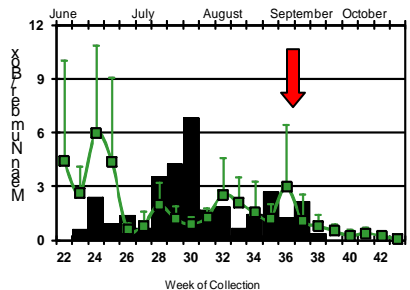


DENNISVILLE (Cape May Co.) 2013
36 Year Mean

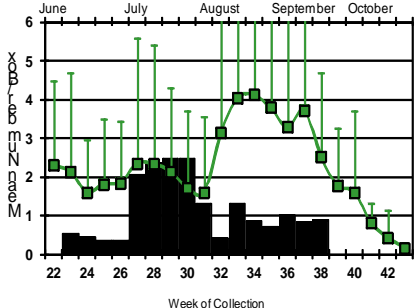


Inland

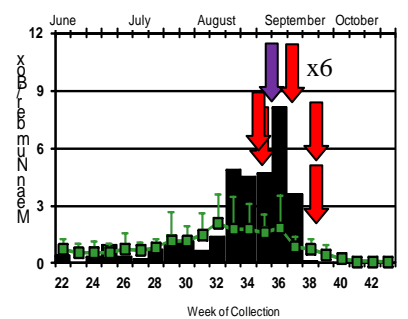
WINSLOW (Camden Co.) 2013
4 Year Mean



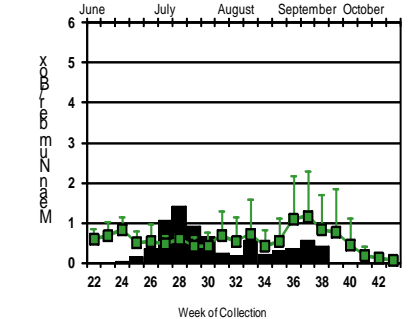
CENTERTON (Salem Co.) 2013
28 Year Mean



TURKEY SWAMP (Monmouth Co.) 2013
10 Year Mean



GLASSBORO (Gloucester Co.) 2013
4 Year Mean



Cs. melanura populations at Bass River continue to be elevated above levels from last year while most other sites decreased from the previous week. The Centerton site showed a mild increase yet remained well below historical averages. Positive pools continue to be detected at the Turkey Swamp and Corbin City 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) 3(AR) 31(FL) 20(GA) 1(KY) 6(LA) 4(MA) 2(ME) 1(MD) 1(MI) 7(MS) 11(NC) 1(NH) 3(NJ) 1(NY) 1(TX) 36(SC) 1(VA) 2(VT)
- mosquito pools: 38(CT) 1(GA) 59(MA) 7(MD) 24(ME) 1(NC) 15(NH) 31(NJ) 42(NY) 4(RI) 98(VA) 22(VT)
- sentinel: 3(AL) 1(DE) 140/4 wild(FL) 1(GA) 1pheasant1emu(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					5
Alaska					
Arizona	0	169/174	4/6	1	23/30
Arkansas				1	4/6
California	1018/1061	2175/2314	330/374	8/9	117/150
Colorado	10/11	439/441		3/6	139/175
Connecticut		76/84			2
Delaware	7		12/13	1/2	2
DC		23			
Florida			78/89	2	1
Georgia	0	64		0	2/4
Hawaii					
Idaho		66		8/9	20/24
Illinois	57/65	1888/2232		4	9/14
Indiana	0	353/412		1	5/11
Iowa		18/30	4/9	5	13/21
Kansas		5/10			5/9
Kentucky				3/4	2
Louisiana		166/171	55/62	1/2	31
Maine		1/2		0	0
Maryland		7/9			8
Mass.		289/323		1	3
Michigan	34/36	10/19		2	11/14
Minnesota	1	48		2	49
Mississippi		42/46		1	30/35
Missouri		4		3/7	3/6

	Birds	Mosquito Pools	Sentinels	Horses	Humans
Montana	1	16/19		17/27	10/19
Nebraska	4	150/182		4	42/53
Nevada	1	42/47			7/8
New Hampshire		10			1
New Jersey	29/30	534/599		0	9
New Mexico		1		3	7
New York		458/525		3/6	7/9
North Carolina					1
North Dakota	6	20/26		1	57/76
Ohio		130		1/2	6/10
Oklahoma		28/36		5	13/21
Oregon	1	82/84	0	2	11
Pennsylvania	21/25	1377/1462		1	7
Rhode Island		5/8			
South Carolina	1			1	1
South Dakota	8	368		2	87/99
Tennessee	1	579/641		0	12
Texas	3	333/354		9	36
Utah		63/64	0	4/6	3/4
Vermont		19/21		1	1
Virginia		98/126	2/6	1	1/2
Washington	0	17/18		0	1
West Virginia		25/26			
Wisconsin	53/57	19/20		0	6/8
Wyoming	5	52		14/17	21/26

* 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 20 September 2013

Species	Pools	Mosquitoes	Positives	MFIR
<i>Aedes albopictus</i>	697	5892	2	0.339
<i>Aedes atlanticus</i>	6	80		
<i>Aedes atropalpus</i>	4	7		
<i>Aedes canadensis canadensis</i>	49	842		
<i>Aedes cantator</i>	31	114		
<i>Aedes grossbecki</i>	1	1		
<i>Aedes japonicus</i>	356	2092	2	0.956
<i>Aedes sollicitans</i>	10	47		
<i>Aedes sticticus</i>	3	5		
<i>Aedes taeniorhynchus</i>	14	123		
<i>Aedes triseriatus</i>	103	270	1	3.704
<i>Aedes trivittatus</i>	8	60		
<i>Aedes vexans</i>	70	705		
<i>Anopheles bradleyi</i>	25	133		
<i>Anopheles crucians</i>	4	102		
<i>Anopheles punctipennis</i>	41	249	1	4.016
<i>Anopheles quadrimaculatus</i>	95	1869		
<i>Coquillettidia perturbans</i>	36	452		
<i>Culex erraticus</i>	96	2789		
<i>Culex pipiens</i>	782	20099	69	3.433
<i>Culex restuans</i>	538	6268	23	3.669
<i>Culex salinarius</i>	82	766		
<i>Culex spp.</i>	3041	127671	481	3.767
<i>Culex territans</i>	14	17		
<i>Culiseta melanura</i>	490	11935	20	1.676
<i>Orthopodomyia signifera</i>	4	4		
<i>Psorophora ciliata</i>	3	4		
<i>Psorophora columbiae</i>	22	167		
<i>Psorophora ferox</i>	29	363		
<i>Psorophora howardii</i>	1	10		
<i>Uranotaenia sapphirina</i>	1	1		
State Total	6656	183137	599	3.271

Remarks: To date, 6656 pools of 183137 mosquitoes from 30 species have been tested, with 599 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*, *Anopheles punctipennis*, and, most recently, *Aedes triseriatus* in Warren County.

Humans, Horses and Wild Birds: To date, eleven 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 (5), 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. No horse or other livestock have been reported positive in 2013 to date.

Bird testing began in mid-April. Thirty positive birds have been reported, mostly corvids. First American Crow positive has been detected. To date, 113 birds have been tested. Testing includes: American Crow (*Corvus brachyrhynchos* 1/6), Fish Crow (*C. ossifragus* 6/17), unidentified Crow (*Corvus* spp. 3/5), 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.

2013 Positive Mosquito pools to date / Total Mosquito Pools Submitted (PHEL)	This time last year (PHEL)
599 / 6656 (0.090)	966 / 6713 (0.144)
2013 Positive Birds to date / Total Birds Submitted	This time last year
30 / 113 (0.265)	120 / 275 (0.436)

WNV Results by County through 20 September 2013

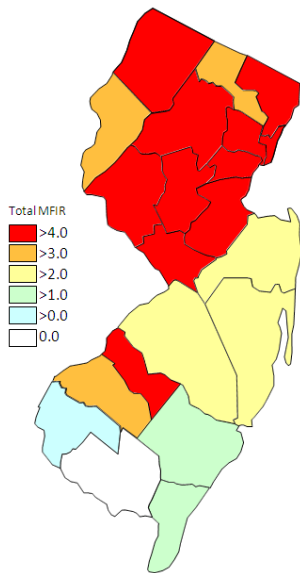
County	Species	Pools	Mosquitoes	Positives	MFIR
Atlantic		170	3125	1	0.320
	<i>Aedes albopictus</i>	16	157		
	<i>Aedes canadensis canadensis</i>	4	81		
	<i>Aedes cantator</i>	3	36		
	<i>Aedes grossbecki</i>	1	1		
	<i>Aedes japonicus</i>	8	28		
	<i>Aedes sollicitans</i>	2	23		
	<i>Aedes sticticus</i>	2	3		
	<i>Aedes taeniorhynchus</i>	6	30		
	<i>Aedes triseriatus</i>	6	14		
	<i>Aedes vexans</i>	14	290		
	<i>Anopheles bradleyi</i>	7	30		
	<i>Anopheles crucians</i>	1	47		
	<i>Anopheles punctipennis</i>	3	13		
	<i>Anopheles quadrimaculatus</i>	3	11		
	<i>Coquillettidia perturbans</i>	6	37		
	<i>Culex erraticus</i>	7	107		
	<i>Culex spp.</i>	47	1663	1	0.601
	<i>Culiseta melanura</i>	25	395		
	<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		
Bergen		184	10778	85	7.886
	<i>Aedes albopictus</i>	1	6		
	<i>Aedes japonicus</i>	5	42		
	<i>Anopheles punctipennis</i>	1	1		
	<i>Culex spp.</i>	177	10729	85	7.922
Burlington		226	8564	20	2.335
	<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>	104	4904	7	1.427
<i>Psorophora ciliata</i>	1	1		
<i>Psorophora columbiae</i>	1	4		
Camden	252	7530	32	4.250
<i>Aedes albopictus</i>	36	180		
<i>Aedes japonicus</i>	32	99	1	10.101
<i>Anopheles punctipennis</i>	1	1		
<i>Culex</i> spp.	148	5824	29	4.979
<i>Culiseta melanura</i>	34	1426	2	1.403
Cape May	1766	17379	24	1.381
<i>Aedes albopictus</i>	173	375		
<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>	71	1742		
<i>Coquillettidia perturbans</i>	4	8		
<i>Culex erraticus</i>	72	2511		
<i>Culex pipiens</i>	475	6258	18	2.876
<i>Culex restuans</i>	468	3677	3	0.816
<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>	119	1448	2	1.381
<i>Orthopodomyia signifera</i>	4	4		
<i>Psorophora columbiae</i>	5	8		
<i>Psorophora ferox</i>	8	11		
Essex	198	2939	4	1.361
<i>Aedes albopictus</i>	81	558		
<i>Aedes japonicus</i>	48	436		
<i>Culex</i> spp.	69	1945	4	2.057
Gloucester	403	15518	47	3.029
<i>Aedes albopictus</i>	18	572		
<i>Aedes japonicus</i>	16	226		
<i>Aedes triseriatus</i>	2	33		
<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>	4	74		
<i>Culex pipiens</i>	267	13105	45	3.434

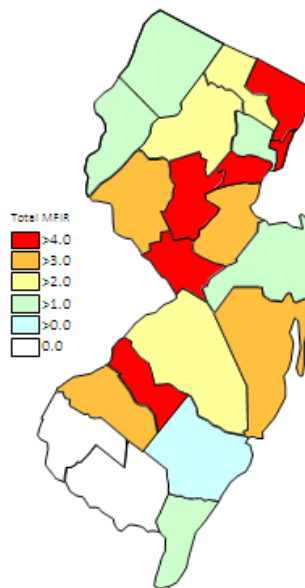
<i>Culiseta melanura</i>	78	1078	1	0.928
<i>Psorophora ferox</i>	3	88		
Hudson	186	9785	59	6.030
<i>Culex</i> spp.	186	9785	59	6.030
Hunterdon	298	14306	46	3.215
<i>Culex</i> spp.	298	14306	46	3.215
Mercer	240	6930	46	6.638
<i>Aedes albopictus</i>	61	590		
<i>Aedes japonicus</i>	12	50	1	20.000
<i>Aedes triseriatus</i>	2	4		
<i>Aedes vexans</i>	5	124		
<i>Culex erraticus</i>	1	3		
<i>Culex pipiens</i>	35	718	6	8.357
<i>Culex restuans</i>	65	2586	20	7.734
<i>Culex salinarius</i>	1	5		
<i>Culex</i> spp.	58	2850	19	6.667
Middlesex	247	7251	27	3.724
<i>Aedes albopictus</i>	14	189		
<i>Aedes japonicus</i>	4	20		
<i>Culex</i> spp.	229	7042	27	3.834
Monmouth	303	4509	9	1.996
<i>Aedes albopictus</i>	54	664		
<i>Aedes atlanticus</i>	3	25		
<i>Aedes canadensis canadensis</i>	17	260		
<i>Aedes cantator</i>	6	20		
<i>Aedes japonicus</i>	25	95		
<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>	16	39		
<i>Anopheles quadrimaculatus</i>	2	3		
<i>Coquillettidia perturbans</i>	3	7		
<i>Culex erraticus</i>	5	59		
<i>Culex restuans</i>	2	2		
<i>Culex salinarius</i>	1	50		
<i>Culex</i> spp.	76	1539	3	1.949
<i>Culiseta melanura</i>	53	1560	6	3.846
<i>Psorophora columbiae</i>	4	70		
<i>Psorophora ferox</i>	6	44		
Morris	355	14212	42	2.955
<i>Culex</i> spp.	355	14212	42	2.955
Ocean	345	4505	14	3.108
<i>Aedes albopictus</i>	95	1233	1	0.811
<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>	6	12		
	<i>Aedes vexans</i>	15	22		
	<i>Anopheles crucians</i>	1	8		
	<i>Anopheles punctipennis</i>	2	3		
	<i>Anopheles quadrimaculatus</i>	1	6		
	<i>Coquillettidia perturbans</i>	8	72		
	<i>Culex erraticus</i>	4	10		
	<i>Culex salinarius</i>	3	13		
	<i>Culex</i> spp.	110	2294	11	4.795
	<i>Culiseta melanura</i>	46	280	2	7.143
Passaic		189	6379	14	2.195
	<i>Aedes albopictus</i>	21	84		
	<i>Aedes japonicus</i>	18	168		
	<i>Aedes triseriatus</i>	8	13		
	<i>Aedes trivittatus</i>	2	51		
	<i>Aedes vexans</i>	2	51		
	<i>Anopheles punctipennis</i>	2	4		
	<i>Anopheles quadrimaculatus</i>	2	20		
	<i>Coquillettidia perturbans</i>	1	2		
	<i>Culex</i> spp.	131	5984	14	2.340
	<i>Psorophora ferox</i>	2	2		
Salem		242	4535		
	<i>Aedes albopictus</i>	37	171		
	<i>Aedes japonicus</i>	24	91		
	<i>Aedes sollicitans</i>	2	2		
	<i>Aedes sticticus</i>	1	2		
	<i>Aedes triseriatus</i>	14	38		
	<i>Anopheles bradleyi</i>	2	8		
	<i>Anopheles punctipennis</i>	5	18		
	<i>Anopheles quadrimaculatus</i>	11	31		
	<i>Coquillettidia perturbans</i>	5	36		
	<i>Culex erraticus</i>	5	95		
	<i>Culex pipiens</i>	3	3		
	<i>Culex restuans</i>	2	2		
	<i>Culex</i> spp.	85	3066		
	<i>Culiseta melanura</i>	29	814		
	<i>Psorophora ciliata</i>	1	2		
	<i>Psorophora columbiae</i>	10	83		
	<i>Psorophora ferox</i>	6	73		
Somerset		255	5941	26	4.376
	<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.	206	5606	26	4.638
Sussex		264	11766	16	1.360
	<i>Aedes japonicus</i>	7	184		
	<i>Culex</i> spp.	256	11552	16	1.385
	<i>Culiseta melanura</i>	1	30		

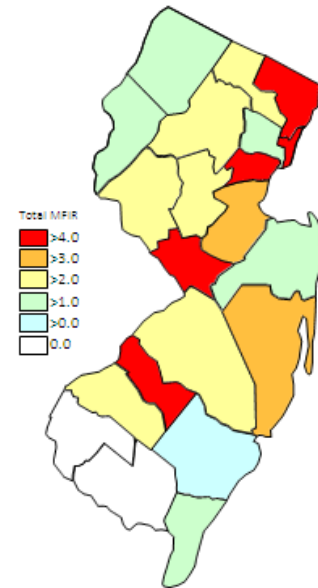
Union		257	13652	68	4.981
	<i>Aedes albopictus</i>	39	582		
	<i>Aedes japonicus</i>	9	137		
	<i>Culex</i> spp.	209	12933	68	5.258
Warren		287	13533	19	1.404
	<i>Aedes albopictus</i>	12	189	1	5.291
	<i>Aedes canadensis canadensis</i>	1	13		
	<i>Aedes japonicus</i>	3	10		
	<i>Aedes triseriatus</i>	1	16	1	62.500
	<i>Anopheles punctipennis</i>	3	17		
	<i>Anopheles quadrimaculatus</i>	1	5		
	<i>Culex</i> spp.	266	13283	17	1.280
Grand Total		6656	183137	599	3.271



Cumulative WNV activity in 2012.



WNV activity to 20 September 2013.



WNV activity last week, 2013.

Saint Louis Encephalitis (SLE) to 20 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. Note: Last week's report of Salem County's results should have been in the LAC table.

County	Species	Pools	Mosquitoes	Positives	MFIR
Burlington		39	1231		
	<i>Aedes albopictus</i>	5	81		
	<i>Aedes japonicus</i>	2	13		
	<i>Culex erraticus</i>	1	2		

	<i>Culex pipiens</i>	31	1135		
Cape May		368	4782		
	<i>Culex pipiens</i>	356	4748		
	<i>Culex</i> spp.	12	34		
Grand Total		407	6013		

La Crosse Encephalitis (LAC) through 20 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
Burlington		1	17		
	<i>Aedes triseriatus</i>	1	17		
Cape May		39	65		
	<i>Aedes triseriatus</i>	39	65		
Salem		12	36		
	<i>Aedes triseriatus</i>	12	36		
Grand Total		52	118		