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 43: October 23 to October 29, 2011

Data Downloaded 12:11 pm 31 October 2011

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 and Senior Services, Department of Agriculture and of the 21 county mosquito control agencies of New Jersey.

Culiseta melanura and Eastern Equine Encephalitis

SITE	Inland / Coastal	Historic Mean	Current Weekly Mean	Total Tested to Date*	Total Pools Submitted /Tested†	EEE Isolations	MFIR
Green Bank (Burlington County)	Coastal	0.09	0	118	18	0	
Corbin City (Atlantic County)	Coastal	0.3	No collection	180	18	0	
Dennisville (Cape May County)	Coastal	0	0	229	20	0	
Winslow (Camden County)	Inland	0.09	0.06	503††	23	0	
Centerton (Salem County)	Inland	0.46	0.30	987††	30	0	
Turkey Swamp (Monmouth County)	Inland	0.07	No collection	368	37	0	
Glassboro (Gloucester County)	Inland	0.08	0.04	482††	21	0	

*Including trial run last week in May. †† Adjusted for testing of past two week to be done.

Remarks: The traditional resting box sites for the collection of *Culiseta melanura*, the primary enzootic vector, continue to show no detectable EEE activity. Total number of *Culiseta melanura* tested to date is 2757 mosquitoes from 163 pools. Samples from the past two weeks will be analyzed soon.

Four hundred additional pools containing 3,963 *Cs. melanura* have tested negative from other county trapping sites using other traps in addition to resting boxes. No detection of EEE has occurred.

Additional *Cs. melanura* trapped by counties *traps with positives indicated in **BOLD**.				
County	**Trap types***	**Number collected (pools)**	**Number of positives pools**	**MFIR**
Burlington	CO2, Gravid	2233 (87)	0	
Cape May	CO2, Gravid, RB	435 (96)	0	
Cumberland	CO2, Gravid, RB	320 (38)	0	
Gloucester	RB	802 (127)	0	
Monmouth	CO2, Gravid	11 (2)		
Ocean	CO2, Gravid, RB	120 (41)	0	
Salem	BA, Gravid	28 (8)	0	
Sussex	CO2	14 (1)	0	
TOTAL		**3963 (400)**	**0**	

Horses and Humans: One positive 3 yo stallion in Gloucester County with no vaccination or travel history was euthanized after onset of symptoms (19 October) from EEE. At this time, with the samples analyzed to date, there has been no detection of EEE in mosquito samples from either the enzootic vector or potential bridge vectors.

There are no reported human cases.

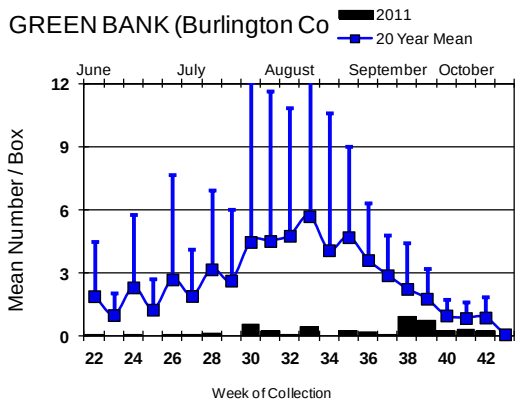
Horses and Vaccinations: The fate of unvaccinated equids reinforces the necessity of maintaining a vaccination schedule for arboviruses. For vaccination schedules recommended by the American Association of Equine Practices, see: http://www.aaep.org/vaccination_guidelines.htm

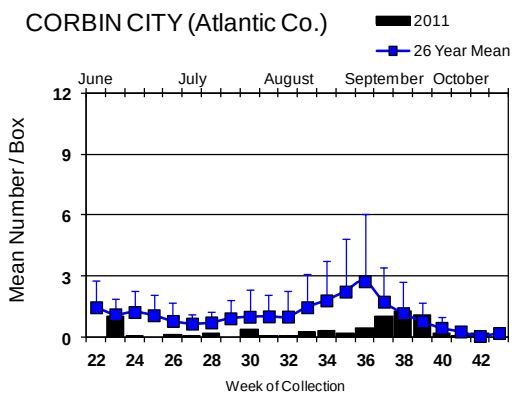
Species other than *Cs. melanura*	Pools	Mosquitoes	Positives	MFIR
Aedes albopictus	57	488		
Aedes atlanticus	6	60		
Aedes atropalpus	3	4		
Aedes canadensis canadensis	48	1998		
Aedes cantator	51	249		
Aedes grossbecki	1	3		
Aedes japonicus	27	98		
Aedes mitchellae	2	29		
Aedes sollicitans	38	238		
Aedes sticticus	2	30		
Aedes taeniorhynchus	22	411		
Aedes thibaulti	1	1		
Aedes triseriatus	18	96		
Aedes trivittatus	1	7		
Aedes vexans	24	841		
Anopheles barberi	2	2		
Anopheles bradleyi	94	1056		
Anopheles crucians	7	75		
Anopheles punctipennis	46	375		
Anopheles quadrimaculatus	38	310		
Coquillettidia perturbans	87	1357		
Culex erraticus	218	9252		
Culex pipiens	515	4033		
Culex restuans	42	108		
Culex salinarius	190	1220		
Culex spp.	373	12303		
Culex territans	4	24		
Psorophora ciliata	1	35		
Psorophora columbiae	7	148		
Psorophora ferox	9	119		
Psorophora howardii	4	35		
Uranotaenia sapphirina	3	81		
State Total	**1941**	**35,086**		

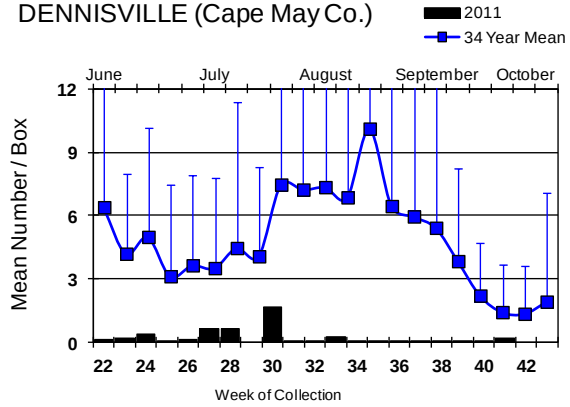
The table to the left indicates non-*Cs. melanura* mosquitoes tested for EEE. An additional 31 species of mosquitoes have been tested with no detection of EEE.

Culiseta melanura Population Graphs

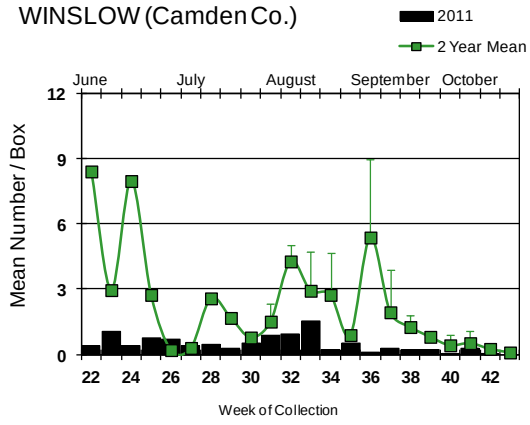
Coastal

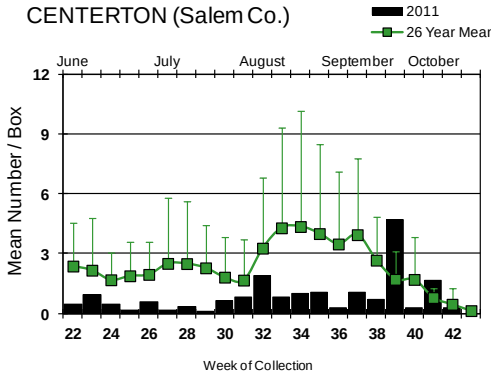


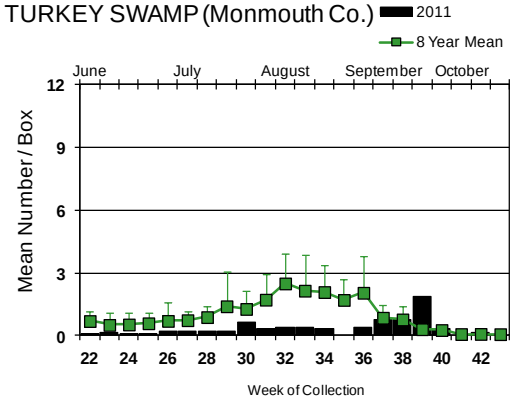




Inland



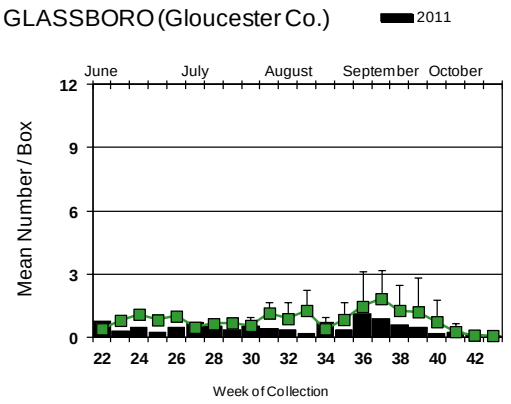




With populations decreasing, sites at Corbin City and Turkey Swamp are no longer being collected for the season. *Cs. melanura* populations continue to be below historical values at the remaining sites.

= Positive pool(s) detected.

Note: Both Winslow and Glassboro have single point historical data (the previous year) for weeks 22 to 29.



EEE in US (2011 cumulative cases): (Black or Red = previous + new reported cases occurring)

- equine: 4(FL) 3(LA) 3(MI) 1(MS) 1(NJ) 12(NY) 2(NC) 1(VT-emu) 34(WI-2 alpaca)
- mosquito pools: 3(CT) 2(LA) 80(MA) 1(MI) 40(NY) 1(NC)
- sentinel: 26 chickens/19 wild bird (FL) 3(NC) 9(VA)
- human: 2(MA, 1 visitor from MO) 1(NY)

West Nile Virus

West Nile in US (2011 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			1		3
Alaska					
Arizona	0	140	17	6/8	39
Arkansas					1
California	656/664	2030/2060	332/351	14	122/129
Colorado	0	59		0	7
Connecticut		163		1	9
Delaware	16		8	1	1
DC	5	31			1
Florida	1 flavi		125	3	25
Georgia	1	374/392		2	9
Hawaii					
Idaho		2/3			1
Illinois	21	1055/1065	0	0	28/29
Indiana	1	191		3	9
Iowa		3	14	2	9
Kansas					4
Kentucky		2/4		1	3
Louisiana		251	3		10
Maine		0		0	0
Maryland	6/7	14/15		2	19
Mass.		275		1	5
Michigan	14	22	0	1	33
Minnesota	4	3/5		1	2
Mississippi		31		1	48
Missouri		119		0	7

	Birds	Mosquito Pools	Sentinels	Horses	Humans
Montana					1
Nebraska	2	53		1	26
Nevada	2	20		1	16
New Hampshire		9		0	0
New Jersey	34/41	528/530		1	5
New Mexico				2	4
New York		452		3*	40/42
North Carolina					2
North Dakota	0	0		7*	4
Ohio		586		4	20
Oklahoma		1			
Oregon	0	3	0	2	0
Pennsylvania	48	1490		10*	5
Rhode Island		2		0	1
South Carolina	0	5/6		0	0
South Dakota		2/4		1	1/2
Tennessee	0	939		3	16
Texas	12	663		4	20
Utah		23/24	0	1	3
Vermont	14/16	3		0	2
Virginia		47		1	8
Washington	0	5		0	0
West Virginia	0	18/27		0	1
Wisconsin	16	0		3	2
Wyoming		10		0	3

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

Protocol: New Jersey Department of Health and Senior Services (NJDHSS Public Health and Environmental Laboratories, PHEL) and the Cape May County Division of Mosquito Control tests mosquito pools using RT-PCR Taqman techniques.

Mosquito Species Submitted for West Nile Virus Testing through 21 Oct. 2011

Species	Pools	Mosquitoes	Positives	MFIR
Aedes albopictus	1193	7866	6	0.763
Aedes atlanticus	18	140		
Aedes atropalpus	3	4		
Aedes aurifer	1	2		
Aedes canadensis canadensis	196	5407		
Aedes cantator	81	426		
Aedes cinereus	3	5		
Aedes grossbecki	3	8		
Aedes japonicus	658	3831	3	0.783
Aedes mitchellae	2	29		
Aedes sollicitans	61	373		
Aedes sticticus	8	88		
Aedes stimulans	5	47		
Aedes taeniorhynchus	70	1187		
Aedes thibaulti	1	1		
Aedes triseriatus	343	759		
Aedes trivittatus	50	479		
Aedes vexans	230	2383		
Anopheles barberi	7	7		
Anopheles bradleyi	122	1577	1	0.634
Anopheles crucians	8	77		
Anopheles punctipennis	122	549		
Anopheles quadrimaculatus	162	889		
Anopheles walkeri	2	14		
Coquillettidia perturbans	128	1700		
Culex erraticus	247	9942		
Culex pipiens	1139	18488	80	4.327
Culex restuans	734	3889	11	2.828
Culex salinarius	221	2423	1	0.413
Culex spp.	3208	117698	415	3.526
Culex territans	6	26		
Culiseta inornata	2	3		
Culiseta melanura	581	6783	12	1.769
Orthopodomyia signifera	6	6		
Psorophora ciliata	6	63		
Psorophora columbiae	23	253		
Psorophora ferox	82	1230	1	0.813
Psorophora howardii	6	42		
Uranotaenia sapphirina	11	118		
State Total	**9,759**	**188,812**	**530**	**2.807**

Remarks: To date, there have been 188,812 mosquitoes tested in 9,759 pools from 38 species. Currently, 530 positive pools have been detected as of last week in *Culex pipiens, Cx. restuans, Cx. salinarius*, Mixed *Culex, Culiseta melanura*, *Aedes albopictus*, *Aedes japonicus, Anopheles bradleyi* and *Psorophora ferox*. Dates for all positive samples were collected between 28 June and 14 October. Last sample analyzed was collected on 21 October.

Humans, Horses and Wild Birds: There have been five human cases reported by the Department of Health and Senior Services. These include one case each in Mercer (probable), Middlesex (confirmed), Morris (probable), Ocean and Union (probable) counties. See http://www.state.nj.us/health/cd/westnile/techinfo.shtml

One positive horse has been reported, with date of onset 10 October, from Monmouth County. The 11 year old mare was not vaccinated.

Bird testing began in mid-April. WNV has been detected in 42 birds from the 121 birds that have been tested. Species include American Crow *Corvus brachyrhynchos* (15/18), Blue Jays *Cyanocitta cristata* (8/15), Fish Crows *Corvus ossifragus* (8/25) unknown Corvus (7/11), Hawk/raptor (0/4) and Other (non-corvid) species (4/46). Positive birds were from Atlantic, Burlington, Gloucester, Mercer, Monmouth, Morris, Ocean, Somerset, Sussex, Union and Warren counties. Counties submitting birds are Atlantic, Burlington, Cape May, Cumberland, Gloucester, Mercer, Monmouth, Morris, Ocean, Salem, Somerset, Sussex, Union and Warren. County participation in submitting dead birds varies across the state.

2011 Positive Mosquito pools to date / Total Mosquito Pools Submitted	This time last year
530 / 9,759 (0.054)	836 / 5,716 (0.146)
2011 Positive Birds to date / Total Birds Submitted	**This time last year**
42/ 121 (0.347)	129 / 240 (0.540)

WNV Results by County through 21 October 2011

County	Species	Pools	Mosquitoes	Positives	MFIR
Atlantic		**236**	**6211**	**4**	**0.644**
	Aedes albopictus	22	540		
	Aedes canadensis canadensis	8	194		
	Aedes cantator	5	40		
	Aedes japonicus	7	24		
	Aedes sticticus	5	48		
	Aedes sollicitans	1	6		
	Aedes taeniorhynchus	8	123		
	Aedes thibaulti	1	1		
	Aedes triseriatus	8	17		
	Aedes trivittatus	2	10		
	Aedes vexans	20	324		
	Anopheles bradleyi	7	50		
	Anopheles punctipennis	4	4		
	Anopheles quadrimaculatus	1	2		
	Coquillettidia perturbans	5	63		
	Culex erraticus	8	192		
	Culex restuans	1	1		
	Culex spp.	87	3838	3	0.782
	Culiseta melanura	20	211		
	Orthopodomyia signifera	1	1		
	Psorophora columbiae	1	2		
	Psorophora ferox	12	513	1	1.949
	Psorophora howardii	2	7		
Bergen		**200**	**13401**	**108**	**8.059**
	Aedes albopictus	5	15		
	Aedes japonicus	11	65	1	15.385
	Aedes triseriatus	1	1		
	Aedes vexans	5	140		
	Anopheles punctipennis	2	5		
	Culex spp.	176	13175	107	8.121

Burlington		**691**	**21129**	**35**	**1.656**
	Aedes albopictus	39	449		
	Aedes atlanticus	6	60		
	Aedes atropalpus	3	4		
	Aedes canadensis canadensis	44	1986		
	Aedes cantator	3	72		
	Aedes grossbecki	1	3		
	Aedes japonicus	16	76		
	Aedes mitchellae	2	29		
	Aedes sollicitans	8	130		
	Aedes sticticus	2	30		
	Aedes taeniorhynchus	9	69		
	Aedes triseriatus	14	91		
	Aedes trivittatus	1	7		
	Aedes vexans	22	839		
	Anopheles bradleyi	13	448	1	2.232
	Anopheles crucians	7	75		
	Anopheles punctipennis	10	40		
	Anopheles quadrimaculatus	1	5		
	Coquillettidia perturbans	29	805		
	Culex erraticus	12	533		
	Culex pipiens	19	312	2	6.410
	Culex restuans	12	57		
	Culex salinarius	24	309		
	Culex spp.	264	11910	27	2.267
	Culex territans	3	23		
	Culiseta melanura	105	2351	5	2.127
	Psorophora ciliata	1	35		
	Psorophora columbiae	7	148		
	Psorophora ferox	7	117		
	Psorophora howardii	4	35		
	Uranotaenia sapphirina	3	81		
Camden		**272**	**6491**	**19**	**2.927**
	Aedes albopictus	53	313		
	Aedes japonicus	32	72		
	Aedes triseriatus	4	8		
	Aedes vexans	1	1		
	Anopheles punctipennis	3	3		
	Anopheles quadrimaculatus	1	2		
	Culex erraticus	2	7		
	Culex pipiens	3	135		
	Culex spp.	152	5468	18	3.292
	Culiseta melanura	21	482	1	2.075
Cape May		**2957**	**24006**	**3**	**0.125**
	Aedes albopictus	442	1062		
	Aedes canadensis canadensis	31	513		
	Aedes cantator	47	152		
	Aedes japonicus	118	197		
	Aedes sollicitans	27	103		
	Aedes taeniorhynchus	35	513		
	Aedes triseriatus	144	213		
	Aedes trivittatus	1	1		
	Aedes vexans	34	73		

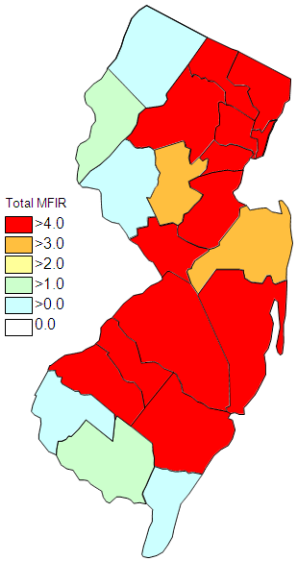
	Anopheles bradleyi	85	646		
	Anopheles punctipennis	13	15		
	Anopheles quadrimaculatus	85	402		
	Coquillettidia perturbans	26	324		
	Culex erraticus	183	8520		
	Culex pipiens	647	6176	1	0.162
	Culex restuans	626	3035	1	0.329
	Culex salinarius	169	914	1	1.094
	Culex spp.	119	468		
	Culiseta melanura	118	667		
	Orthopodomyia signifera	5	5		
	Psorophora ferox	1	6		
	Uranotaenia sapphirina	1	1		
Cumberland		**254**	**3996**		
	Aedes albopictus	27	95		
	Aedes atlanticus	3	17		
	Aedes canadensis canadensis	13	147		
	Aedes cantator	3	81		
	Aedes japonicus	11	41		
	Aedes sollicitans	4	24		
	Aedes taeniorhynchus	6	337		
	Aedes triseriatus	14	26		
	Aedes vexans	14	99		
	Anopheles bradleyi	7	416		
	Anopheles punctipennis	6	13		
	Anopheles quadrimaculatus	5	13		
	Coquillettidia perturbans	13	144		
	Culex erraticus	13	72		
	Culex pipiens	8	25		
	Culex restuans	4	17		
	Culex salinarius	17	1160		
	Culex spp.	40	890		
	Culex territans	2	2		
	Culiseta melanura	38	320		
	Psorophora ciliata	1	8		
	Psorophora columbiae	1	23		
	Psorophora ferox	4	26		
Essex		**550**	**7837**	**16**	**2.042**
	Aedes albopictus	112	516	1	1.938
	Aedes canadensis canadensis	2	8		
	Aedes grossbecki	2	5		
	Aedes japonicus	86	711	1	1.406
	Aedes sticticus	1	21		
	Aedes stimulans	4	46		
	Aedes triseriatus	43	110		
	Aedes vexans	31	127		
	Anopheles punctipennis	4	5		
	Culex spp.	261	6269	14	2.233
	Psorophora ferox	4	19		
Gloucester		**679**	**12485**	**48**	**3.845**
	Aedes albopictus	82	1098	3	2.732
	Aedes canadensis canadensis	2	23		
	Aedes japonicus	24	174		

	Aedes triseriatus	7	19		
	Aedes vexans	19	334		
	Anopheles punctipennis	22	306		
	Anopheles quadrimaculatus	34	313		
	Coquillettidia perturbans	14	79		
	Culex pipiens	312	8701	43	4.942
	Culiseta melanura	150	1282	2	1.560
	Psorophora ciliata	1	8		
	Psorophora ferox	12	148		
Hudson		**214**	**11230**	**37**	**3.295**
	Culex spp.	214	11230	37	3.295
Hunterdon		**250**	**11462**	**39**	**3.403**
	Culex spp.	250	11462	39	3.43
Mercer		**369**	**4702**	**44**	**9.385**
	Aedes albopictus	109	818	1	1.222
	Aedes japonicus	56	168		
	Aedes triseriatus	12	30		
	Aedes vexans	5	13		
	Culex erraticus	3	7		
	Culex pipiens	133	2997	33	11.011
	Culex restuans	45	655	10	15.267
	Culex salinarius	3	7		
	Culex spp.	1	2		
	Psorophora ciliata	1	4		
	Psorophora ferox	1	1		
Middlesex		**246**	**8693**	**55**	**6.327**
	Aedes albopictus	19	160		
	Aedes japonicus	24	248		
	Aedes triseriatus	1	5		
	Culex spp.	202	8280	55	6.643
Monmouth		**495**	**4262**	**7**	**1.642**
	Aedes albopictus	67	339		
	Aedes atlanticus	1	2		
	Aedes canadensis canadensis	30	430		
	Aedes cantator	10	33		
	Aedes japonicus	52	163		
	Aedes sollicitans	10	34		
	Aedes taeniorhynchus	10	141		
	Aedes triseriatus	32	80		
	Aedes trivittatus	18	113		
	Aedes vexans	18	48		
	Anopheles barberi	5	5		
	Anopheles crucians	1	2		
	Anopheles punctipennis	16	54		
	Anopheles quadrimaculatus	5	7		
	Coquillettidia perturbans	6	29		
	Culex erraticus	3	5		
	Culex pipiens	3	17		
	Culex restuans	6	22		
	Culex salinarius	1	16		

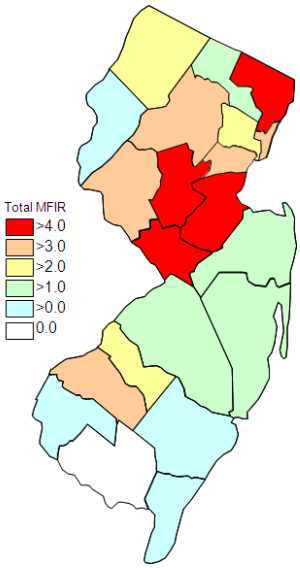
	Culex spp.	138	2239	7	3.126
	Culex territans	1	1		
	Culiseta melanura	45	385		
	Psorophora ciliata	1	1		
	Psorophora columbiae	3	17		
	Psorophora ferox	12	78		
	Uranotaenia sapphirina	1	1		
Morris		**230**	**7695**	**25**	**3.249**
	Aedes albopictus	2	14		
	Aedes japonicus	12	187		
	Coquillettidia perturbans	2	65		
	Culex spp.	214	7429	25	3.365
Ocean		**524**	**6282**	**10**	**1.592**
	Aedes albopictus	99	1563		
	Aedes atlanticus	8	61		
	Aedes canadensis canadensis	57	2066		
	Aedes cantator	10	42		
	Aedes japonicus	45	94		
	Aedes sollicitans	4	29		
	Aedes sticticus	1	1		
	Aedes taeniorhynchus	2	4		
	Aedes triseriatus	20	32		
	Aedes trivittatus	12	58		
	Aedes vexans	26	107		
	Anopheles bradleyi	7	14		
	Anopheles punctipennis	17	36		
	Anopheles quadrimaculatus	5	6		
	Coquillettidia perturbans	20	105		
	Culex erraticus	2	2		
	Culex restuans	13	17		
	Culex salinarius	7	17		
	Culex spp.	105	1697	8	4.714
	Culiseta melanura	37	94	2	21.277
	Psorophora ciliata	1	7		
	Psorophora columbiae	2	2		
	Psorophora ferox	22	226		
	Uranotaenia sapphirina	2	2		
Passaic		**124**	**2244**	**4**	**1.783**
	Aedes albopictus	15	132		
	Aedes canadensis canadensis	3	10		
	Aedes japonicus	22	186		
	Aedes triseriatus	8	29		
	Aedes trivittatus	4	32		
	Aedes vexans	1	4		
	Anopheles punctipennis	1	1		
	Coquillettidia perturbans	1	3		
	Culex spp.	69	1847	4	2.166
Salem		**304**	**3553**	**2**	**0.563**
	Aedes albopictus	30	59		
	Aedes aurifer	1	2		
	Aedes canadensis canadensis	4	20		
	Aedes cantator	3	6		

	Aedes japonicus	28	61		
	Aedes sollicitans	3	5		
	Aedes sticticus	1	1		
	Aedes triseriatus	23	47		
	Aedes vexans	19	137		
	Anopheles barberi	1	1		
	Anopheles bradleyi	3	3		
	Anopheles punctipennis	10	15		
	Anopheles quadrimaculatus	18	105		
	Coquillettidia perturbans	8	22		
	Culex erraticus	21	604		
	Culex pipiens	6	12		
	Culex restuans	14	31		
	Culex spp.	65	1425		
	Culiseta inornata	1	2		
	Culiseta melanura	36	934	2	2.141
	Psorophora columbiae	9	61		
Somerset		**227**	**3095**	**17**	**5.493**
	Aedes albopictus	21	89		
	Aedes japonicus	16	141		
	Aedes triseriatus	7	36		
	Aedes trivittatus	4	112		
	Aedes vexans	3	45		
	Anopheles punctipennis	3	10		
	Coquillettidia perturbans	1	1		
	Culex spp.	169	2605	17	6.526
	Psorophora ferox	3	56		
Sussex		**370**	**9769**	**25**	**2.559**
	Aedes japonicus	82	1153	1	0.867
	Aedes vexans	1	7		
	Coquillettidia perturbans	1	57		
	Culex pipiens	8	113	1	8.850
	Culex restuans	12	50		
	Culex spp.	260	8358	23	2.752
	Culiseta melanura	6	31		
Union		**176**	**4832**	**17**	**3.518**
	Aedes albopictus	47	599	1	1.669
	Aedes japonicus	3	14		
	Culex spp.	126	4219	16	3.792
Warren		**363**	**15381**	**15**	**0.975**
	Aedes cinereus	3	5		
	Aedes japonicus	11	53		
	Aedes sticticus	2	29		
	Aedes stimulans	1	1		
	Aedes triseriatus	5	15		
	Aedes trivittatus	8	146		
	Aedes vexans	10	83		
	Anopheles barberi	1	1		
	Anopheles punctipennis	9	39		
	Anopheles quadrimaculatus	7	34		
	Anopheles walkeri	2	14		
	Coquillettidia perturbans	2	3		

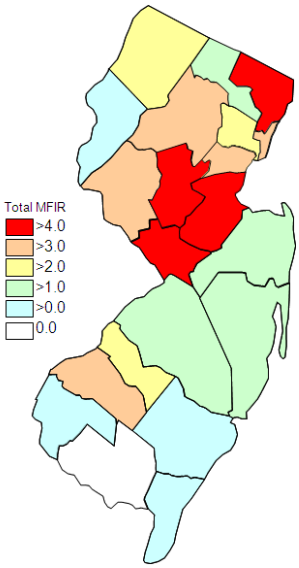
	Culex spp.	293	14884	15	1.008
	Culiseta inornata	1	1		
	Culiseta melanura	1	1		
	Psorophora ferox	4	40		
	Uranotaenia sapphirina	3	32		
Grand Total		**9,749**	**188,812**	**530**	**2.807**



Cumulative WNV activity in 2010.



WNV activity to 21 October 2011.



WNV activity last week, 2011.

Saint Louis Encephalitis (SLE) through 21 October 2011.

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 tested positive for SLE to date in 2011.

County	Species	Pools	Mosquitoes	Positives	MFIR
Burlington		**659**	**20993**		
	Aedes albopictus	37	447		
	Aedes atlanticus	6	60		
	Aedes atropalpus	3	4		
	Aedes canadensis canadensis	42	1984		
	Aedes cantator	3	72		
	Aedes grossbecki	1	3		
	Aedes japonicus	16	76		
	Aedes mithcellae	2	29		
	Aedes sollicitans	7	129		
	Aedes sticticus	2	30		
	Aedes taeniorhynchus	9	69		
	Aedes triseriatus	14	91		
	Aedes trivittatus	1	7		
	Aedes vexans	22	839		
	Anopheles bradleyi	11	445		
	Anopheles crucians	7	75		
	Anopheles punctipennis	8	36		
	Anopheles quadrimaculatus	1	5		
	Coquillettidia perturbans	29	805		
	Culex erraticus	12	533		
	Culex pipiens	19	312		
	Culex restuans	9	53		
	Culex salinarius	23	308		
	Culex spp.	263	11909		

	Culex erraticus	3	23		
	Culiseta melanura	87	2233		
	Psorophora ciliata	1	35		
	Psorophora columbiae	7	148		
	Psorophora ferox	7	117		
	Psorophora howardii	4	35		
	Uranotaenia sapphirina	3	81		
Camden		**251**	**6009**		
	Aedes albopictus	53	313		
	Aedes japonicus	32	72		
	Aedes triseriatus	4	8		
	Aedes vexans	1	1		
	Anopheles punctipennis	3	3		
	Anopheles quadrimaculatus	1	2		
	Culex erraticus	2	7		
	Culex pipiens	3	135		
	Culex spp.	152	5468		
Cumberland		**1**	**1**		
	Aedes triseriatus	1	1		
Essex		**550**	**7837**		
	Aedes albopictus	112	516		
	Aedes canadensis canadensis	2	8		
	Aedes grossbecki	2	5		
	Aedes japonicus	86	711		
	Aedes sticticus	1	21		
	Aedes stimulans	4	46		
	Aedes triseriatus	43	110		
	Aedes vexans	31	127		
	Anopheles punctipennis	4	5		
	Culex spp.	261	6269		
	Psorophora ferox	4	19		
Hudson		**199**	**10456**		
	Culex spp.	199	10456		
Grand Total		**1,660**	**45,296**		

La Crosse Encephalitis (LAC) through 21 October 2011.

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 tested positive to date for 2011.

County	Species	Pools	Mosquitoes	Positives	MFIR
Cape May		**135**	**01**		
	Aedes japonicus	1	1		
	Aedes triseriatus	134	200		
Cumberland		**16**	**30**		
	Aedes triseriatus	16	30		
Salem		**9**	**18**		
	Aedes triseriatus	9	18		
Warren		**1**	**9**		
	Aedes triseriatus	1	9		
Grand Total		**161**	**258**		