RUTGERS
New Jersey Agricultural Experiment Station

VECTOR SURVEILLANCE IN NEW JERSEY
EEE and WNV
CDC WEEK 42: October 12 to October 18, 2008

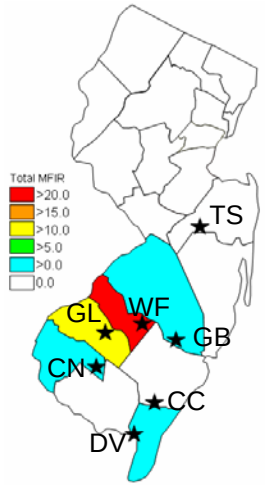
Prepared by Lisa M. Reed, Scott Crans Dina Fonseca and Marc Slaff at the Center for Vector Biology, Rutgers University.
Supported by funding from the NJ State Mosquito Control Commission.

Culiseta melanura and Eastern Equine Encephalitis

SITE	Inland / Coastal	Historic Mean	Current Weekly Mean	Total Collected to Date*	Total Pools Submitted	EEE Isolations	MFIR
Green Bank (Burlington County)	Coastal	0.9	0.2	245	46	1	4.08
Corbin City (Atlantic County)	Coastal	0.3	< 0.1	161	55		
Dennisville (Cape May County)	Coastal	1.5	0.6	586	64	1	1.71
Waterford (Camden County)	Inland	0.7	< 0.1	64	11	2	31.25
Centerton (Salem County)	Inland	0.8	1.6	545	60	2	3.67
Turkey Swamp (Monmouth County)	Inland	0.3	< 0.1	270	58		
Glassboro (Gloucester County)	Inland	no history	0.1	82	33	1	12.20

*Including trial run last week in May.

Remarks: While populations of *Cs. melanura* have decreased as it gets colder, eastern equine encephalitis activity within the mosquito populations have increased significantly. There now appears to be widespread dissemination of the virus in southern New Jersey, with 4 additional positive pools detected this past week. All eight pools (including one detected by the Cape May labs) were composed of the enzootic vector, *Culiseta melanura*. After first detection, county personnel put additional resting boxes out to monitor sites previously shown to be positive for EEE detection. None of these sites have detected EEE activity. The MFIR values are very high, in part due to the low mosquito population levels. It may be that these few enzootic vectors, despite dissemination, are too few to help generate a high virus load and thus EEE is not being transmitted to traditional bridge vectors such as *Aedes sollicitans* and Coquillettidia perturbans. However, while the past weekend nighttime temperatures were low, at killing frost values, caution should remain at more southern coastal areas as some reports of mosquitoes on the wing continue to come in, and thus the potential for transmission to bridge vectors, or for primary enzootic vectors to act as bridge vectors, remain. [The figure to the right map the MFIR values from above. CC=Corbin City, CN=Centerton, DV=Dennisville, GB=Green Bank, GL=Glassboro, TS=Turkey Swamp, WF=Waterford.]

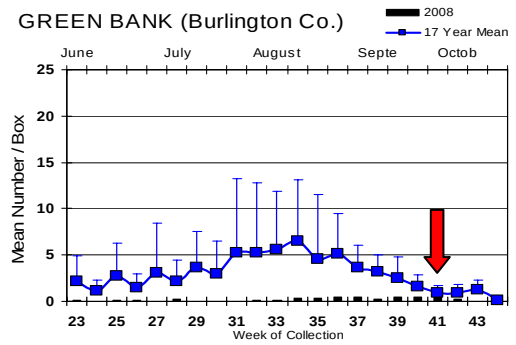


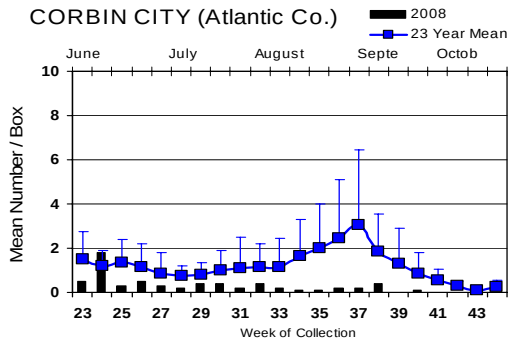
To date, 327 pools from 1953 *Cs. melanura* mosquitoes have been sent for EEE testing from the resting box collections. Previously, an additional EEE positive pool from Cape May had been detected by the Cape May Mosquito Control Department's lab, giving a statewide cumulative total of 4 positive EEE pools. No horse or human cases have been reported to date.

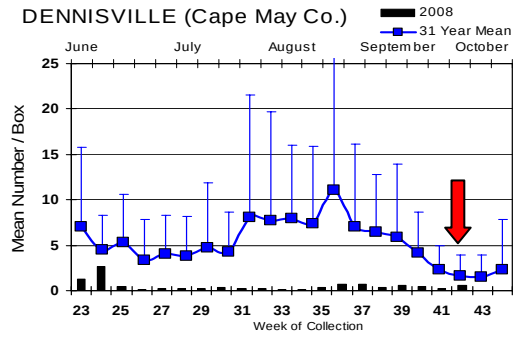
An additional 555 pools of 4966 individual mosquitoes from 31 species other than *Cs. melanura* have also been tested and all pools were found to be negative. These species include: *Aedes albopictus, Ae. canadensis canadensis, Ae. cantator, Ae. cinereus ,Ae. communis, Ae. grossbecki, Ae. japonicus, Ae. sollicitans, Ae. sticticus, Ae. taeniorhynchus, Ae. triseriatus, Ae. trivittatus, Ae. vexans, Anopheles bradleyi, An. crucians, An. punctipennis, An. quadrimaculatus, Coquillettidia perturbans, Culex erraticus, Cx. pipiens, Cx. restuans, Cx., salinarius, Mixed Culex, Cx. territans, Culiseta inornata, Orthopodomyia signifera, Psorophora ciliata, Ps. columbiae, Ps. cyanescens, Ps., ferox, Ps. howardii and Uranotaenia sapphirina.*

Culiseta melanura Population Graphs

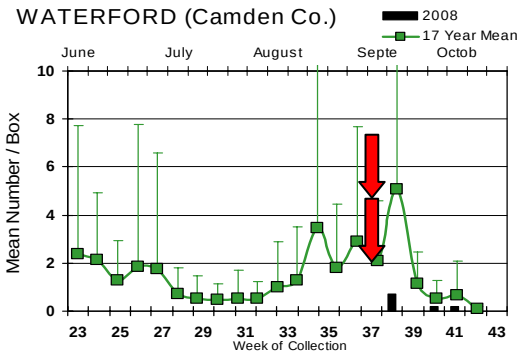
Coastal

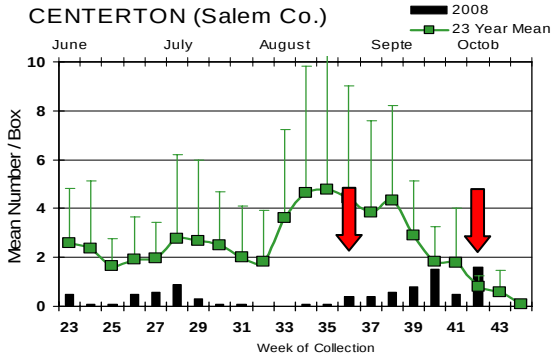


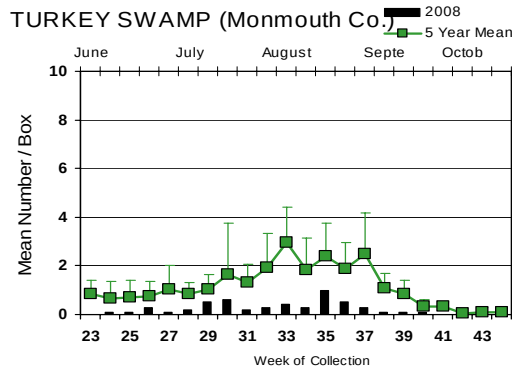




Inland



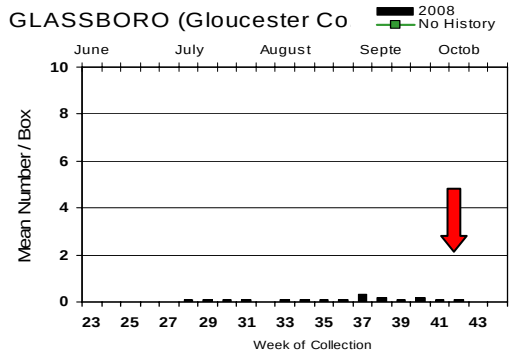




Figures: Inland and coastal resting box sites showing current weekly population levels (in bars) against historical trends (lines with standard deviation). The number of years for historical population levels varies by site.

An additional inland resting box site has been added. This site is located near Glassboro, in Gloucester County. The location is in a wildlife management area, with box location in a mixed forest swamp (Red Maple/White Pine).

Red arrows indicate when *Cs. melanura* populations were detected as positive for eastern equine encephalitis. Earliest infection occurred at week 36 in Centerton.



EEE in US (2008 cumulative cases): (Red = new reported cases occurring)

- equine: 13(AL), 84(FL) 22(GA) 7(LA) 1(MA) 1(ME) 7(MS) 11(NC) 5(SC) 1(TN) 2(TX) 1(VA) 1(WI)
- mosquito: 1(AR) 3(FL) 2(GA) 1(IN) 5(LA) 13(MA) 4(MD) 1(ME) 8(NH) 7(NJ) 4(MD) 9(VA)
- sentinel: 3(AL) 3(DE) 112(FL74 wild) 19[2emu](NC) emu(NH) 5(VA)
- human: 1(AL) 1(FL)

West Nile Virus

West Nile in US (2008 cumulative cases): Single black values indicate no change from previous week. Black values / red values equals previous week/New totals.

	Birds	Mosquito Pools	Sentinels	Horses	Humans
Alabama				4	7/19
Alaska					
Arizona	3	199/200	40	3	77/90
Arkansas	2	19		1	8
California	2319/2387	1831/1849	452/481	26/29	359/345
Colorado	4	61		1	79/86
Connecticut		190			7
Delaware	2		16/18		1
DC		50			
Florida	3 live		9	1	3
Georgia	2/4	25/42			5/6
Hawaii					
Idaho	4	7 counties		1	39
Illinois	30/31	626/641		1	16/19
Indiana	6	187/191			3
Iowa	3	5	3	5	8
Kansas					16/22
Kentucky	2	11		3/5	1/2
Louisiana		600	9	1	7
Maine					
Maryland		10		1	4/6
Mass.	63	133/135			
Michigan	8	1/2		1	9/14
Minnesota	7	22			21
Mississippi		3		2	99/100
Missouri	29	215		1	15
Montana		5		6	5
Nebraska	10/17	79/88		2	37/44

	Birds	Mosquito Pools	Sentinels	Horses	Humans
Nevada	4	38		2	15
New Hampshire		1			
New Jersey	51/52	595/602	1		7
New Mexico		3		2	7
New York	154	351		2	36/42
North Carolina				1	1
North Dakota				1	43
Ohio	11	355			16
Oklahoma		15			8
Oregon	2	18			16
Pennsylvania	14	518		1/2	5
Rhode Island		10			1
South Carolina	3	7			
South Dakota	1	39		4	37
Tennessee	1	618			8
Texas	2/3	114/115		2	51
Utah	2/3	140	16	7	26/27
Vermont	1	1			
Virginia		675	1		1
Washington	19/20	41/57		37	2
West Virginia	2	44		2	1
Wisconsin	38			5	6
Wyoming	5	14		1	8

Note: Some data reported by states are provisional and are subject to change. Sources for this table can be found here.

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

Mosquito Species Submitted for West Nile Virus Testing through 21 October 2008

Species	Pools	Mosquitoes	Positives	MFIR
Aedes abserratus	1	9		
Aedes albopictus	1084	9390	3	0.32
Aedes atlanticus	2	5		
Aedes atropalpus	1	1		
Aedes canadensis canadensis	62	1260		
Aedes cantator	31	398		
Aedes cinereus	3	5		
Aedes communis	1	1		
Aedes grossbecki	3	4		
Aedes japonicus	516	2155	1	0.46
Aedes sollicitans	60	1273		
Aedes sticticus	9	93		

Aedes stimulans	1	1		
Aedes taeniorhynchus	36	683		
Aedes thibaulti	5	13		
Aedes triseriatus	229	649		
Aedes trivittatus	21	169		
Aedes vexans	295	3782		
Anopheles atropos	1	1		
Anopheles barberi	3	3		
Anopheles bradleyi	77	1141		
Anopheles crucians	11	35		
Anopheles earlei	1	1		
Anopheles punctipennis	172	965		
Anopheles quadrimaculatus	170	2045		
Coquillettidia perturbans	105	941		
Culex erraticus	161	1244		
Culex pipiens	975	20586	118	5.73
Culex restuans	478	4862	6	1.23
Culex salinarius	254	9735	2	0.21
Culex spp.	2940	104525	470	4.50
Culex territans	85	361		
Culiseta inornata	3	5		
Culiseta melanura	427	2464	3	1.22
Orthopodomyia signifera	12	21		
Psorophora ciliata	9	54		
Psorophora columbiae	33	206		
Psorophora cyanescens	1	1		
Psorophora ferox	37	178		
Psorophora howardii	4	11		
Uranotaenia sapphirina	38	251		
State Total	**8357**	**169527**	**602**	**3.56**

Remarks: Submitted pools (8,357) comprised of 169,527 individual mosquitoes produced 602 positive pools from 20 different counties. This week, *Culiseta melanura* was detected positive for WNV. This primary bird-feeder is the enzootic vector for eastern equine encephalitis and as such, it is not surprising that this mosquito would also be exposed to WNV, another arbovirus with avian hosts. Limitations to exposure by *Culiseta melanura* would likely come through the different habitat that each disease exploits (WNV = more urban/suburban; EEE = more rural).

Humans, Horses and Wild Birds: A total of seven humans have been reported by PHEL as having contracted WNV. For more details plus information about WNV, see the PHEL's West Nile Virus Alert and FAQ Sheets:
http://www.state.nj.us/health/cd/westnile/enceph.htm

No confirmed horse cases have occurred.

To date, there have been 163 dead birds submitted for West Nile virus testing with 53 positives Last year, there were 45 positive birds from 183 submissions to this point in time.

2008 Positive Mosquito pools to date / Total Mosquito Pools Submitted	This time last year
602 / 8,357	346 / 7,015

WNV Results by County through 21 October 2008

County	Species	Pools	Mosquitoes	Positives	MFIR
Atlantic		**346**	**6657**	**10**	**1.50**
	Aedes albopictus	37	749		
	Aedes canadensis canadensis	4	13		
	Aedes cantator	5	38		
	Aedes japonicus	7	12		
	Aedes sollicitans	19	683		
	Aedes taeniorhynchus	23	564		
	Aedes thibaulti	4	8		
	Aedes triseriatus	8	19		
	Aedes vexans	22	441		
	Anopheles atropos	1	1		
	Anopheles bradleyi	13	81		
	Anopheles crucians	2	24		
	Anopheles punctipennis	9	15		
	Anopheles quadrimaculatus	3	6		
	Coquillettidia perturbans	6	44		
	Culex erraticus	11	135		
	Culex pipiens	1	17		
	Culex restuans	12	357	1	2.80
	Culex salinarius	3	3		
	Culex sp.	79	3236	9	2.78
	Culex territans	10	24		
	Culiseta melanura	59	167		
	Orthopodomyia signifera	2	2		
	Psorophora columbiae	1	1		
	Psorophora ferox	4	15		
	Uranotaenia sapphirina	1	2		
Bergen		**660**	**30826**	**153**	**4.96**
	Aedes albopictus	29	151		
	Aedes canadensis canadensis	1	6		
	Aedes japonicus	34	165		
	Aedes sollicitans	1	1		
	Aedes triseriatus	13	42		
	Aedes vexans	26	108		
	Anopheles barberi	1	1		
	Anopheles bradleyi	6	15		
	Anopheles punctipennis	6	35		
	Coquillettidia perturbans	29	192		
	Culex pipiens	100	3561	15	4.21
	Culex restuans	32	321		
	Culex salinarius	130	8051	1	0.12
	Culex spp.	250	18175	137	7.54
	Culex territans	1	1		
	Orthopodomyia signifera	1	1		
Burlington		**541**	**4076**	**5**	**1.23**
	Aedes albopictus	62	579		
	Aedes canadensis canadensis	23	609		
	Aedes cantator	4	148		
	Aedes cinereus	1	3		
	Aedes grossbecki	1	1		
	Aedes japonicus	25	72		

	Aedes sollicitans	2	22		
	Aedes sticticus	2	5		
	Aedes taeniorhynchus	2	9		
	Aedes triseriatus	18	45		
	Aedes trivittatus	2	5		
	Aedes vexans	66	666		
	Anopheles bradleyi	4	16		
	Anopheles crucians	8	10		
	Anopheles punctipennis	21	55		
	Anopheles quadrimaculatus	18	31		
	Coquillettidia perturbans	22	237		
	Culex erraticus	12	36		
	Culex pipiens	19	179	3	16.76
	Culex restuans	16	98	1	10.20
	Culex salinarius	7	7		
	Culex sp.	79	735	1	1.36
	Culex territans	13	24		
	Culiseta inornata	1	3		
	Culiseta melanura	72	389		
	Orthopodomyia signifera	4	12		
	Psorophora ciliata	6	10		
	Psorophora columbiae	14	46		
	Psorophora cyanescens	1	1		
	Psorophora ferox	5	6		
	Psorophora howardii	1	3		
	Uranotaenia sapphirina	10	14		
Camden		**221**	**3731**	**18**	**4.82**
	Aedes albopictus	43	301		
	Aedes canadensis canadensis	1	19		
	Aedes cantator	1	22		
	Aedes japonicus	16	33		
	Aedes triseriatus	2	2		
	Aedes trivittatus	1	1		
	Aedes vexans	7	144		
	Anopheles punctipennis	8	33		
	Anopheles quadrimaculatus	8	14		
	Coquillettidia perturbans	4	16		
	Culex erraticus	3	9		
	Culex pipiens	14	531		
	Culex restuans	22	523		
	Culex salinarius	4	15		
	Culex sp.	69	1999	17	8.50
	Culex territans	1	1		
	Culiseta inornata	1	1		
	Culiseta melanura	13	63	1	15.87
	Orthopodomyia signifera	2	3		
	Psorophora columbiae	1	1		
Cape May		**732**	**8655**	**3**	**0.35**
	Aedes albopictus	43	124		
	Aedes canadensis canadensis	4	71		
	Aedes cantator	8	82		
	Aedes japonicus	15	26		
	Aedes sollicitans	11	397		
	Aedes taeniorhynchus	4	80		

	Aedes triseriatus	3	5		
	Aedes vexans	3	14		
	Anopheles bradleyi	23	609		
	Anopheles punctipennis	10	105		
	Anopheles quadrimaculatus	27	673		
	Coquillettidia perturbans	4	28		
	Culex erraticus	15	285		
	Culex pipiens	174	2367	1	0.42
	Culex restuans	166	1659	1	0.60
	Culex salinarius	12	426		
	Culex sp.	69	719	1	1.39
	Culex territans	7	21		
	Culiseta melanura	78	622		
Cumberland		**284**	**2351**	**8**	**3.40**
	Aedes albopictus	59	204		
	Aedes japonicus	19	41		
	Aedes sticticus	2	6		
	Aedes triseriatus	11	18		
	Aedes vexans	7	66		
	Anopheles bradleyi	2	2		
	Anopheles punctipennis	5	14		
	Anopheles quadrimaculatus	2	4		
	Coquillettidia perturbans	1	1		
	Culex erraticus	26	83		
	Culex pipiens	40	302	4	13.25
	Culex restuans	15	105	1	9.52
	Culex salinarius	3	3		
	Culex spp.	77	1387	3	2.16
	Culex territans	2	5		
	Culiseta melanura	7	100		
	Psorophora columbiae	1	2		
	Psorophora ferox	1	1		
	Psorophora howardii	1	1		
	Uranotaenia sapphirina	3	6		
Essex		**328**	**3915**	**34**	**8.68**
	Aedes albopictus	89	538		
	Aedes japonicus	29	127	1	7.87
	Aedes triseriatus	21	36		
	Aedes trivittatus	1	1		
	Aedes vexans	12	40		
	Anopheles punctipennis	6	6		
	Anopheles quadrimaculatus	4	11		
	Coquillettidia perturbans	2	2		
	Culex pipiens	1	75	1	13.33
	Culex restuans	1	14		
	Culex spp.	155	3054	32	10.48
	Culex territans	6	10		
	Psorophora columbiae	1	1		

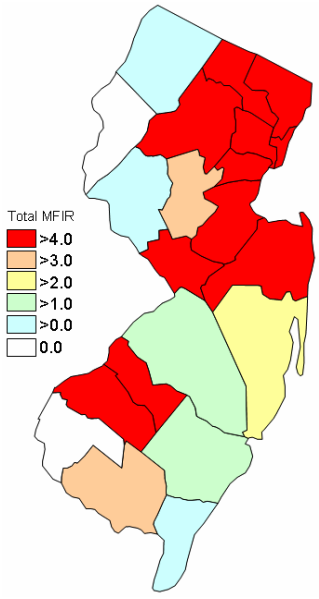
Gloucester		**680**	**12832**	**56**	**4.36**
	Aedes abserratus	1	9		
	Aedes albopictus	69	490		
	Aedes canadensis canadensis	7	245		
	Aedes communis	1	1		
	Aedes japonicus	36	142		
	Aedes sollicitans	1	2		
	Aedes thibaulti	1	5		
	Aedes triseriatus	11	21		
	Aedes vexans	9	269		
	Anopheles bradleyi	4	86		
	Anopheles earlei	1	1		
	Anopheles punctipennis	26	86		
	Anopheles quadrimaculatus	27	55		
	Coquillettidia perturbans	8	38		
	Culex erraticus	7	47		
	Culex pipiens	371	10308	55	5.34
	Culex restuans	19	591		
	Culex salinarius	6	34		
	Culex territans	11	87		
	Culiseta melanura	52	163	1	6.13
	Psorophora columbiae	4	113		
	Psorophora ferox	3	9		
	Uranotaenia sapphirina	5	30		
Hudson		**221**	**10109**	**63**	**6.23**
	Culex spp.	221	10109	63	6.23
Hunterdon		**309**	**13872**	**7**	**0.50**
	Aedes albopictus	5	58		
	Aedes japonicus	1	6		
	Aedes trivittatus	1	18		
	Aedes vexans	3	105		
	Anopheles punctipennis	1	50		
	Anopheles quadrimaculatus	2	25		
	Culex erraticus	1	10		
	Culex spp.	294	13599	7	0.51
	Culiseta inornata	1	1		
Mercer		**562**	**5718**	**44**	**7.69**
	Aedes albopictus	236	2798	2	0.71
	Aedes atropalpus	1	1		
	Aedes japonicus	68	115		
	Aedes stimulans	1	1		
	Aedes triseriatus	27	52		
	Aedes vexans	6	16		
	Anopheles punctipennis	1	1		
	Culex erraticus	17	58		
	Culex pipiens	114	1983	35	17.65
	Culex restuans	64	259	3	11.58
	Culex salinarius	13	162		
	Culex spp.	11	267	4	14.98
	Culex territans	1	1		
	Orthopodomyia signifera	1	1		

	Psorophora columbiae	1	3		
Middlesex		**345**	**8040**	**44**	**5.47**
	Aedes albopictus	34	386		
	Aedes japonicus	12	57		
	Aedes triseriatus	5	22		
	Aedes trivittatus	1	1		
	Aedes vexans	21	512		
	Culex erraticus	1	1		
	Culex pipiens	23	215	1	4.65
	Culex restuans	11	137		
	Culex salinarius	14	324	1	3.09
	Culex spp.	212	6315	42	6.65
	Culex territans	3	10		
	Psorophora ciliata	3	44		
	Psorophora columbiae	1	4		
	Psorophora ferox	1	1		
	Psorophora howardii	1	3		
	Uranotaenia sapphirina	2	8		
Monmouth		**630**	**5767**	**26**	**4.51**
	Aedes albopictus	115	670		
	Aedes canadensis canadensis	3	18		
	Aedes cantator	4	5		
	Aedes japonicus	27	71		
	Aedes sollicitans	13	46		
	Aedes taeniorhynchus	7	30		
	Aedes triseriatus	11	21		
	Aedes trivittatus	3	4		
	Aedes vexans	34	154		
	Anopheles barberi	1	1		
	Anopheles crucians	1	1		
	Anopheles punctipennis	20	45		
	Anopheles quadrimaculatus	11	22		
	Coquillettidia perturbans	4	5		
	Culex erraticus	12	97		
	Culex pipiens	64	591	1	1.69
	Culex restuans	45	258		
	Culex salinarius	17	51		
	Culex spp.	158	3280	25	7.62
	Culex territans	16	119		
	Culiseta melanura	60	270		
	Psorophora ferox	1	1		
	Uranotaenia sapphirina	3	7		
Morris		**231**	**6904**	**31**	**4.49**
	Aedes albopictus	1	3		
	Aedes japonicus	10	41		
	Aedes triseriatus	2	4		
	Anopheles punctipennis	1	4		
	Coquillettidia perturbans	1	50		
	Culex spp.	216	6802	31	4.56
Ocean		**416**	**6037**	**13**	**2.15**
	Aedes albopictus	108	1409	1	0.71

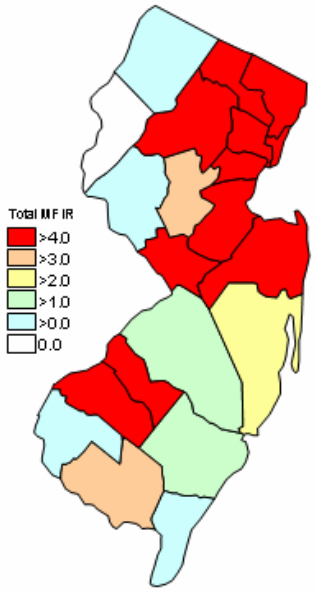
	Aedes atlanticus	1	1		
	Aedes canadensis canadensis	9	85		
	Aedes cantator	3	25		
	Aedes japonicus	27	55		
	Aedes sollicitans	9	117		
	Aedes triseriatus	11	23		
	Aedes trivittatus	2	2		
	Aedes vexans	24	111		
	Anopheles bradleyi	3	3		
	Anopheles punctipennis	6	10		
	Anopheles quadrimaculatus	6	21		
	Coquillettidia perturbans	5	16		
	Culex pipiens	11	251	1	3.98
	Culex restuans	25	255		
	Culex salinarius	17	121		
	Culex sp.	122	3391	11	3.24
	Culex territans	2	2		
	Culiseta melanura	15	94		
	Psorophora ferox	9	22		
	Uranotaenia sapphirina	1	23		
Passaic		**121**	**3859**	**32**	**8.29**
	Aedes albopictus	17	97		
	Aedes japonicus	8	89		
	Aedes triseriatus	1	2		
	Anopheles punctipennis	1	5		
	Culex spp.	94	3666	32	8.73
Salem		**467**	**5533**	**1**	**0.18**
	Aedes albopictus	38	131		
	Aedes atlanticus	1	4		
	Aedes canadensis canadensis	7	181		
	Aedes cantator	6	78		
	Aedes grossbecki	2	3		
	Aedes japonicus	14	33		
	Aedes sollicitans	1	1		
	Aedes sticticus	4	81		
	Aedes triseriatus	19	38		
	Aedes vexans	23	877		
	Anopheles bradleyi	20	238		
	Anopheles punctipennis	33	473		
	Anopheles quadrimaculatus	51	1164		
	Coquillettidia perturbans	9	93		
	Culex erraticus	53	424		
	Culex pipiens	19	69		
	Culex restuans	13	38		
	Culex salinarius	23	528		
	Culex spp.	37	235		
	Culex territans	10	42		
	Culiseta melanura	63	557	1	1.80
	Psorophora columbiae	4	27		
	Psorophora ferox	6	83		
	Psorophora howardii	1	4		
	Uranotaenia sapphirina	10	131		
Somerset		**314**	**4183**	**14**	**3.35**

	Aedes albopictus	19	65		
	Aedes canadensis canadensis	1	2		
	Aedes japonicus	52	329		
	Aedes triseriatus	39	155		
	Aedes trivittatus	6	105		
	Aedes vexans	7	123		
	Anopheles barberi	1	1		
	Anopheles punctipennis	10	11		
	Anopheles quadrimaculatus	7	7		
	Culex pipiens	2	22		
	Culex restuans	2	19		
	Culex spp.	160	3303	14	4.24
	Orthopodomyia signifera	2	2		
	Psorophora ferox	5	38		
	Uranotaenia sapphirina	1	1		
Sussex		**463**	**12304**	**7**	**0.57**
	Aedes canadensis canadensis	2	11		
	Aedes cinereus	2	2		
	Aedes japonicus	104	677		
	Aedes sticticus	1	1		
	Aedes triseriatus	24	141		
	Aedes trivittatus	4	32		
	Aedes vexans	6	48		
	Anopheles punctipennis	3	8		
	Anopheles quadrimaculatus	1	1		
	Coquillettidia perturbans	10	219		
	Culex pipiens	9	57		
	Culex restuans	13	146		
	Culex salinarius	2	5		
	Culex spp.	279	10926	7	0.64
	Psorophora ferox	1	1		
	Uranotaenia sapphirina	2	29		
Union		**248**	**4739**	**35**	**7.39**
	Aedes albopictus	75	621		
	Aedes japonicus	9	14		
	Aedes sollicitans	2	3		
	Aedes triseriatus	3	3		
	Aedes vexans	19	88		
	Anopheles punctipennis	3	5		
	Anopheles quadrimaculatus	1	1		
	Culex pipiens	4	23	1	43.48
	Culex restuans	7	29		
	Culex salinarius	2	3		
	Culex spp.	117	3940	34	8.63
	Psorophora columbiae	5	8		
	Psorophora ferox	1	1		
Warren		**238**	**9419**		

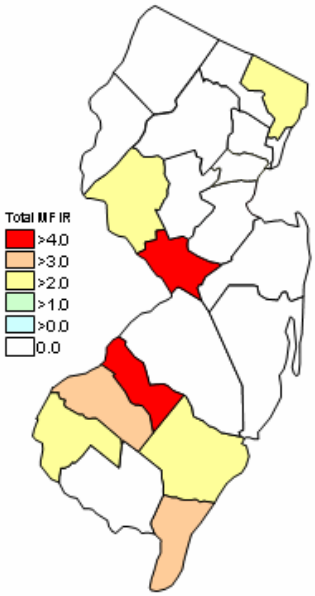
	Aedes japonicus	2	49		
	Culex spp.	236	9370		
Grand Total		**8357**	**169527**	**603**	**3.56**



Cumulative activity to last week



Cumulative activity to this week



Recent Activity 9/28 to 10/13)

RAMP (Rapid Analyte Measurement Platform). More than half of the counties in New Jersey are incorporating the use of RAMP results in their vector surveillance programs. Counties participate with the PHEL Lab in monitoring the efficacy and sensitivity of the RAMP results by sending in samples to be confirmed. Note that not all samples done by the counties are sent in to PHEL and therefore the number of pools submitted can differ from the number of pools reported by the counties.

Note: PHEL reported additional positive RAMP pools for data not currently in the database. This table will be updated to include those positives when the database is up to date.

RAMP Results for 21 October 2008

County	Species	Pools	Mosquitoes	Positives	PHEL (pools submitted/+/-)
Monmouth		**75**	**671**		
	Aedes albopictus	4	11		
	Aedes canadensis	8	38		
	Aedes cantator	3	13		
	Aedes japonicus	11	42		
	Aedes triseriatus	1	1		
	Anopheles punctipennis	3	6		
	Coquillettidia perturbans	1	1		
	Culex spp.	2	2		
	Culiseta melanura	1	1		
Warren		**51**	**1968**		
	Aedes japonicus	3	33		
	Aedes triseriatus	1	1		
	Aedes vexans	1	2		
	Culex restuans	1	4		
	Culex spp.	45	1928	**2**	**9/0/2**