

VECTOR SURVEILLANCE SUMMARY SHEET
EEE and WNV in New Jersey
WEEK 6: July 8 to 14, 2007



Culiseta melanura (Coquillett) and Eastern Equine Encephalitis

Coastal Resting Boxes						Inland Resting Boxes					
Sites	Mean From Previous Years	No. Per Box For This Collection	Total Collected to Date*	Total Pools Submitted to Date*	EEE Isolations To Date	Sites	Mean From Previous Years	No. Per Box For This Collection	Total Collected to Date*	Total Pools Submitted to Date*	EEE Isolations To Date
Green Bank (Burlington Co.)	2.3	0.4	151	22	-	Waterford (Camden Co.)	0.7	0.3	291	20	-
Corbin City (Atlantic Co.)	0.7	1.3	289	26	-	Centerton (Salem Co.)	2.9	0.2	312	24	-
Dennisville (Cape May Co.)	4.0	0.4	956	33	-	Turkey Swamp (Monmouth Co.)	0.9	0.6	262	26	-

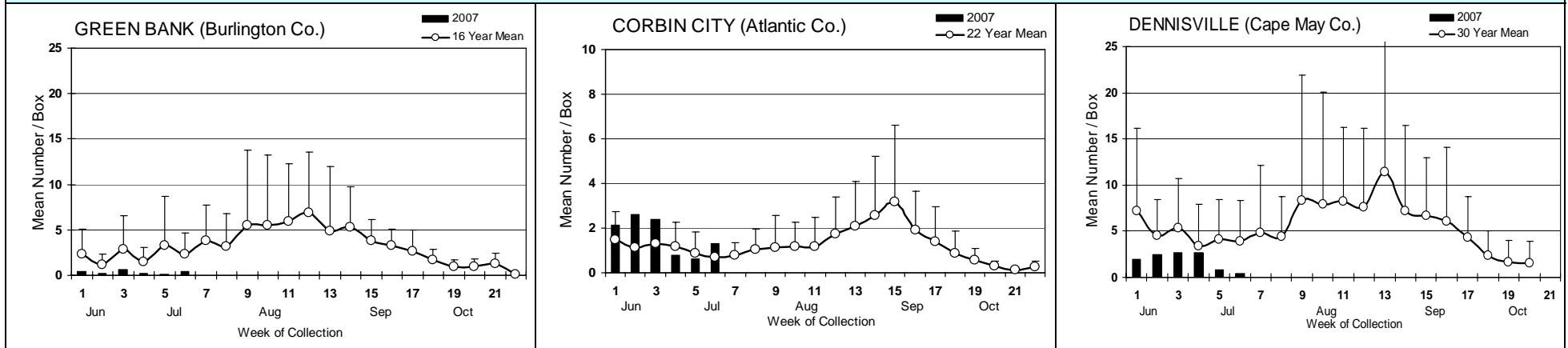
*Including trial run last week in May.

Remarks: *Culiseta melanura* populations were higher at 4 sites than during the previous week. This may indicate that individuals emerging now are from eggboats that were laid at the beginning of the season (i.e., the second generation). This new group is capable of amplifying EEE in the local bird population, particularly in the immunologically-naïve juvenile birds. To date, 151 pools have been tested for EEE and there have been no positive results.

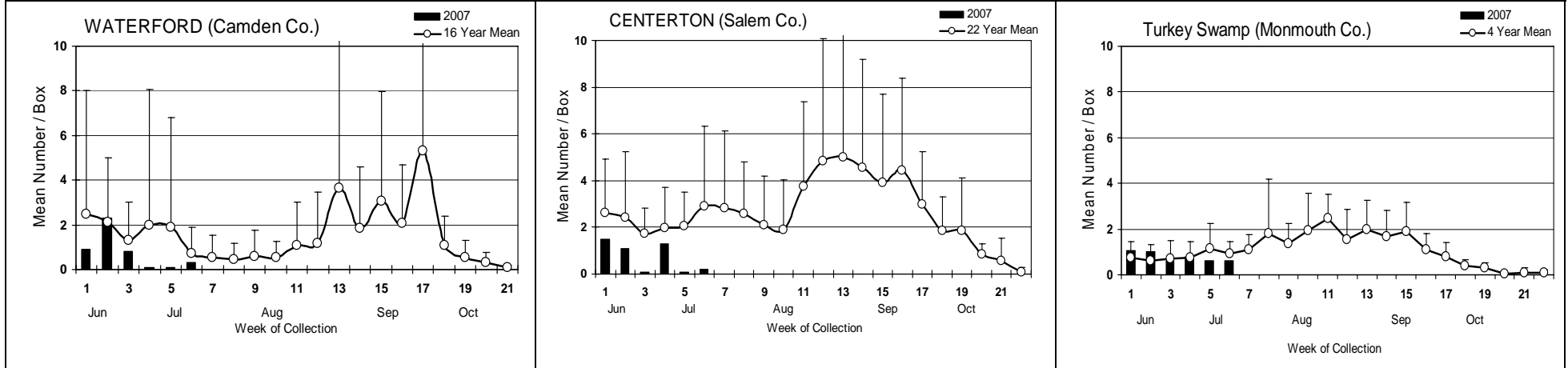
Supported by funding from the NJ State Mosquito Control Commission. Summary Prepared by Lisa M. Reed, Scott Crans and Dina Fonseca at the Center for Vector Biology, Rutgers University

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.

EEE in US (2007 cumulative cases): New Reports are in red.

- equine: 7(FL) (1 additional cases), VA(1)
- mosquito: 2(LA), 1(MA)
- sentinel: 30(FL) (7 additional sentinels)
- human: 0

Mosquito Species Submitted for West Nile Virus Testing through 13 July 2007

Species	Pools	Mosquitoes	Positives
<i>Aedes albopictus</i>	51	173	
<i>Aedes cinereus</i>	1	4	
<i>Aedes vexans</i>	21	316	
<i>Anopheles barberi</i>	1	1	
<i>Anopheles bradleyi</i>	5	39	
<i>Anopheles punctipennis</i>	20	74	
<i>Anopheles quadrimaculatus</i>	28	1159	
<i>Coquillettidia perturbans</i>	18	422	
<i>Culex erraticus</i>	1	26	
<i>Culex pipiens</i>	51	816	
<i>Culex restuans</i>	52	883	
<i>Culex salinarius</i>	17	59	
<i>Culex sp.</i>	337	14107	2
<i>Culex territans</i>	5	12	
<i>Culiseta melanura</i>	163	2308	
<i>Aedes canadensis canadensis</i>	19	651	
<i>Aedes cantator</i>	6	19	
<i>Aedes grossbecki</i>	1	1	
<i>Aedes japonicus</i>	50	284	
<i>Aedes sollicitans</i>	1	3	
<i>Aedes sticticus</i>	7	246	
<i>Aedes thibaulti</i>	3	4	
<i>Aedes triseriatus</i>	25	48	
<i>Aedes trivittatus</i>	2	2	
<i>Psorophora ferox</i>	2	30	
<i>Uranotaenia sapphirina</i>	2	2	
Grand Total	889	21689	2

Remarks: To date, there have been 21,689 mosquitoes submitted for testing in 889 pools. Submissions are from 25 different species, plus mixed *Culex* pools from 21 counties. A positive pool of *Culex* mix has been found in Hunterdon County north of Lambertville. This is the second positive pool (also *Culex* mix) found this season. Localized WN activity has begun, with positive mosquitoes found on the western side of the state and positive birds found on the eastern side. The positive mosquito pools this year have occurred earlier than the previous two years.

West Nile in US (2007 cumulative cases): New/changed reports are indicated in red, strikeouts indicate previous week's cases.

- dead bird: CA(~~99~~159) MS(~~34~~) ND(43) OR(1) TN(2), TX(~~35~~)
- equine: AZ(1), CA(23) ID(1), NM(1), TN(1) TX(1), VA(1)

- mosquito: AZ(737) CA(72143) CT(1) ID(23) IL(2832) IN(4517) LA(38) MO(3640) NE(69) OH(35) OK(2) PA (2) SD(69) TX(4619) UT(1) VA(1)
- sentinel: CA(46) FL(67).UT(1)
- human: AR(1) CA(43) CO(2) IA(1) IL(1) MS(6) ND(1) NE(2) SD(57) TX(1) WY(1) (AZ case removed)

Protocol: New Jersey Department of Health and Senior Services tests mosquito pools using RT-PCR Taqman techniques.

Submission for West Nile Testing by County through 13 July 2007

County	Species	Pools	Mosquitoes	Positives
Atlantic		43	635	0
	<i>Aedes albopictus</i>	1	8	
	<i>Aedes vexans</i>	1	29	
	<i>Coquillettidia perturbans</i>	1	6	
	<i>Culex erraticus</i>	1	26	
	<i>Culex restuans</i>	1	1	
	<i>Culex sp.</i>	5	215	
	<i>Culex territans</i>	1	1	
	<i>Culiseta melanura</i>	27	290	
	<i>Aedes canadensis canadensis</i>	1	26	
	<i>Aedes grossbecki</i>	1	1	
	<i>Aedes japonicus</i>	1	2	
	<i>Aedes triseriatus</i>	1	1	
	<i>Psorophora ferox</i>	1	29	
Bergen		15	1125	0
	<i>Culex sp.</i>	15	1125	
Burlington		74	533	0
	<i>Aedes albopictus</i>	7	31	
	<i>Aedes vexans</i>	3	17	
	<i>Anopheles barberi</i>	1	1	
	<i>Anopheles punctipennis</i>	2	3	
	<i>Coquillettidia perturbans</i>	7	78	
	<i>Culex pipiens</i>	5	34	
	<i>Culex restuans</i>	4	131	
	<i>Culex salinarius</i>	3	4	
	<i>Culex sp.</i>	6	54	
	<i>Culiseta melanura</i>	23	153	
	<i>Aedes canadensis canadensis</i>	3	8	

<i>Aedes japonicus</i>	4	6	
<i>Aedes sticticus</i>	1	1	
<i>Aedes triseriatus</i>	4	11	
<i>Psorophora ferox</i>	1	1	
Camden	67	1045	1
<i>Aedes albopictus</i>	8	33	
<i>Anopheles punctipennis</i>	5	29	
<i>Anopheles quadrimaculatus</i>	3	3	
<i>Culex restuans</i>	1	1	
<i>Culex sp.</i>	20	651	1
<i>Culiseta melanura</i>	20	291	
<i>Aedes canadensis canadensis</i>	1	1	
<i>Aedes japonicus</i>	5	27	
<i>Aedes triseriatus</i>	2	7	
<i>Aedes trivittatus</i>	2	2	
Cape_May	85	2286	0
<i>Anopheles bradleyi</i>	4	36	
<i>Anopheles punctipennis</i>	1	1	
<i>Anopheles quadrimaculatus</i>	17	1123	
<i>Culex pipiens</i>	4	19	
<i>Culex restuans</i>	8	38	
<i>Culex salinarius</i>	4	19	
<i>Culex sp.</i>	9	97	
<i>Culex territans</i>	2	5	
<i>Culiseta melanura</i>	35	946	
<i>Aedes cantator</i>	1	2	
Cumberland	5	41	0
<i>Culex pipiens</i>	1	17	
<i>Culex restuans</i>	2	17	
<i>Culiseta melanura</i>	2	7	
Essex	13	127	0
<i>Aedes albopictus</i>	2	5	
<i>Culex sp.</i>	10	118	
<i>Aedes japonicus</i>	1	4	

Gloucester	16	354	0
<i>Culex pipiens</i>	13	350	
<i>Aedes japonicus</i>	3	4	
Hudson	66	3199	0
<i>Aedes albopictus</i>	10	36	
<i>Culex sp.</i>	56	3163	
Hunterdon	21	746	1
<i>Anopheles punctipennis</i>	1	2	
<i>Culex sp.</i>	18	687	1
<i>Aedes japonicus</i>	2	57	
Mercer	34	397	0
<i>Aedes albopictus</i>	7	21	
<i>Culex pipiens</i>	15	340	
<i>Culex restuans</i>	6	26	
<i>Culex salinarius</i>	2	3	
<i>Aedes japonicus</i>	2	5	
<i>Aedes triseriatus</i>	2	2	
Middlesex	54	2003	0
<i>Aedes albopictus</i>	1	4	
<i>Aedes vexans</i>	3	64	
<i>Anopheles bradleyi</i>	1	3	
<i>Coquillettidia perturbans</i>	3	107	
<i>Culex pipiens</i>	2	3	
<i>Culex restuans</i>	6	273	
<i>Culex sp.</i>	28	1492	
<i>Culiseta melanura</i>	1	4	
<i>Aedes canadensis canadensis</i>	4	34	
<i>Aedes japonicus</i>	4	17	
<i>Aedes triseriatus</i>	1	2	
Monmouth	111	1034	0
<i>Aedes albopictus</i>	6	12	
<i>Aedes vexans</i>	8	137	

<i>Anopheles punctipennis</i>	2	2	
<i>Anopheles quadrimaculatus</i>	1	1	
<i>Coquillettidia perturbans</i>	2	30	
<i>Culex pipiens</i>	4	13	
<i>Culex restuans</i>	10	105	
<i>Culex salinarius</i>	3	19	
<i>Culex sp.</i>	21	122	
<i>Culex territans</i>	2	6	
<i>Culiseta melanura</i>	28	286	
<i>Aedes canadensis canadensis</i>	4	240	
<i>Aedes cantator</i>	5	17	
<i>Aedes japonicus</i>	5	23	
<i>Aedes sollicitans</i>	1	3	
<i>Aedes sticticus</i>	1	7	
<i>Aedes triseriatus</i>	6	9	
<i>Uranotaenia sapphirina</i>	2	2	
Morris	32	507	0
<i>Aedes vexans</i>	1	1	
<i>Anopheles punctipennis</i>	1	1	
<i>Anopheles quadrimaculatus</i>	2	2	
<i>Culex pipiens</i>	5	37	
<i>Culex restuans</i>	5	254	
<i>Culex salinarius</i>	2	7	
<i>Culex sp.</i>	11	190	
<i>Aedes japonicus</i>	3	12	
<i>Aedes triseriatus</i>	2	3	
Ocean	54	1980	0
<i>Aedes albopictus</i>	4	11	
<i>Aedes vexans</i>	2	13	
<i>Coquillettidia perturbans</i>	1	2	
<i>Culex restuans</i>	4	14	
<i>Culex salinarius</i>	2	5	
<i>Culex sp.</i>	25	1534	
<i>Culiseta melanura</i>	3	19	
<i>Aedes canadensis canadensis</i>	5	339	
<i>Aedes japonicus</i>	4	20	

<i>Aedes sticticus</i>	1	17	
<i>Aedes triseriatus</i>	3	6	
Passaic	23	861	0
<i>Culex sp.</i>	22	856	
<i>Aedes japonicus</i>	1	5	
Salem	39	373	0
<i>Anopheles punctipennis</i>	5	22	
<i>Anopheles quadrimaculatus</i>	5	30	
<i>Culex restuans</i>	1	2	
<i>Culiseta melanura</i>	24	312	
<i>Aedes canadensis canadensis</i>	1	3	
<i>Aedes thibaulti</i>	3	4	
Somerset	39	981	0
<i>Aedes cinereus</i>	1	4	
<i>Aedes vexans</i>	3	55	
<i>Anopheles punctipennis</i>	2	12	
<i>Culex restuans</i>	1	2	
<i>Culex salinarius</i>	1	2	
<i>Culex sp.</i>	17	612	
<i>Aedes japonicus</i>	8	69	
<i>Aedes sticticus</i>	4	221	
<i>Aedes triseriatus</i>	2	4	
Sussex	28	1156	0
<i>Coquillettidia perturbans</i>	3	198	
<i>Culex sp.</i>	24	956	
<i>Aedes japonicus</i>	1	2	
Union	32	743	0
<i>Aedes albopictus</i>	5	12	
<i>Culex sp.</i>	19	697	
<i>Aedes japonicus</i>	6	31	
<i>Aedes triseriatus</i>	2	3	
Warren	38	1563	0

<i>Anopheles punctipennis</i>	1	2	
<i>Coquillettidia perturbans</i>	1	1	
<i>Culex pipiens</i>	2	3	
<i>Culex restuans</i>	3	19	
<i>Culex sp.</i>	31	1538	
Grand Total	889	21689	2