VECTOR SURVEILLANCE SUMMARY SHEET

EEE and WNV in New Jersey

WEEK 5: July 1 to 7, 2007

RUTGERS
THE STATE UNIVERSITY OF NEW JERSEY

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.)	3.3	< 0.1	120	18	-	Waterford (Camden Co.)	1.9	0.1	269	18	-
Corbin City (Atlantic Co.)	0.9	0.6	257	23	-	Centerton (Salem Co.)	2.0	0.1	297	22	-
Dennisville (Cape May Co.)	4.1	0.8	935	30	-	Turkey Swamp (Monmouth Co.)	1.2	0.6	231	23	-

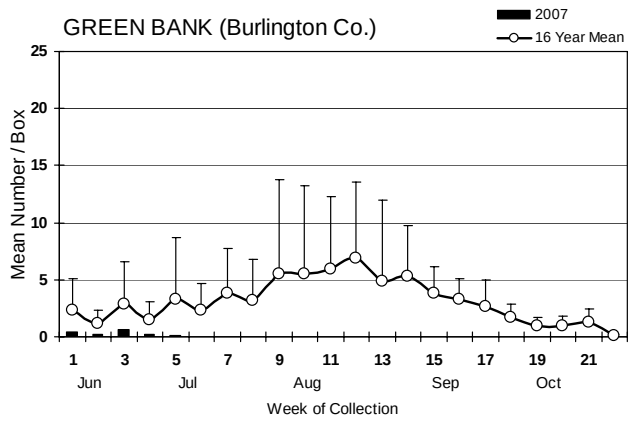
*Including trial run last week in May.

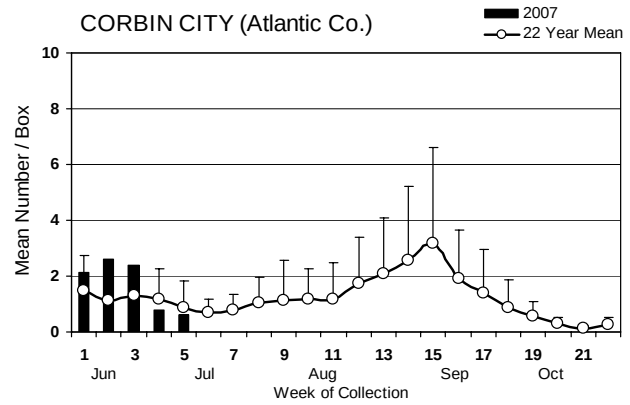
Remarks: *Culiseta melanura* populations declined at all resting box sites from last week. All averages would appear to be lower than the historical trends. However, only the Centerton site mean was outside of the historical standard deviation, collected on a no-rain day. *Culiseta melanura* will move away from resting boxes when temperatures rise under dry conditions to avoid desiccation. To date, 134 pools have been tested for EEE and there have been no positive results.

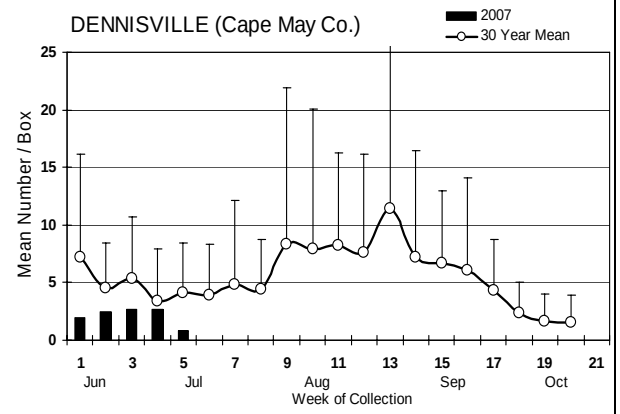
Supported by funding from the NJ State Mosquito Control Commission. Summary Prepared by Lisa M. Reed, Scott Crans and Dina Fonseca at the Center for Vector Biology, Rutgers University

Culiseta melanura Population Graphs

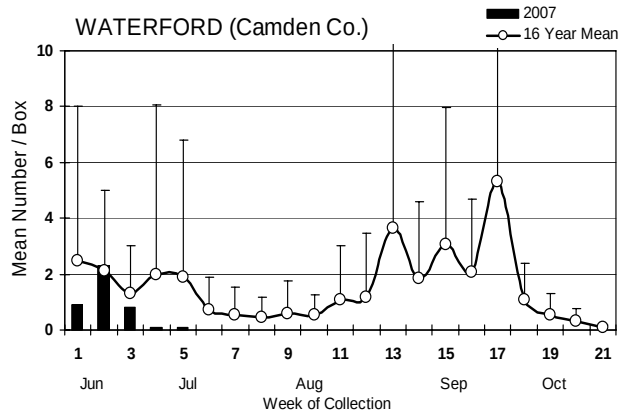
Coastal

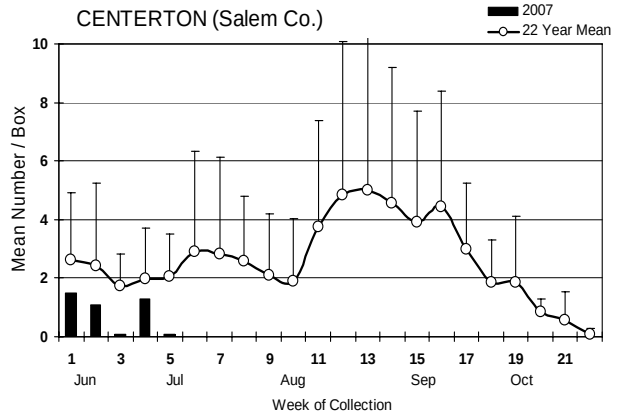


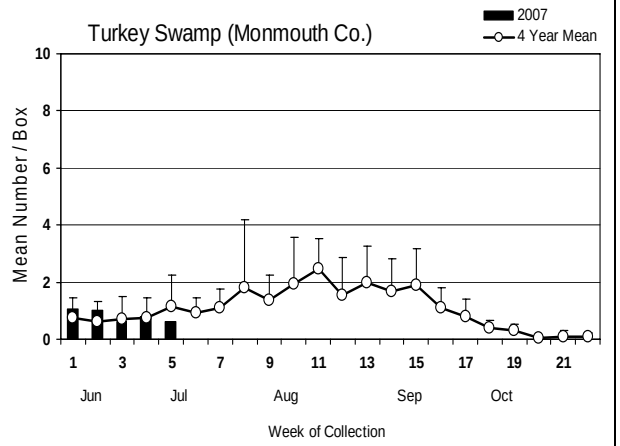




Inland







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: 6(FL) (2 additional cases) Note that EEE activity continues to occur in Florida with horse cases occurring where positive sentinels have been found. No positive mosquitoes have been reported yet.
- mosquito: 0
- sentinel: 22(FL) (3 additional sentinels)
- human: 0

Mosquito Species Submitted for West Nile Virus Testing through 06 July 2007

Species	Pools	Mosquitoes	Positives
Aedes albopictus	24	71	
Aedes cinereus	1	4	
Aedes vexans	9	154	
Anopheles barberi	1	1	
Anopheles bradleyi	3	30	
Anopheles punctipennis	15	60	
Anopheles quadrimaculatus	20	840	
Coquillettidia perturbans	11	277	
Culex pipiens	31	669	
Culex restuans	28	219	
Culex salinarius	10	23	
Culex sp.	167	5862	1
Culex territans	3	7	
Culiseta melanura	141	2143	
Aedes canadensis canadensis	13	590	
Aedes cantator	2	7	
Aedes japonicus	26	133	
Aedes sticticus	7	246	
Aedes thibaulti	3	4	
Aedes triseriatus	11	21	
Aedes trivittatus	2	2	
Grand Total	528	11363	1

Remarks: To date, there have been 11,363 mosquitoes submitted for testing in 528 pools. Submissions are from 20 different species, including mixed *Culex* pools from 19 counties. One positive pool from a mixed *Culex* sample was collected in Camden County on the 28th of June. This is similar to past years, when positive pools began to appear during mid to late June. A positive Blue Jay was found on the 17th of June, but in Ocean County. *Culex* populations in both these active areas appear above or within historical levels, according to the Adult Surveillance program, providing the opportunity for transmission and amplification of WNV in host birds.

West Nile in US (2007 cumulative cases): Previous week's values in black/New or changed reports are indicated in red.

- dead bird: CA(25/99) MS(3/4) ND(1) OR(1) TX(3) (Previous Arizona cases not listed)
- equine: CA(1/2) TN(1) TX(1)
- mosquito:AZ(7) NE(2) CA(472) ID(2) IL(3/28) IN(8/15) MO(36) OH(3) PA (2) SD(6) TX(1/16) UT(1) VA(1)
- sentinel: CA(2/4) FL(3/6).UT(1)
- human: AR(1) CA(1) IA(1) IL(1) MS(4/6) ND(1) NE(2) SD(1/5)

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 06 July 2007

County	Species	Pools	Mosquitoes	Positives
Atlantic		**24**	**258**	**0**
	Culex restuans	1	1	
	Culiseta melanura	23	257	
Burlington		**55**	**424**	**0**
	Aedes albopictus	4	17	
	Aedes vexans	1	2	
	Anopheles barberi	1	1	
	Anopheles punctipennis	2	3	
	Coquillettidia perturbans	6	76	
	Culex pipiens	5	34	
	Culex restuans	4	131	
	Culex salinarius	3	4	
	Culex sp.	3	16	
	Culiseta melanura	19	122	
	Aedes canadensis canadensis	2	7	
	Aedes japonicus	2	2	
	Aedes sticticus	1	1	
	Aedes triseriatus	2	8	
Camden		**52**	**796**	**1**
	Aedes albopictus	5	13	
	Anopheles punctipennis	4	25	
	Anopheles quadrimaculatus	2	2	
	Culex restuans	1	1	
	Culex sp.	15	477	**1**
	Culiseta melanura	18	269	
	Aedes canadensis canadensis	1	1	
	Aedes japonicus	4	6	
	Aedes trivittatus	2	2	
Cape_May		**66**	**1880**	**0**
	Anopheles bradleyi	3	30	
	Anopheles punctipennis	1	1	
	Anopheles quadrimaculatus	13	823	

	Culex restuans	3	6	
	Culex salinarius	3	11	
	Culex sp.	8	77	
	Culex territans	2	5	
	Culiseta melanura	32	925	
	Aedes cantator	1	2	
Essex		**2**	**6**	**0**
	Culex sp.	2	6	
Gloucester		**16**	**354**	**0**
	Culex pipiens	13	350	
	Aedes japonicus	3	4	
Hudson		**15**	**801**	**0**
	Culex sp.	15	801	
Hunterdon		**21**	**746**	**0**
	Anopheles punctipennis	1	2	
	Culex sp.	18	687	
	Aedes japonicus	2	57	
Mercer		**23**	**318**	**0**
	Aedes albopictus	4	13	
	Culex pipiens	11	282	
	Culex restuans	5	19	
	Culex salinarius	1	2	
	Aedes triseriatus	2	2	
Middlesex		**15**	**540**	**0**
	Aedes albopictus	1	4	
	Culex sp.	13	532	
	Aedes japonicus	1	4	
Monmouth		**53**	**668**	**0**
	Aedes albopictus	2	2	
	Aedes vexans	3	84	
	Anopheles quadrimaculatus	1	1	

	Culex restuans	5	24	
	Culex salinarius	1	2	
	Culex sp.	8	45	
	Culex territans	1	2	
	Culiseta melanura	24	254	
	Aedes canadensis canadensis	4	240	
	Aedes cantator	1	5	
	Aedes japonicus	1	1	
	Aedes sticticus	1	7	
	Aedes triseriatus	1	1	
Morris		**15**	**195**	**0**
	Anopheles punctipennis	1	1	
	Culex sp.	11	190	
	Aedes japonicus	1	1	
	Aedes triseriatus	2	3	
Ocean		**24**	**425**	**0**
	Aedes albopictus	3	10	
	Aedes vexans	2	13	
	Coquillettidia perturbans	1	2	
	Culex restuans	4	14	
	Culex salinarius	1	2	
	Culiseta melanura	3	19	
	Aedes canadensis canadensis	5	339	
	Aedes japonicus	2	5	
	Aedes sticticus	1	17	
	Aedes triseriatus	2	4	
Passaic		**22**	**811**	**0**
	Culex sp.	21	806	
	Aedes japonicus	1	5	
Salem		**35**	**336**	**0**
	Anopheles punctipennis	4	16	
	Anopheles quadrimaculatus	4	14	
	Culex restuans	1	2	
	Culiseta melanura	22	297	

	Aedes canadensis canadensis	1	3	
	Aedes thibaulti	3	4	
Somerset		**27**	**782**	**0**
	Aedes cinereus	1	4	
	Aedes vexans	3	55	
	Anopheles punctipennis	1	10	
	Culex restuans	1	2	
	Culex salinarius	1	2	
	Culex sp.	10	457	
	Aedes japonicus	5	30	
	Aedes sticticus	4	221	
	Aedes triseriatus	1	1	
Sussex		**15**	**585**	**0**
	Coquillettidia perturbans	3	198	
	Culex sp.	12	387	
Union		**26**	**606**	**0**
	Aedes albopictus	5	12	
	Culex sp.	16	574	
	Aedes japonicus	4	18	
	Aedes triseriatus	1	2	
Warren		**22**	**832**	**0**
	Anopheles punctipennis	1	2	
	Coquillettidia perturbans	1	1	
	Culex pipiens	2	3	
	Culex restuans	3	19	
	Culex sp.	15	807	
Grand Total		**528**	**11363**	**1**