VECTOR SURVEILLANCE SUMMARY SHEET

EEE and WNV in New Jersey

WEEK 2: June 10 - 16, 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.)	1.2	0.2	69	8	-	Waterford (Camden Co.)	2.1	2.3	211	10	-
Corbin City (Atlantic Co.)	1.1	2.6	161	12	-	Centerton (Salem Co.)	2.4	1.1	206	11	-
Dennisville (Cape May Co.)	4.5	2.5	626	16	-	Turkey Swamp (Monmouth Co.)	0.6	1. 0	136	11	-

*Including trial run last week in May.

Remarks: *Culiseta melanura* populations are beginning to show a varied response among the sites. The Coastal sites are showing populations that are lower at two of the sites (Green Bank and Dennisville) as does one of the Inland sites. Corbin City in the Coastal sites was substantially higher than both the corresponding historical value and the previous week's value. The Inland sites recorded higher than historical values except for Centerton. Note, however, that most values lie within the standard deviations of the historical values and thus the lack of the words "significantly different." See graphs next page.

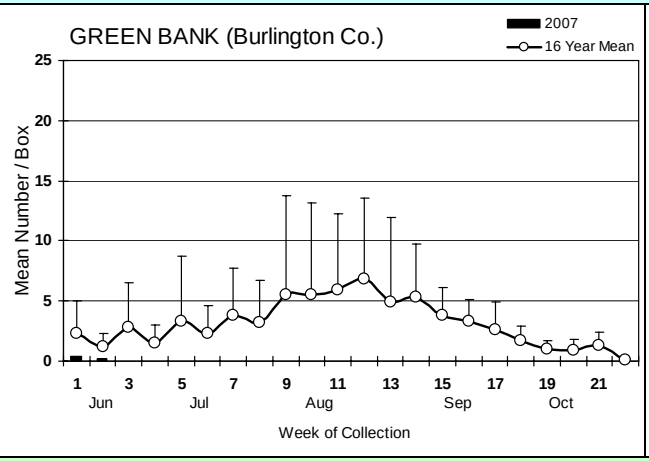
When numerous females are feeding in June, they will be contributing to an increased amplification risk as well as contributing eggs toward the latter season emergence that may contribute toward increased transmission. However, it is too early in the season to determine if we are heading toward such an abundant amplification based on three higher-than-average values during the second week.

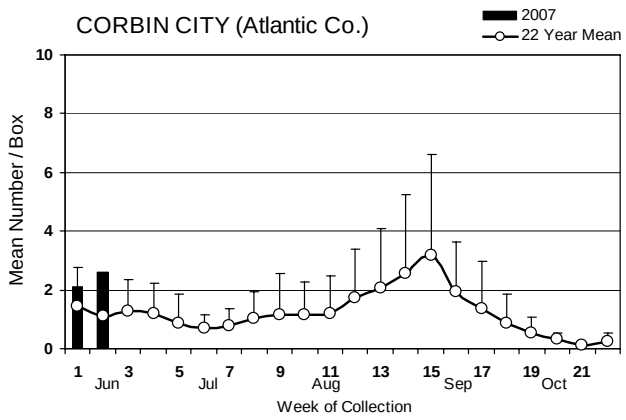
There were no positive pools with either eastern equine encephalitis or with West Nile virus.

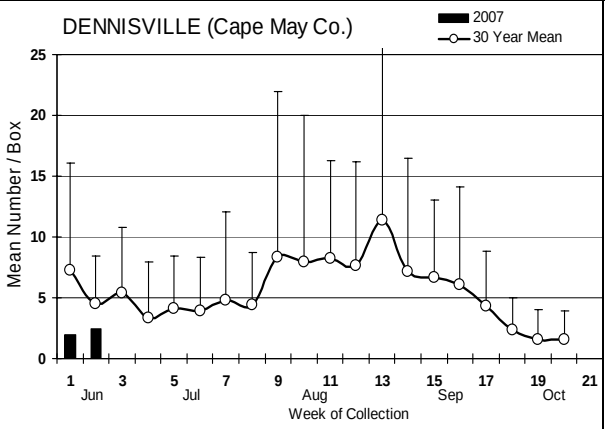
Supported by funding from the NJ State Mosquito Control Commission. Summary Prepared by Lisa M. Reed, Scott Crans and Dina Fonseca at the Center for Vector Biology, Rutgers University

Culiseta melanura Population Graphs

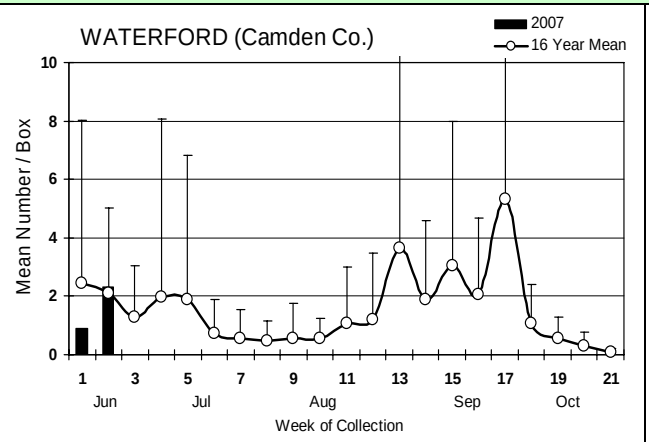
Coastal

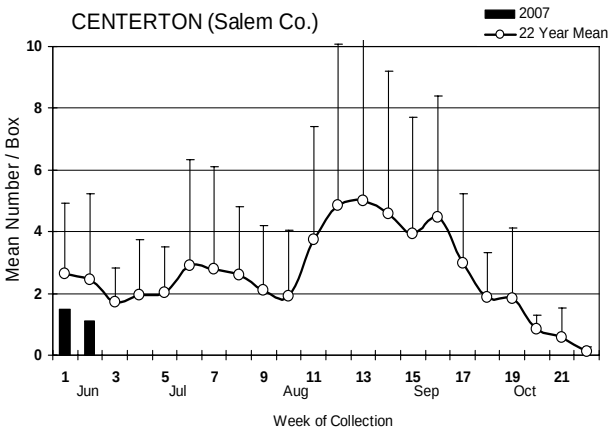


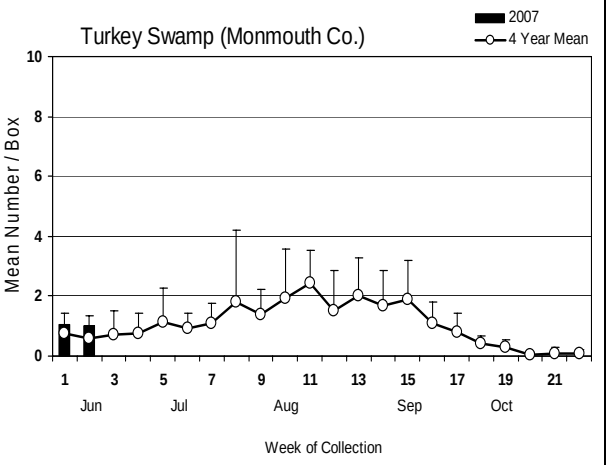




Inland







EEE in US: Four equine cases in central Florida with 22 sentinel birds reported positive. Most positive sentinels occur within or in adjacent counties to the positive horses, or in the Panhandle.

Mosquito Species Submitted for West Nile Virus Testing through 15 June 2007

Species	Pools	Mosquitoes	Positives
Anopheles punctipennis	3	9	
Anopheles quadrimaculatus	6	294	
Culex restuans	3	10	
Culex salinarius	1	2	
Culex territans	1	2	
Culiseta melanura	70	1399	
Aedes canadensis canadensis	1	3	
Grand Total	**85**	**1719**	**0**

Remarks: No positive pools have been found to date.

West Nile in US: Human cases: IA (1), MS (4), SD (1). Mosquitoes: CA, IL, IN, TX, VA. Sentinels: CA, FL. Birds: CA. MS.

Protocol: New Jersey Department of Health and Senior Services testing of mosquito samples are done using RT-PCR Taqman techniques.

Submission for West Nile Testing by County through 15 June 2007

County	Species	Pools	Mosquitoes	Positives
Atlantic		**12**	**161**	**0**
	Culiseta melanura	12	161	
Burlington		**8**	**69**	**0**
	Culiseta melanura	8	69	
Camden		**12**	**217**	**0**
	Anopheles punctipennis	1	5	
	Culex restuans	1	1	
	Culiseta melanura	10	211	
Cape May		**27**	**915**	**0**
	Anopheles punctipennis	1	1	
	Anopheles quadrimaculatus	5	292	
	Culex restuans	1	2	
	Culex salinarius	1	2	
	Culex territans	1	2	
	Culiseta melanura	18	616	
Monmouth		**12**	**143**	**0**
	Culex restuans	1	7	
	Culiseta melanura	11	136	
Salem		**14**	**214**	**0**
	Anopheles punctipennis	1	3	
	Anopheles quadrimaculatus	1	2	
	Culiseta melanura	11	206	
	Aedes canadensis canadensis	1	3	
Grand Total		**85**	**1719**	**0**