VECTOR SURVEILLANCE SUMMARY SHEET

WEEK: 3

Culiseta melanura Monitor

June 13 - 19, 2005

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.)	**3.2**	**<0.1**	**68**	**8**	**0**	**Waterford (Camden Co.)**	**1.5**	**0**	**22**	**3**	**0**
Corbin City (Atlantic Co.).	**1.3**	**2.4**	**76**	**8**	**0**	**Centerton (Salem Co.)**	**1.9**	**<0.1**	**11**	**6**	**0**
Dennisville (Cape May Co.)	**5.7**	**1.3**	**620**	**17**	**0**	**Turkey Swamp (Monmouth Co.)**	**0.3**	**0.5**	**36**	**10**	**0**

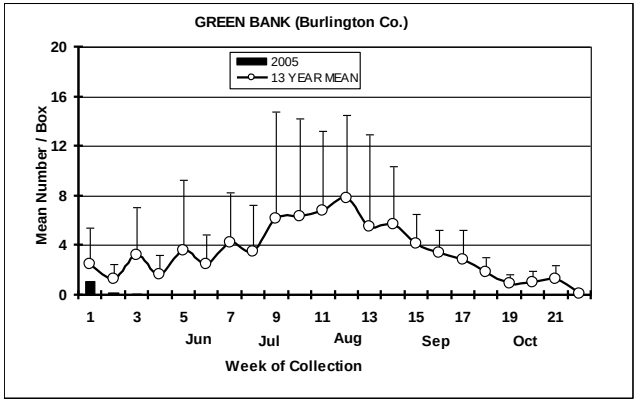
Collections submitted to PHEL for West Nile Virus testing

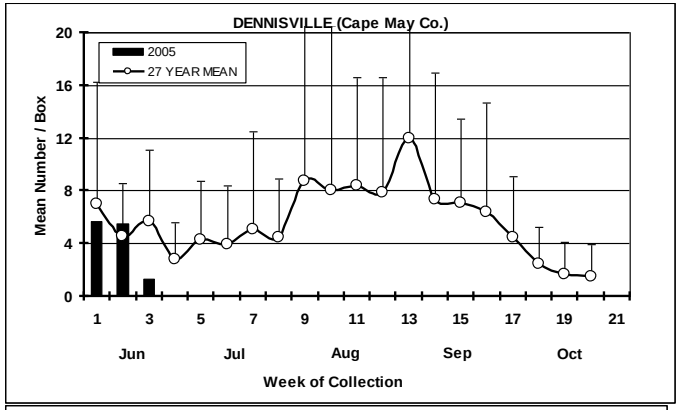
Species	***Cx. pip***	***Cx. rest***	***Cx. sal***	***Cx. spp.***	***Cs. mel***	***Ae. vex***	***Oc. cana***	***Oc. triv***	***Oc. tris***	***Oc. soll.***	***Oc. jap***	***Ae. albo***	***Other***	**TOTALS**
No. Pools	**0**	**0**	**0**	**46**	**52**	**1**	**1**	**0**	**0**	**0**	**8**	**1**	**7**	**116**
Total Specimens	**0**	**0**	**0**	**1999**	**833**	**11**	**1**	**0**	**0**	**0**	**29**	**1**	**18**	**2892**
No. Positive Pools	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

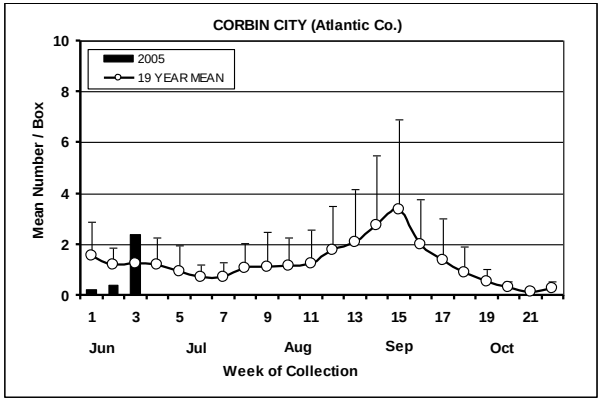
Remarks: In general, spring *Culiseta melanura* populations in New Jersey have been lower than normal at the sites being monitored for EEE activity this year. Unusually low spring temperatures, however, have delayed emergence of adults from the overwintering generation of larvae and produced populations that vary in age from one area to the next. The Dennisville site in Cape May Co. had relatively high populations in early June followed by a sharp decline in the 3rd week of the month. This week's data set shows evidence for a recent emergence of adults at Corbin City after 2 weeks of below normal levels. An influx of nullipars during the latter part of June places large numbers of mosquitoes in contact with susceptible juvenile birds that fledge at that time of year. This, in turn, favors amplification of EEE if virus is present in the adult birds serving as reservoir hosts. *Culiseta melanura* populations typically decline during the month of July. It will be interesting to see how this year's unusual emergence pattern affects amplification of EEE in southern NJ this season. Testing for WNV has, purposely, been minimal to date. The virus testing program will be fully implemented during the 1st week of July.

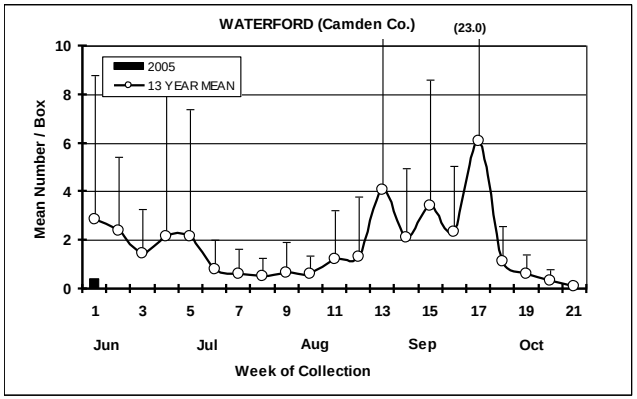
New Jersey Agricultural Experiment Station Publication No. PT-08-40500-03-05
Supported by State funds and funding by the NJ State Mosquito Control Commission.
Summary Prepared by: Wayne J. Crans, Rutgers University

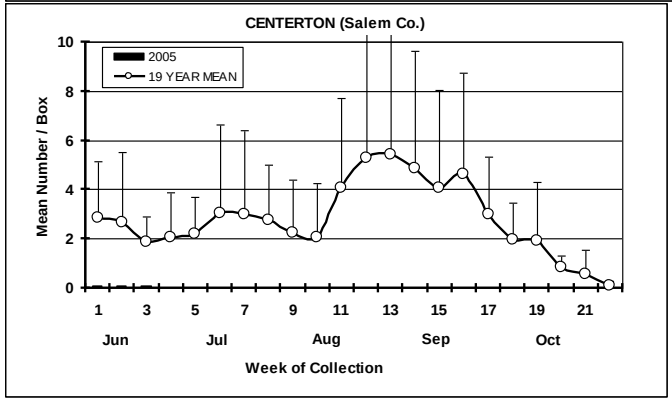
Culiseta melanura Population Graphs

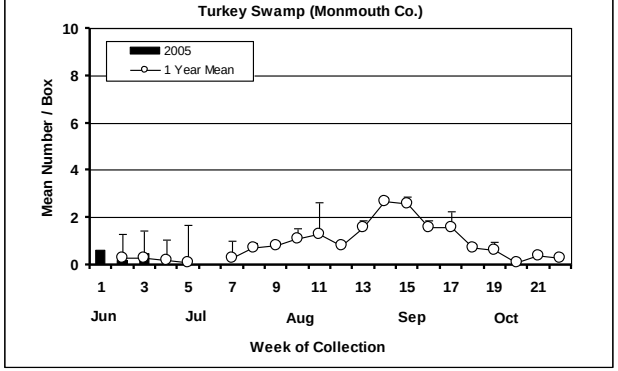












Mosquito Species Submitted for West Nile Virus Testing through June 17, 2005

Species	Pools	Mosquitoes	Positives
Cs. melanura	52	833	0
Cx. mix	46	1999	0
Oc. japonicus	8	29	0
Oc. albopictus	1	1	0
An. punctipennis	3	10	0
Cq. perturbans	2	6	0
Ae. vexans	1	11	0
Oc. grossbecki	1	1	0
Oc. canadensis	1	1	0
An. quadrimaculatus	1	1	0
Grand Total	**116**	**2892**	**0**

Submissions by County through June 17, 2005

County	Species	Pools	Mosquitoes	Positives
Atlantic		**8**	**76**	**0**
	Cs. melanura	8	76	
Burlington		**18**	**115**	**0**
	Cs. melanura	8	68	
	Cx. mix	2	21	
	Oc. japonicus	1	1	
	An. punctipennis	2	6	
	Cq. perturbans	1	5	
	Ae. vexans	1	11	
	Oc. grossbecki	1	1	
	Oc. canadensis	1	1	
	An. quadrimaculatus	1	1	
Camden		**13**	**238**	**0**
	Cs. melanura	3	22	
	Cx. mix	6	203	
	Oc. japonicus	3	12	
	Oc. albopictus	1	1	
Cape May		**17**	**620**	**0**
	Cs. melanura	17	620	
Monmouth		**10**	**36**	**0**
	Cs. melanura	10	36	
Salem		**6**	**11**	**0**
	Cs. melanura	6	11	
Middlesex		**34**	**1494**	**0**
	Cx. mix	31	1482	
	Oc. japonicus	3	12	
Somerset		**3**	**114**	**0**
	Cx. mix	3	114	
Warren		**7**	**188**	**0**
	Cx. mix	4	179	
	Oc. japonicus	1	4	
	An. punctipennis	1	4	
	Cq. perturbans	1	1	
Grand Total		**116**	**2892**	**0**