VECTOR SURVEILLANCE SUMMARY SHEET

WEEK: 2

Culiseta melanura Monitor

June 7 - 11, 2004

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.)	**1.3**	**1.2**	**216**	**10**	**0**	**Waterford (Camden Co.)**	**2.0**	**8.0**	**615**	**16**	**0**
Corbin City (Atlantic Co.).	**1.2**	**1.2**	**90**	**6**	**0**	**Centerton (Salem Co.)**	**2.6**	**3.9**	**391**	**12**	**0**
Dennisville (Cape May Co.)	**4.4**	**7.7**	**602**	**16**	**0**	**Turkey Swamp (Monmouth Co.)**	**0.3**	**1.7**	**77**	**7**	**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	**16**	**20**	**7**	**13**	**85**	**20**	**23**	**3**	1	**0**	**15**	**0**	**46**	**249**
Total Specimens	**301**	**272**	**60**	**156**	**2501**	**551**	**549**	**8**	**2**	**0**	**45**	**0**	**1137**	**5582**
No. Positive Pools	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**-**	**0**	**-**	**0**	**0**

Remarks: *Culiseta melanura* populations remain at or above the long term mean at all of the study sites where the species is being monitored for EEE activity. It is still much too early to predict what will happen later this season but conditions are developing that would favor summer amplification of EEE in southern New Jersey this year. High spring populations over a wide geographic area are an indirect indicator of the numbers of larvae that survived the winter with this species. Current data suggest that winter mortality was minimal in most areas. Adult female *Cs. melanura* that blood feed in June lay eggs that produce a late summer emergence of nullipars. High populations of nulliparous *Cs. melanura* in July and August produce ideal conditions for virus amplification in birds during the early fall months. Wet summers maintain larval habit and maximize the size of late season populations. When drought conditions develop during the summer months, the EEE cycle is usually aborted. Mosquito specimens from 11 counties have been submitted for WNV testing. There has been no evidence of WNV, to date, beyond the 2 positive crows reported from Atlantic County in May.

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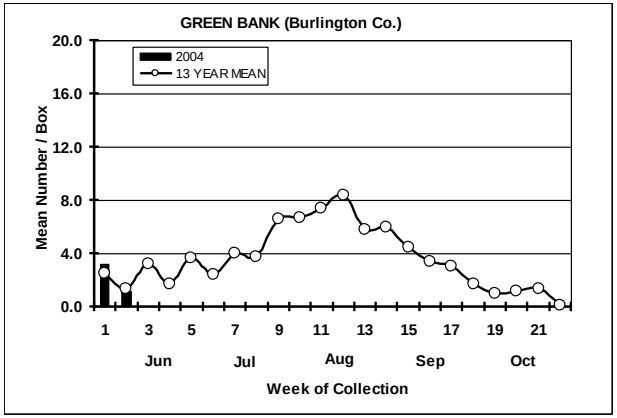
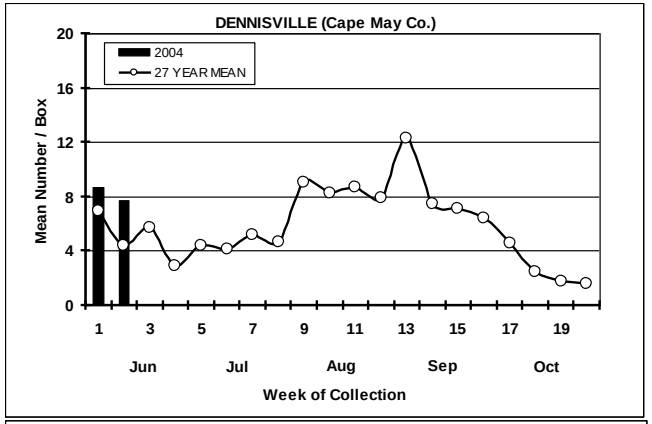
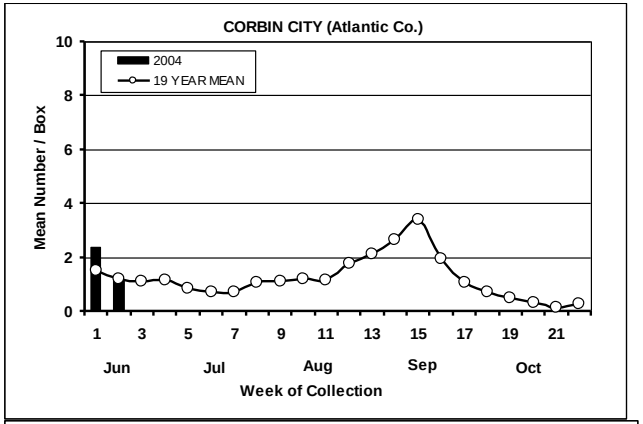
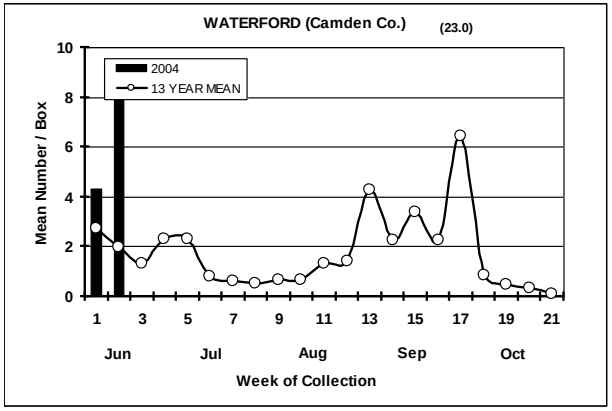
Supported by State funds and funding by the NJ State Mosquito Control Commission.
Summary Prepared by: Wayne J. Crans, Rutgers University

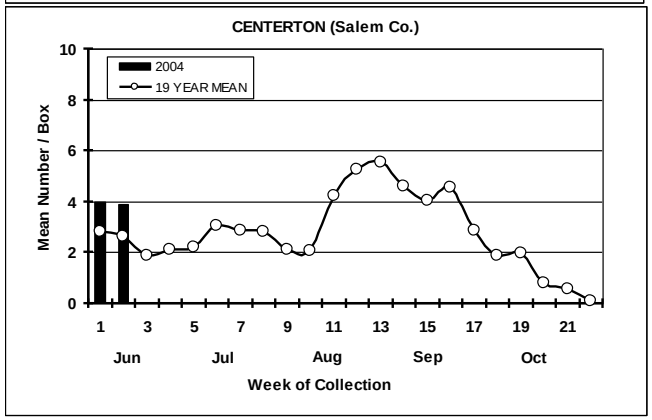
Culiseta melanura Population Graphs

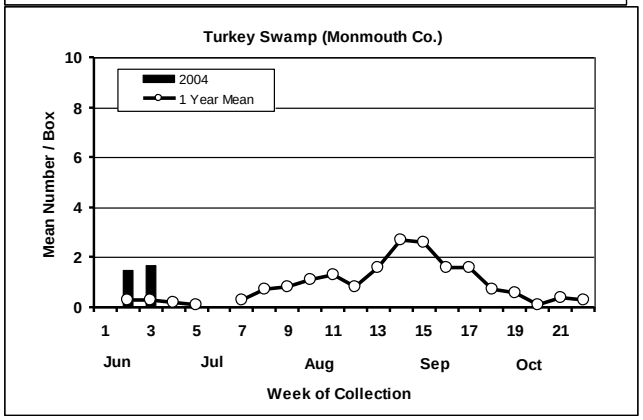












Remarks: Resting box collections indicate that early spring populations of *Cs. melanura* are higher than average over a wide geographic area. The collections from Waterford are 4 times higher than the 13 year mean. The Atlantic Co. Office of Mosquito Control is making the collections from the Corbin City boxes. The Monmouth County Mosquito Extermination Commission is collecting from the resting boxes located at Turkey Swamp.

Mosquito Species Submitted for WNV Testing through June 11, 2004

Species	Pools	Mosquitoes	Positives
Aedes cinereus	2	38	
Aedes vexans	20	551	
Anopheles bradleyi	1	2	
Anopheles punctipennis	8	100	
Culex pipiens	16	301	
Culex restuans	20	272	
Culex salinarius	7	60	
Culex spp.	13	156	
Culiseta melanura	85	2501	
Ochlerotatus abserratus	1	9	
Ochlerotatus canadensis	23	549	
Ochlerotatus cantator	19	785	
Ochlerotatus grossbecki	2	10	
Ochlerotatus japonicus	15	45	
Ochlerotatus sticticus	3	49	
Ochlerotatus stimulans	1	4	
Ochlerotatus trivittatus	3	8	
Coquillettidia perturbans	5	26	
Aedes albopictus	1	3	
Ochlerotatus triseriatus	1	2	
Culex territans	1	11	
Anopheles quadrimaculatus	2	100	
Grand Total	**249**	**5582**	**0**

Submissions by County through June 11, 2004

County	Species	Pools	Mosquitoes	Positives
Atlantic		**85**	**2288**	**0**
	Aedes cinereus	1	35	
	Aedes vexans	10	303	
	Anopheles bradleyi	1	2	
	Anopheles punctipennis	2	5	
	Culex pipiens	2	5	
	Culex restuans	6	113	
	Culex salinarius	2	32	
	Culex spp.	5	104	
	Culiseta melanura	20	583	
	Ochlerotatus canadensis	14	322	
	Ochlerotatus cantator	18	777	
	Ochlerotatus japonicus	2	4	
	Ochlerotatus trivittatus	1	1	
	Coquillettidia perturbans	1	2	
Burlington		**24**	**288**	**0**
	Aedes cinereus	1	3	
	Aedes vexans	1	13	
	Culex spp.	4	10	
	Culiseta melanura	11	221	
	Ochlerotatus abserratus	1	9	
	Ochlerotatus canadensis	1	14	
	Ochlerotatus grossbecki	1	6	
	Ochlerotatus japonicus	1	1	
	Ochlerotatus sticticus	1	6	
	Ochlerotatus stimulans	1	4	
	Ochlerotatus trivittatus	1	1	
Camden		**17**	**621**	**0**
	Anopheles punctipennis	1	6	
	Culiseta melanura	16	615	
Cape May		**20**	**721**	**0**
	Culex restuans	1	8	
	Culiseta melanura	16	602	
	Culex territans	1	11	
	Anopheles quadrimaculatus	2	100	
Cumberland		**11**	**33**	**0**
	Aedes vexans	1	3	
	Culex pipiens	2	8	
	Culex restuans	2	8	
	Culex salinarius	2	4	

	Culiseta melanura	1	2	
	Ochlerotatus canadensis	1	4	
	Ochlerotatus japonicus	2	4	
Gloucester		**9**	**290**	**0**
	Aedes vexans	1	6	
	Culex pipiens	5	224	
	Culex restuans	1	37	
	Culex salinarius	1	20	
	Ochlerotatus japonicus	1	3	
Monmouth		**26**	**258**	**0**
	Aedes vexans	2	52	
	Anopheles punctipennis	1	8	
	Culex pipiens	1	7	
	Culex restuans	2	16	
	Culex salinarius	1	2	
	Culex spp.	3	30	
	Culiseta melanura	8	78	
	Ochlerotatus canadensis	2	49	
	Ochlerotatus cantator	1	8	
	Ochlerotatus japonicus	3	3	
	Ochlerotatus sticticus	1	3	
	Coquillettida Perturbans	1	2	
Salem		**12**	**391**	**0**
	Culiseta melanura	12	391	
Mercer		**29**	**495**	**0**
	Aedes vexans	2	97	
	Anopheles punctipennis	2	43	
	Culex pipiens	5	56	
	Culex restuans	6	66	
	Culex salinarius	1	2	
	Culex spp.	1	12	
	Ochlerotatus canadensis	3	150	
	Ochlerotatus japonicus	4	11	
	Ochlerotatus sticticus	1	40	
	Ochlerotatus trivittatus	1	6	
	Coquillettidia perturbans	1	7	
	Aedes albopictus	1	3	
	Ochlerotatus triseriatus	1	2	
Ocean		**10**	**136**	**0**
	Aedes vexans	2	75	
	Anopheles punctipennis	1	14	
	Culex pipiens	1	1	

	Culex restuans	1	10	
	Culiseta melanura	1	9	
	Ochlerotatus canadensis	1	7	
	Ochlerotatus grossbecki	1	4	
	Ochlerotatus japonicus	1	6	
	Coquillettida Perturbans	1	10	
Sussex		**6**	**61**	**0**
	Aedes vexans	1	2	
	Anopheles punctipennis	1	24	
	Culex restuans	1	14	
	Ochlerotatus canadensis	1	3	
	Ochlerotatus japonicus	1	13	
	Coquillettida perturbans	1	5	
Grand Total		**249**	**5582**	**0**