

VECTOR SURVEILLANCE SUMMARY SHEET

WEEK: 4

Culiseta melanura Monitor

June 21 - 25, 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.)	1.7	0.7	391	19	0	Waterford (Camden Co.)	2.3	0.3	806	24	0
Corbin City (Atlantic Co.)	1.1	2.4	251	15	0	Centerton (Salem Co.)	2.1	1.1	552	21	0
Dennisville (Cape May Co.)	2.9	1.1	895	27	0	Turkey Swamp (Monmouth Co.)	0.2	1.4	155	15	0

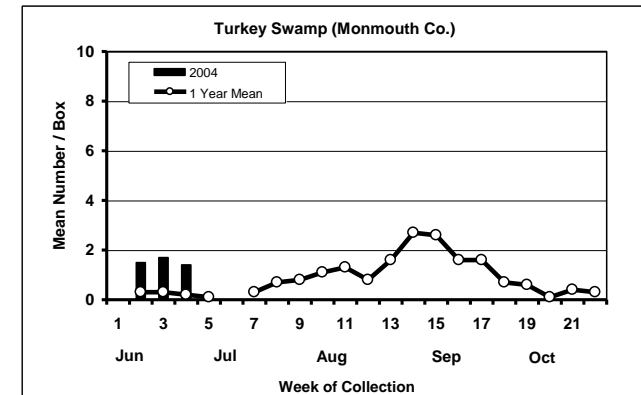
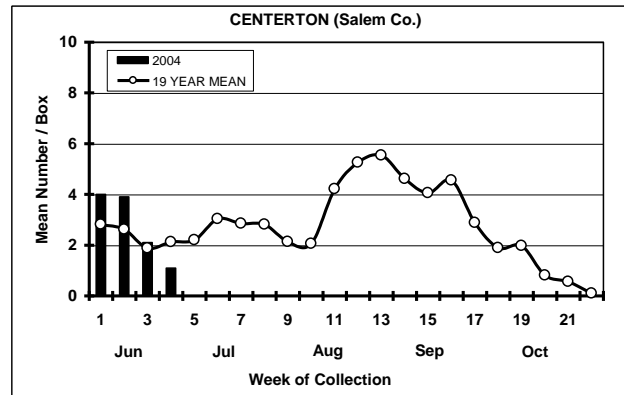
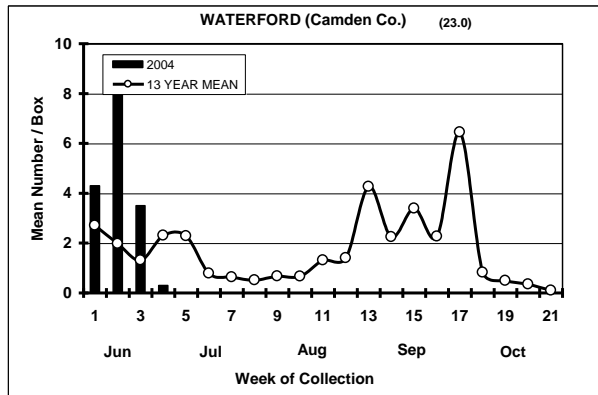
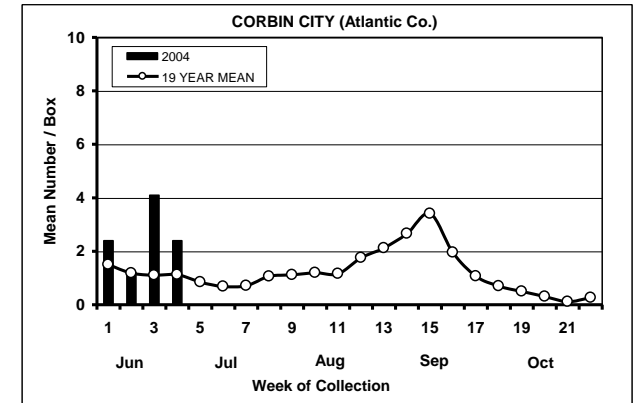
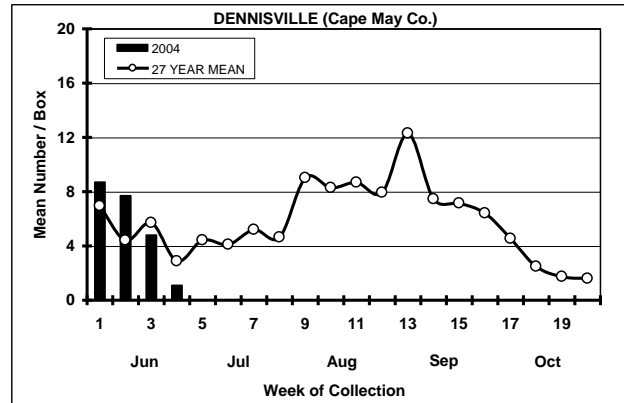
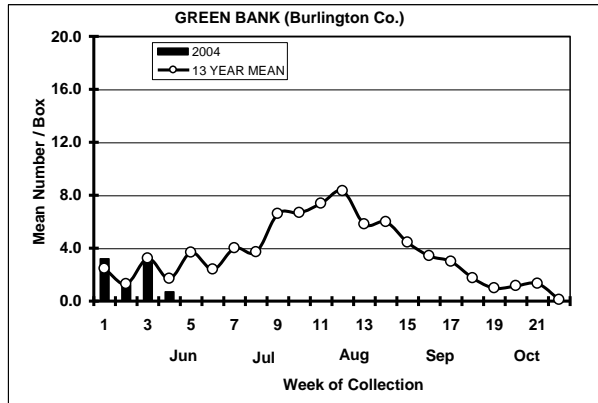
Collections submitted to PHEL for West Nile Virus testing

Species	<i>Cx. pip</i>	<i>Cx. rest</i>	<i>Cx. sal</i>	<i>Cx. spp.</i>	<i>Cs. mel</i>	<i>Ae. vex</i>	<i>Oc. cana</i>	<i>Oc. triv</i>	<i>Oc. tris</i>	<i>Oc. soll.</i>	<i>Oc. jap</i>	<i>Ae. albo</i>	Other	TOTALS
No. Pools	37	57	14	119	158	36	34	4	14	1	43	5	97	619
Total Specimens	560	1,076	104	4,464	3,745	657	807	9	91	1	195	16	1,795	13,520
No. Positive Pools	0	1	0	0	0	0	0	0	0	0	0	0	0	1

Remarks: *Culiseta melanura* populations dropped dramatically during week 4 of the Vector Surveillance season at 4 of the 6 sites where the species is being monitored with resting boxes. Populations were down at Green Bank, Dennisville, Waterford and Centerton. Numbers remained higher than average at Corbin City and Turkey Swamp. Collections over the next week or two will determine if the population decline is an artifact in the data set or a true function of natural mortality in field populations. *Culiseta melanura* typically decline from late June through mid July because of their bivoltine life cycle. Historical data show that an influx of nulliparous specimens is typical in late July and early August when adults begin to emerge from eggs deposited by the spring generation that overwintered as 4th instar larvae. The Cape May Co. Mosquito Control Commission obtained a WNV positive pool of *Cx. restuans* in a gravid trap collection from Upper Township on June 3rd. This is the first indication of WNV amplification, beyond the positive crows reported from Atlantic and Morris counties earlier this season.

New Jersey Agricultural Experiment Station Publication No. PT-08-40500-04-04
 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 25, 2004

Species	Pools	Mosquitoes	Positives
Aedes albopictus	5	16	
Aedes cinereus	2	38	
Aedes vexans	36	657	
Anopheles bradleyi	1	2	
Anopheles punctipennis	22	178	
Anopheles quadrimaculatus	12	413	
Coquilletidia perturbans	15	213	
Culex pipiens	37	560	
Culex restuans	57	1076	1
Culex salinarius	14	104	
Culex spp.	119	4464	
Culex territans	5	20	
Culiseta melanura	158	3745	
Ochlerotatus abserratus	1	9	
Ochlerotatus canadensis	34	807	
Ochlerotatus cantator	23	843	
Ochlerotatus excrucians	2	3	
Ochlerotatus grossbecki	4	13	
Ochlerotatus japonicus	43	195	
Ochlerotatus mitchellae	1	1	
Ochlerotatus sollicitans	1	1	
Ochlerotatus sticticus	3	49	
Ochlerotatus stimulans	2	7	
Ochlerotatus triseriatus	14	91	
Ochlerotatus trivittatus	4	9	
Orthopodomyia signifera	1	2	
Psorophora columbiae	1	1	
Psorophora ferox	1	1	
Uranotaenia sapphirina	1	2	
Grand Total	619	13520	1

Submissions by County through June 25, 2004

County	Species	Pools	Mosquitoes	Positives
Atlantic		124	3615	0
	Aedes albopictus	2	10	
	Aedes cinereus	1	35	
	Aedes vexans	11	307	
	Anopheles bradleyi	1	2	
	Anopheles punctipennis	2	5	
	Coquillettidia perturbans	2	5	
	Culex pipiens	2	5	
	Culex restuans	6	113	
	Culex salinarius	2	32	
	Culex spp.	28	1180	
	Culiseta melanura	29	744	
	Ochlerotatus canadensis	14	322	
	Ochlerotatus cantator	18	777	
	Ochlerotatus japonicus	3	6	
	Ochlerotatus triseriatus	2	71	
	Ochlerotatus trivittatus	1	1	
Burlington		44	565	0
	Aedes cinereus	1	3	
	Aedes vexans	3	21	
	Anopheles punctipennis	1	2	
	Coquillettidia perturbans	1	20	
	Culex spp.	6	75	
	Culiseta melanura	21	397	
	Ochlerotatus abserratus	1	9	
	Ochlerotatus canadensis	1	14	
	Ochlerotatus grossbecki	1	6	
	Ochlerotatus japonicus	3	4	
	Ochlerotatus mitchellae	1	1	
	Ochlerotatus sticticus	1	6	
	Ochlerotatus stimulans	1	4	
	Ochlerotatus trivittatus	1	1	
	Orthopodomyia signifera	1	2	
Camden		28	836	0
	Anopheles punctipennis	3	29	
	Anopheles quadrimaculatus	1	1	
	Culiseta melanura	24	806	
Cape May		73	1573	1
	Aedes albopictus	1	2	

	Anopheles punctipennis	1	2	
	Anopheles quadrimaculatus	7	400	
	Coquillettidia perturbans	1	1	
	Culex pipiens	8	80	
	Culex restuans	14	133	1
	Culex salinarius	2	11	
	Culex territans	3	17	
	Culiseta melanura	31	915	
	Ochlerotatus cantator	2	7	
	Ochlerotatus japonicus	1	2	
	Ochlerotatus sollicitans	1	1	
	Ochlerotatus triseriatus	1	2	
Cumberland		24	109	0
	Aedes vexans	3	14	
	Culex pipiens	4	21	
	Culex restuans	4	23	
	Culex salinarius	4	33	
	Culiseta melanura	1	2	
	Ochlerotatus canadensis	1	4	
	Ochlerotatus cantator	1	1	
	Ochlerotatus japonicus	4	9	
	Ochlerotatus triseriatus	1	1	
	Psorophora columbiae	1	1	
Gloucester		15	394	0
	Aedes vexans	2	7	
	Culex pipiens	5	224	
	Culex restuans	1	37	
	Culex salinarius	1	20	
	Culex spp.	2	100	
	Ochlerotatus japonicus	2	4	
	Ochlerotatus triseriatus	1	1	
	Psorophora ferox	1	1	
Hunterdon		20	952	0
	Culex spp.	19	950	
	Ochlerotatus japonicus	1	2	
Mercer		55	1018	0
	Aedes albopictus	2	4	
	Aedes vexans	4	119	
	Anopheles punctipennis	3	44	
	Coquillettidia perturbans	1	7	
	Culex pipiens	10	94	

	Culex restuans	14	337	
	Culex salinarius	1	2	
	Culex spp.	1	12	
	Ochlerotatus canadensis	6	331	
	Ochlerotatus excrucians	2	3	
	Ochlerotatus japonicus	6	13	
	Ochlerotatus sticticus	1	40	
	Ochlerotatus triseriatus	2	5	
	Ochlerotatus trivittatus	2	7	
Monmouth		53	500	0
	Aedes vexans	4	62	
	Anopheles punctipennis	3	12	
	Anopheles quadrimaculatus	2	4	
	Coquillettidia perturbans	2	5	
	Culex pipiens	3	48	
	Culex restuans	6	104	
	Culex salinarius	1	2	
	Culex spp.	3	30	
	Culiseta melanura	18	158	
	Ochlerotatus canadensis	3	57	
	Ochlerotatus cantator	1	8	
	Ochlerotatus japonicus	4	4	
	Ochlerotatus sticticus	1	3	
	Ochlerotatus triseriatus	2	3	
Morris		15	1009	0
	Culex spp.	15	1009	
Ocean		50	724	0
	Aedes vexans	5	103	
	Anopheles punctipennis	3	43	
	Anopheles quadrimaculatus	1	1	
	Coquillettidia perturbans	3	122	
	Culex pipiens	3	45	
	Culex restuans	3	67	
	Culex salinarius	1	1	
	Culex spp.	7	73	
	Culex territans	1	2	
	Culiseta melanura	10	167	
	Ochlerotatus canadensis	4	61	
	Ochlerotatus grossbecki	3	7	
	Ochlerotatus japonicus	5	29	
	Ochlerotatus triseriatus	1	3	

Salem	23	562	0
Anopheles punctipennis	1	3	
Anopheles quadrimaculatus	1	7	
Culiseta melanura	21	552	
Somerset	37	548	0
Aedes vexans	2	19	
Anopheles punctipennis	2	5	
Coquillettidia perturbans	2	6	
Culex pipiens	2	43	
Culex restuans	6	222	
Culex salinarius	1	2	
Culex spp.	13	214	
Culiseta melanura	1	1	
Ochlerotatus canadensis	2	9	
Ochlerotatus japonicus	4	24	
Ochlerotatus triseriatus	2	3	
Sussex	22	187	0
Aedes vexans	1	2	
Anopheles punctipennis	3	33	
Coquillettidia perturbans	3	47	
Culex restuans	3	40	
Culex salinarius	1	1	
Culex territans	1	1	
Culiseta melanura	2	3	
Ochlerotatus canadensis	3	9	
Ochlerotatus japonicus	3	46	
Ochlerotatus stimulans	1	3	
Uranotaenia sapphirina	1	2	
Warren	36	928	0
Aedes vexans	1	3	
Culex spp.	25	821	
Ochlerotatus cantator	1	50	
Ochlerotatus japonicus	7	52	
Ochlerotatus triseriatus	2	2	
Grand Total	619	13520	1