

VECTOR SURVEILLANCE SUMMARY SHEET

WEEK: 5

Culiseta melanura Monitor June 30 – July 4, 2003

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.)	3.8	1.7	238	23	0	Waterford (Camden Co.)	2.5	<0.1	37	11	0
Corbin City (Atlantic Co.)	0.9	0.4	71	15	0	Centerton (Salem Co.)	2.2	2.0	526	23	0
Dennisville (Cape May Co.)	4.5	1.5	275	14	0	Turkey Swamp (Monmouth Co.)	NA	<0.1	10	9	0

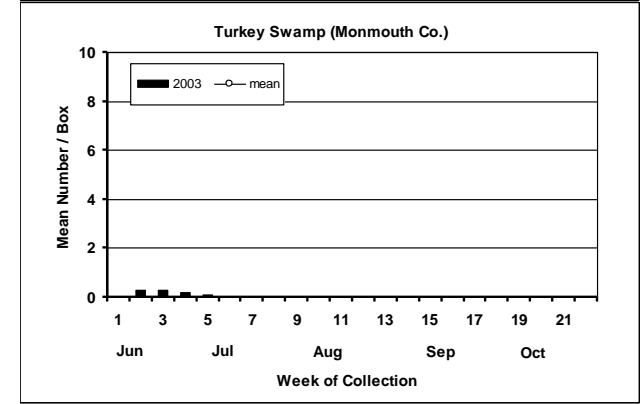
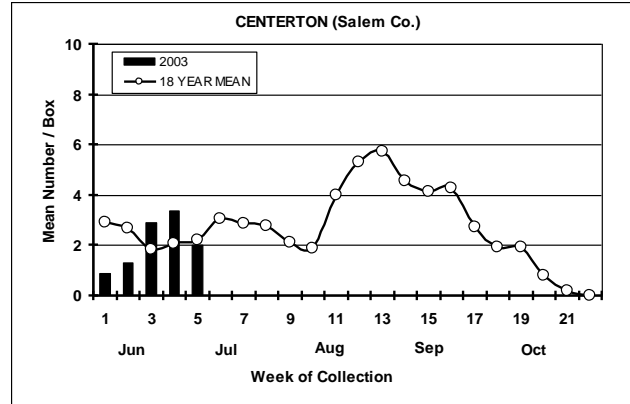
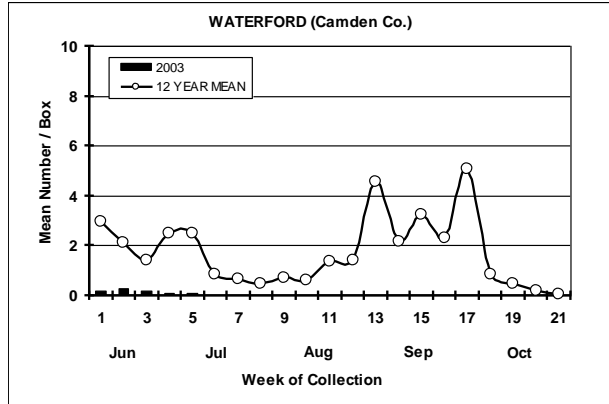
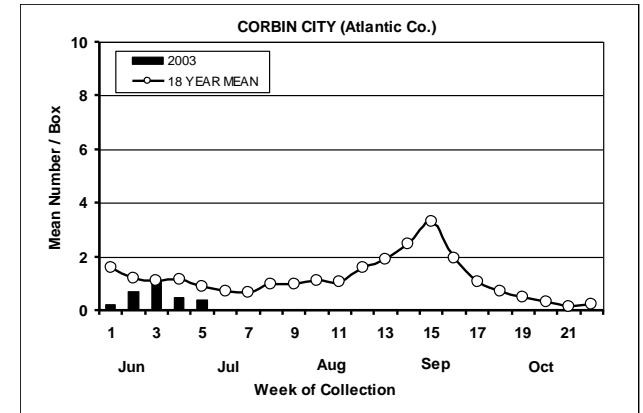
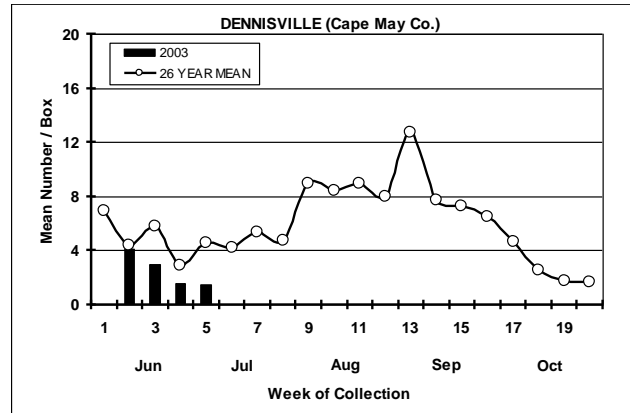
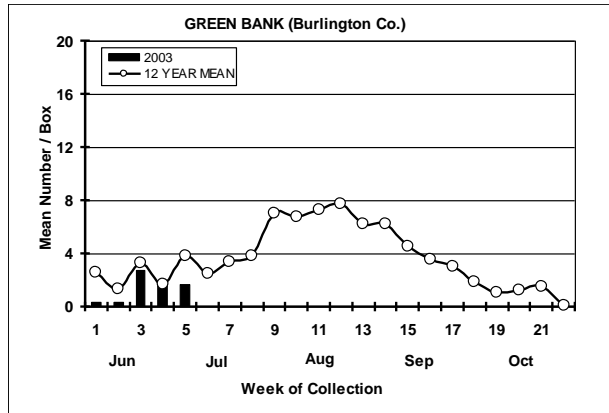
Collections submitted to PHEL for West Nile Virus testing

Species	<i>Cx. pip</i>	<i>Cx. rest</i>	<i>Cx. sal</i>	<i>Cx. spp.</i>	<i>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	79	230	30	948	105	224	34	74	37	122	8	522	2,413
Total Specimens	1,490	5,878	379	26,082	2,115	5,838	688	264	1,002	799	23	5,996	50,554
No. Positive Pools	1	0	0	0	0	0	0	0	0	0	0	0	1

Remarks: *Culiseta melanura* populations dropped somewhat at all NJ study sites but the trend may be more weather related than real. Resting boxes do not do well during hot dry weather and the temperatures NJ experienced this past week have probably severely stressed natural populations. *Cs. melanura* appear to exit resting boxes earlier in the day when temperatures rise into the 90's, presumably to find natural resting sites that afford greater protection against desiccation. The building reports of EEE further south continue to point toward potential for virus activity this season, underscoring the need to closely monitor *Cs. melanura* as an indicator species.. Confirmed crows from Gloucester and Ocean counties marks the first evidence of a WNV amplification cycle in our region this year. Trapping is being conducted at sites where the dead birds were collected with the hope of identifying the first signs of the bird – mosquito cycle in nature. July has traditionally been the period where WNV begins amplification in our geographic region. Positive mosquito pools jumped from 2 to 7 in the Week 5 Surveillance Report last year. More than 50,000 specimens have been tested to date with no positives beyond the single pool of *Cx. pipiens* taken from an overwintering site in January. Floodwater mosquito pools have increased markedly in recent weeks with County submissions making up a large proportion of this year's WNV database.

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Culiseta melanura Population Graphs



Mosquito Species Submitted for WNV Testing through July 4, 2003

Species	Pools	Mosquitoes
Ae. albopictus	8	23
Ae. cinereus	12	26
Ae. vexans	105	2115
An. barberi	1	1
An. bradleyi	1	1
An. crucians	1	3
An. punctipennis	66	226
An. quadrimaculatus	39	401
An. walkeri	2	3
Cq. perturbans	23	472
Cs. inornata	1	2
Cs. melanura	112	1226
Cx. erraticus	7	78
Cx. mix	948	26082
Cx. pipiens	79	1490
Cx. restuans	230	5878
Cx. salinarius	30	379
Cx. territans	13	65
Oc. abserratus	3	9
Oc. atlanticus	1	1
Oc. aurifer	8	176
Oc. canadensis	224	5838
Oc. cantator	86	1410
Oc. excrucians	10	73
Oc. grossbecki	47	548
Oc. japonicus	122	799
Oc. sollicitans	37	1002
Oc. sticticus	41	661
Oc. stimulans	23	248
Oc. taeniorhynchus	1	1
Oc. thibaulti	5	127
Oc. triseriatus	74	264
Oc. trivittatus	34	688
Or. signifera	1	1
Ps. columbiae	3	10
Ps. ferox	15	227
Grand Total	2413	50554

Submission by County through July 4, 2003

County	Species	Pools	Mosquitoes	Positives
Atlantic		157	5625	0
	Ae. vexans	5	195	
	Cq. perturbans	2	100	
	Cs. melanura	19	198	
	Cx. mix	55	2297	
	Cx. restuans	2	50	
	Cx. territans	1	6	
	Oc. canadensis	26	1141	
	Oc. cantator	23	921	
	Oc. grossbecki	4	59	
	Oc. sollicitans	8	344	
	Oc. sticticus	4	74	
	Oc. triseriatus	2	63	
	Oc. trivittatus	1	50	
	Oc. thibaulti	5	127	
Bergen		172	6478	0
	Ae. vexans	6	300	
	An. punctipennis	1	2	
	An. quadrimaculatus	4	4	
	Cx. mix	114	5262	
	Cx. pipiens	5	96	
	Cx. restuans	3	12	
	Cx. salinarius	6	300	
	Oc. canadensis	3	107	
	Oc. grossbecki	1	19	
	Oc. japonicus	20	344	
	Oc. sticticus	1	15	
	Oc. triseriatus	8	17	
Burlington		143	1620	0
	Ae. cinereus	4	4	
	Ae. vexans	10	24	
	An. punctipennis	5	10	
	Cs. melanura	25	250	
	Cx. mix	43	669	
	Cx. restuans	3	7	
	Cx. salinarius	4	8	
	Oc. canadensis	25	504	
	Oc. cantator	5	31	
	Oc. grossbecki	7	22	
	Oc. japonicus	1	4	
	Oc. sollicitans	4	70	
	Oc. sticticus	2	2	
	Oc. stimulans	2	10	
	Oc. triseriatus	1	1	
	An. crucians	1	3	
	An. bradleyi	1	1	

Camden		39	288	0
	Ae. albopictus	1	3	
	Ae. vexans	2	4	
	An. punctipennis	4	9	
	Cq. perturbans	1	1	
	Cs. melanura	11	37	
	Cx. mix	8	172	
	Cx. restuans	5	42	
	Cx. territans	1	1	
	Oc. canadensis	1	4	
	Oc. grossbecki	2	6	
	Oc. sollicitans	1	1	
	Oc. triseriatus	2	8	
Cape May		152	3197	0
	An. punctipennis	3	9	
	An. quadrimaculatus	8	325	
	Cs. melanura	12	237	
	Cx. mix	94	1427	
	Cx. restuans	6	248	
	Cx. territans	2	21	
	Oc. canadensis	15	599	
	Oc. cantator	6	109	
	Oc. grossbecki	6	222	
Cumberland		44	271	0
	Ae. vexans	2	2	
	An. punctipennis	1	1	
	Cs. melanura	3	5	
	Cx. mix	5	6	
	Cx. restuans	6	136	
	Cx. territans	1	1	
	Oc. canadensis	11	50	
	Oc. cantator	1	2	
	Oc. grossbecki	5	8	
	Oc. sticticus	4	41	
	Oc. triseriatus	1	1	
	Ps. ferox	3	17	
	Oc. atlanticus	1	1	
Essex		55	897	0
	Ae. vexans	16	460	
	An. punctipennis	1	1	
	Cx. mix	8	81	
	Oc. canadensis	3	19	
	Oc. sticticus	15	174	
	Oc. stimulans	5	28	
	Oc. triseriatus	1	1	
	Oc. trivittatus	5	102	
	Ps. ferox	1	31	

Gloucester		102	2808	0
	Ae. albopictus	3	3	
	Ae. vexans	3	25	
	An. punctipennis	3	3	
	Cx. mix	81	2659	
	Oc. excrucians	2	3	
	Oc. japonicus	5	9	
	Oc. triseriatus	3	6	
	Ps. ferox	2	100	
Hunterdon		70	2834	0
	Ae. vexans	1	4	
	Cx. mix	60	2809	
	Oc. japonicus	4	12	
	Oc. triseriatus	5	9	
Mercer		264	5620	0
	Ae. cinereus	2	4	
	Ae. vexans	14	429	
	An. punctipennis	11	51	
	An. quadrimaculatus	2	2	
	Cq. perturbans	4	111	
	Cs. melanura	2	2	
	Cx. mix	11	262	
	Cx. pipiens	17	121	
	Cx. restuans	116	3194	
	Cx. salinarius	8	42	
	Cx. territans	2	5	
	Oc. canadensis	40	1143	
	Oc. cantator	1	2	
	Oc. excrucians	3	7	
	Oc. grossbecki	14	188	
	Oc. japonicus	11	22	
	Oc. sticticus	1	2	
	Oc. triseriatus	2	4	
	Oc. trivittatus	1	5	
	Ps. columbiae	1	2	
	Ps. ferox	1	22	
Middlesex		76	1027	0
	Ae. vexans	7	67	
	An. punctipennis	2	2	
	Cq. perturbans	1	1	
	Cx. mix	48	786	
	Oc. canadensis	4	42	
	Oc. cantator	2	18	
	Oc. excrucians	1	2	
	Oc. grossbecki	1	1	
	Oc. sollicitans	3	27	
	Oc. trivittatus	3	47	
	Ps. columbiae	2	8	
	Ps. ferox	2	26	

Monmouth	258	3217	1
Ae. albopictus	1	1	(Overwintering)
Ae. vexans	8	141	
An. punctipennis	4	11	
An. quadrimaculatus	4	7	
Cq. perturbans	3	7	
Cs. melanura	11	14	
Cx. mix	108	1292	
Cx. pipiens	25	774	
Cx. restuans	13	209	
Cx. salinarius	2	12	
Cx. territans	1	3	
Oc. abserratus	2	6	
Oc. canadensis	21	268	
Oc. cantator	16	50	
Oc. excrucians	1	3	
Oc. japonicus	12	32	
Oc. sollicitans	14	354	
Oc. triseriatus	6	26	
Oc. trivittatus	3	4	
An. barberi	1	1	
Oc. taeniorhynchus	1	1	
Ps. ferox	1	1	
Morris	65	1000	0
Ae. cinereus	1	1	
Ae. vexans	4	12	
An. punctipennis	2	7	
An. quadrimaculatus	1	1	
An. walkeri	1	2	
Cx. mix	16	564	
Cx. pipiens	5	126	
Cx. restuans	6	160	
Oc. aurifer	3	20	
Oc. canadensis	5	56	
Oc. grossbecki	1	1	
Oc. japonicus	8	16	
Oc. sticticus	1	1	
Oc. stimulans	1	2	
Oc. triseriatus	9	26	
Oc. trivittatus	1	5	
Ocean	131	2409	
Ae. albopictus	1	3	
Ae. vexans	5	67	
Cq. perturbans	1	1	
Cs. inornata	1	2	
Cs. melanura	7	50	
Cx. mix	41	1085	
Cx. restuans	18	512	
Cx. salinarius	2	3	
Cx. territans	3	5	
Oc. canadensis	16	232	
Oc. cantator	13	167	

	Oc. grossbecki	1	1	
	Oc. japonicus	5	12	
	Oc. sollicitans	7	206	
	Oc. triseriatus	7	42	
	Or. signifera	1	1	
	Ps. ferox	2	20	
Passaic		52	1114	0
	An. punctipennis	2	5	
	Cx. mix	13	461	
	Cx. pipiens	6	33	
	Cx. restuans	16	558	
	Cx. salinarius	1	1	
	Oc. canadensis	2	20	
	Oc. japonicus	8	27	
	Oc. sticticus	3	8	
	Oc. triseriatus	1	1	
Salem		176	2362	0
	Ae. albopictus	2	13	
	Ae. vexans	5	10	
	An. punctipennis	4	6	
	An. quadrimaculatus	8	37	
	Cq. perturbans	3	3	
	Cs. melanura	21	430	
	Cx. erraticus	7	78	
	Cx. mix	60	768	
	Cx. pipiens	15	319	
	Cx. restuans	8	115	
	Cx. salinarius	1	1	
	Cx. territans	1	11	
	Oc. canadensis	18	454	
	Oc. cantator	15	93	
	Oc. grossbecki	5	21	
	Oc. triseriatus	2	2	
	Ps. ferox	1	1	
Somerset		75	1329	0
	An. punctipennis	1	1	
	An. quadrimaculatus	2	2	
	Cx. mix	46	1185	
	Cx. pipiens	1	1	
	Cx. restuans	3	3	
	Oc. japonicus	11	42	
	Oc. triseriatus	6	8	
	Oc. trivittatus	4	81	
	Ps. ferox	1	6	
Sussex		195	4215	0
	Ae. cinereus	4	16	
	Ae. vexans	9	293	
	An. punctipennis	14	90	
	An. quadrimaculatus	4	17	
	Cq. perturbans	8	248	
	Cs. melanura	1	3	

Cx. mix	57	1498	
Cx. pipiens	1	1	
Cx. restuans	12	438	
Cx. salinarius	2	6	
Cx. territans	1	12	
Oc. abserratus	1	3	
Oc. aurifer	1	50	
Oc. canadensis	10	274	
Oc. excrucians	3	58	
Oc. japonicus	24	262	
Oc. sticticus	8	340	
Oc. stimulans	10	174	
Oc. triseriatus	14	44	
Oc. trivittatus	10	385	
Ps. ferox	1	3	
Union	56	1374	0
Ae. vexans	2	7	
Cx. mix	7	244	
Cx. pipiens	4	19	
Cx. restuans	9	172	
Cx. salinarius	4	6	
Oc. canadensis	21	910	
Oc. japonicus	4	5	
Oc. sticticus	2	4	
Oc. triseriatus	1	2	
Oc. trivittatus	2	5	
Warren	131	2869	0
Ae. cinereus	1	1	
Ae. vexans	6	75	
An. punctipennis	8	18	
An. quadrimaculatus	6	6	
An. walkeri	1	1	
Cx. mix	73	2555	
Cx. restuans	4	22	
Oc. aurifer	4	106	
Oc. canadensis	3	15	
Oc. cantator	4	17	
Oc. japonicus	9	12	
Oc. stimulans	5	34	
Oc. triseriatus	3	3	
Oc. trivittatus	4	4	
Grand Total	2413	50554	1