VECTOR SURVEILLANCE SUMMARY SHEET

WEEK: 18

Culiseta melanura Monitor

September 30 – October 4, 2002

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.)	**1.9**	**1.7**	**460**	**54**	**0**	**Waterford (Camden Co.)**	**0.8**	**1.5**	**100**	**19**	**0**
Corbin City (Atlantic Co.).	**0.7**	**<0.1**	**90**	**35**	**0**	**Centerton (Salem Co.)**	**1.9**	**1.9**	**740**	**72**	**0**
Dennisville (Cape May Co.)	**2.7**	**0.3**	**303**	**56**	**0**						

West Nile Virus Collections Submitted for Virus Isolation Attempts

Species	***Cx. pip***	***Cx. rest***	***Cx. sal***	***Cx. spp.***	***Ae. vex***	***Oc. cana***	***Oc. triv***	***Oc. tris***	***Oc. soll.***	***Oc. jap***	***Ae. albo***	***Cs. mel***	***Other***	**TOTALS**
No. Pools	**559**	**375**	**287**	**3,003**	**513**	**157**	**149**	**572**	**173**	**427**	**307**	**282**	**1,456**	**8,260**
Total Specimens	**9,745**	**7,496**	**7,151**	**91,829**	**7,577**	**2,847**	**4,282**	**2,622**	**3,518**	**1,823**	**2,326**	**2,276**	**18,207**	**161,699**
No. Positive Pools	**65**	**13**	**18**	**388**	**7**	**0**	**1**	**4**	**2**	**10**	**4**	**2**	**21**	**535**

Remarks: *Culiseta melanura* populations continue to show signs of recovery at all but the Dennisville and Corbin City sites. Drought conditions forced this species to survive at subsistence levels for most of the season. Recovery did not take place at most sites until well into the month of September. Resting box collection records suggest that larvae from the 2nd generation of their bi-voltine life cycle probably stopped feeding and burrowed into the mud for most of the summer. After their habitat reflooded, moderate numbers emerged as adults nearly 2 months later than usual. The phenomenon was most apparent at Waterford where collections were zero for most of the summer. Eggs from adults currently on the wing will be responsible for producing the overwintering generation of larvae. In all probability, the overwintering cohort will be composed largely of early instar larvae which could delay emergence next spring. It should be noted that WNV was picked up by the late season cohort of adult *Cs. melanura* . *Culex pipiens* adults have entered hibernaculae and are now resting in a state of torpor with abdomens filled with carbohydrates. *Culex* adults still entering gravid traps represent parous individuals that will not survive the winter. As a result, the number of pools testing positive for WNV should decrease from this point on.

New Jersey Agricultural Experiment Station Publication No. PT-40500-17-02
Supported by State funds and funding by the NJ State Mosquito Control Commission.
Summary Prepared by: Wayne J. Crans, Rutgers University

Submissions by County through October 7, 2002

County	Species	Pools	Mosquitoes	Positives
Atlantic		**417**	**10056**	**25**
	Ae. albopictus	15	62	
	Ae. vexans	37	817	
	An. bradleyi	7	174	
	An. punctipennis	1	2	
	An. quadrimaculatus	2	2	
	Cq. perturbans	5	31	
	Cs. melanura	35	100	
	Cx. erraticus	20	608	**1**
	Cx. mix	144	4930	**20**
	Cx. pipiens	4	54	**3**
	Cx. restuans	7	29	
	Cx. salinarius	7	84	
	Cx. territans	2	3	
	Oc. atlanticus	1	2	
	Oc. canadensis	13	507	
	Oc. cantator	36	1366	
	Oc. grossbecki	6	69	
	Oc. japonicus	4	21	
	Oc. sollicitans	21	600	
	Oc. sticticus	5	74	
	Oc. taeniorhynchus	8	100	
	Oc. thibaulti	1	1	
	Oc. triseriatus	23	116	
	Oc. trivittatus	1	3	
	Or. signifera	1	3	
	Ps. ciliata	9	200	**1**
	Ps. ferox	2	98	
Bergen		**697**	**21891**	**128**
	Ae. albopictus	23	267	**1**
	Ae. cinereus	4	66	
	Ae. vexans	44	679	**2**
	An. crucians	1	1	
	An. punctipennis	16	44	
	An. quadrimaculatus	8	49	
	Cq. perturbans	6	16	
	Cs. melanura	3	17	
	Cx. mix	295	13526	**99**
	Cx. pipiens	52	1270	**13**
	Cx. restuans	58	1832	**2**
	Cx. salinarius	77	2904	**8**
	Cx. territans	3	15	
	Cx. vexans	1	20	
	Oc. canadensis	5	66	

	Oc. cantator	1	1	
	Oc. japonicus	24	118	**1**
	Oc. sollicitans	9	91	**1**
	Oc. sticticus	1	2	
	Oc. taeniorhynchus	1	1	
	Oc. thibaulti	15	619	
	Oc. triseriatus	26	103	**1**
	Oc. trivittatus	10	115	
	Or. signifera	4	4	
	Ps. columbiae	2	2	
	Ps. ferox	6	61	
	Ur. sapphirina	2	2	
Burlington		**485**	**5913**	**11**
	Ae. albopictus	32	176	**2**
	Ae. vexans	44	400	**1**
	An. atropos	1	3	
	An. bradleyi	8	62	
	An. crucians	4	6	
	An. punctipennis	18	61	
	An. quadrimaculatus	14	21	
	Cq. perturbans	26	372	
	Cs. inornata	1	1	
	Cs. melanura	59	555	**1**
	Cx. erraticus	12	29	
	Cx. mix	91	1729	**5**
	Cx. pipiens	15	209	**1**
	Cx. restuans	19	335	
	Cx. salinarius	10	54	
	Cx. territans	7	12	
	Oc. atlanticus	1	1	
	Oc. atropalpus	1	1	
	Oc. canadensis	34	947	
	Oc. cantator	12	433	
	Oc. grossbecki	5	32	
	Oc. japonicus	15	20	
	Oc. sollicitans	8	293	
	Oc. taeniorhynchus	2	4	
	Oc. triseriatus	31	119	
	Oc. trivittatus	2	3	
	Ps. columbiae	6	18	**1**
	Ps. ferox	3	10	
	Ur. sapphirina	4	7	
Camden		**242**	**2551**	**5**
	Ae. albopictus	31	96	
	Ae. vexans	26	468	
	An. atropos	2	2	
	An. bradleyi	7	165	
	An. crucians	4	163	

	An. punctipennis	16	33	
	An. quadrimaculatus	12	21	
	Cq. perturbans	9	42	**1**
	Cs. melanura	16	27	
	Cx. erraticus	4	7	
	Cx. mix	53	1171	**4**
	Cx. pipiens	15	193	
	Cx. restuans	14	98	
	Oc. atropalpus	1	1	
	Oc. canadensis	4	11	
	Oc. triseriatus	18	29	
	Oc. trivittatus	2	3	
	Ps. columbiae	2	3	
	Ps. ferox	2	4	
	Ur. sapphirina	4	14	
Cape May		**417**	**5653**	**3**
	Ae. albopictus	10	23	
	Ae. vexans	4	50	
	An. bradleyi	21	479	**1**
	An. punctipennis	3	5	
	An. quadrimaculatus	23	826	
	Cq. perturbans	5	151	
	Cs. melanura	56	469	
	Cx. erraticus	11	369	
	Cx. pipiens	162	1949	**1**
	Cx. restuans	60	415	**1**
	Cx. salinarius	11	285	
	Cx. territans	1	4	
	Oc. canadensis	7	205	
	Oc. cantator	10	98	
	Oc. sollicitans	13	212	
	Oc. taeniorhynchus	12	96	
	Oc. triseriatus	8	17	
Cumberland		**400**	**4490**	**36**
	Ae. albopictus	6	13	
	Ae. vexans	22	58	
	An. bradleyi	7	9	
	An. punctipennis	10	17	**1**
	An. quadrimaculatus	20	45	
	Cq. perturbans	10	15	
	Cs. melanura	15	22	
	Cx. erraticus	14	163	**2**
	Cx. mix	69	758	**4**
	Cx. pipiens	43	1350	**22**
	Cx. restuans	20	639	**2**
	Cx. salinarius	11	136	**4**
	Oc. atropalpus	1	1	
	Oc. canadensis	26	213	

	Oc. cantator	28	204	
	Oc. grossbecki	7	8	
	Oc. sollicitans	17	33	
	Oc. taeniorhynchus	26	309	
	Oc. triseriatus	37	466	
	Oc. trivittatus	1	3	
	Ps. columbiae	6	23	**1**
	Ps. ferox	1	1	
	Ps. howardii	1	1	
	Ur. sapphirina	2	3	
Essex		**169**	**2259**	**19**
	Ae. albopictus	10	120	
	Ae. vexans	8	104	**1**
	An. punctipennis	3	4	
	An. quadrimaculatus	1	4	
	Cx. mix	92	1497	**14**
	Cx. pipiens	12	359	**3**
	Cx. restuans	4	16	
	Cx. salinarius	2	3	
	Oc. japonicus	18	53	**1**
	Oc. sticticus	2	46	
	Oc. triseriatus	12	39	
	Oc. trivittatus	3	9	
	Ps. ciliata	1	1	
	Ps. ferox	1	4	
Gloucester		**467**	**6924**	**22**
	Ae. albopictus	122	719	**1**
	Ae. vexans	9	32	
	An. punctipennis	9	13	
	An. quadrimaculatus	1	1	
	Cq. perturbans	2	3	
	Cx. erraticus	2	22	
	Cx. mix	247	5678	**21**
	Cx. pipiens	10	151	
	Cx. restuans	6	33	
	Cx. salinarius	4	20	
	Oc. grossbecki	1	1	
	Oc. japonicus	2	2	
	Oc. triseriatus	44	181	
	Ps. ferox	6	66	
	Ps. howardii	1	1	
	Ur. sapphirina	1	1	
Hudson		**103**	**1867**	**8**
	Ae. albopictus	7	165	
	Ae. vexans	4	11	
	Ae./Oc. spp.	1	1	
	An. punctipennis	1	4	

	An. quadrimaculatus	1	1	
	Cq. perturbans	5	88	
	Cx. erraticus	1	1	
	Cx. mix	45	351	**4**
	Cx. pipiens	11	279	**3**
	Cx. restuans	4	77	
	Cx. salinarius	20	867	**1**
	Oc. triseriatus	3	22	
Hunterdon		**389**	**13003**	**10**
	Ae. vexans	3	19	
	An. punctipennis	10	47	
	An. quadrimaculatus	2	10	
	Cx. mix	259	11741	**10**
	Cx. pipiens	14	72	
	Cx. restuans	20	481	
	Cx. salinarius	3	13	
	Oc. canadensis	2	14	
	Oc. japonicus	42	267	
	Oc. triseriatus	27	126	
	Oc. trivittatus	5	201	
	Ps. columbiae	2	12	
Mercer		**62**	**436**	**3**
	Ae. vexans	10	117	
	An. punctipennis	7	34	
	An. quadrimaculatus	2	4	
	Cx. mix	4	16	
	Cx. pipiens	15	112	**2**
	Cx. restuans	8	44	**1**
	Cx. salinarius	8	88	
	Oc. japonicus	3	5	
	Oc. triseriatus	4	15	
	Ps. columbiae	1	1	
Middlesex		**291**	**4687**	**36**
	Ae. albopictus	5	40	
	Ae. vexans	14	55	
	An. bradleyi	2	12	
	An. crucians	1	2	
	An. punctipennis	9	18	
	An. quadrimaculatus	3	16	
	Cq. perturbans	8	80	**1**
	Cx. mix	126	2690	**24**
	Cx. pipiens	30	673	**6**
	Cx. restuans	16	419	**2**
	Cx. salinarius	15	383	**1**
	Oc. canadensis	1	1	
	Oc. cantator	11	61	**1**
	Oc. japonicus	11	23	**1**

	Oc. sollicitans	8	96	
	Oc. triseriatus	21	48	
	Oc. trivittatus	3	3	
	Ps. ciliata	1	2	
	Ps. columbiae	4	61	
	Ur. sapphirina	2	4	
Monmouth		**658**	**7381**	**58**
	Ae. albopictus	24	536	
	Ae. vexans	56	577	**1**
	An. barberi	2	2	
	An. punctipennis	18	43	**2**
	An. quadrimaculatus	7	7	**1**
	Cq. perturbans	5	6	
	Cx. erraticus	8	29	
	Cx. mix	239	3055	**39**
	Cx. pipiens	51	659	**9**
	Cx. restuans	28	749	**2**
	Cx. salinarius	14	75	**2**
	Oc. canadensis	12	45	
	Oc. cantator	14	66	
	Oc. japonicus	49	67	
	Oc. sollicitans	51	1229	**1**
	Oc. taeniorhynchus	5	14	
	Oc. triseriatus	56	149	**1**
	Oc. trivittatus	10	16	
	Ps. columbiae	2	19	
	Ur. sapphirina	7	38	
Morris		**406**	**9229**	**34**
	Ae. cinereus	9	249	
	Ae. vexans	35	839	**2**
	An. punctipennis	30	198	**1**
	An. quadrimaculatus	24	731	
	An. walkeri	3	19	
	Cq. perturbans	8	77	
	Cs. melanura	7	11	
	Cx. erraticus	1	5	
	Cx. mix	120	4338	**25**
	Cx. pipiens	24	557	**1**
	Cx. restuans	23	589	**1**
	Cx. salinarius	8	187	**1**
	Cx. territans	3	4	
	Oc. canadensis	8	131	
	Oc. grossbecki	3	101	
	Oc. japonicus	40	139	**1**
	Oc. sticticus	11	420	
	Oc. stimulans	5	151	
	Oc. triseriatus	19	51	**1**
	Oc. trivittatus	19	408	**1**

	Or. signifera	1	1	
	Ur. sapphirina	5	23	
Ocean		**486**	**8074**	**23**
	Ae. albopictus	15	97	
	Ae. vexans	44	367	
	An. bradleyi	10	56	
	An. punctipennis	8	16	
	An. quadrimaculatus	3	8	
	Cq. perturbans	19	260	
	Cs. melanura	21	73	**1**
	Cx. erraticus	1	1	
	Cx. mix	166	4986	**20**
	Cx. pipiens	12	164	**1**
	Cx. restuans	11	160	
	Cx. salinarius	26	428	
	Cx. territans	1	1	
	Oc. canadensis	19	249	
	Oc. cantator	23	146	
	Oc. grossbecki	1	1	
	Oc. japonicus	14	44	**1**
	Oc. sollicitans	34	817	
	Oc. sticticus	1	1	
	Oc. taeniorhynchus	4	28	
	Oc. triseriatus	46	148	
	Ps. ferox	5	19	
	Ur. sapphirina	2	4	
Passaic		**367**	**10406**	**50**
	Ae. cinereus	1	1	
	Ae. vexans	9	47	
	An. punctipennis	11	45	
	An. quadrimaculatus	11	52	**1**
	An. walkeri	1	2	
	Cq. perturbans	4	10	
	Cx. mix	240	9562	**48**
	Cx. pipiens	8	269	
	Cx. restuans	5	75	
	Cx. salinarius	3	4	
	Oc. canadensis	2	19	
	Oc. japonicus	41	193	**1**
	Oc. triseriatus	22	103	
	Oc. trivittatus	6	17	
	Ps. ferox	1	1	
	Ur. sapphirina	2	6	
Salem		**713**	**9478**	**11**
	Ae. albopictus	1	1	
	Ae. vexans	66	920	
	An. bradleyi	22	100	**1**

	An. punctipennis	34	117	**2**
	An. quadrimaculatus	94	1371	**1**
	An. walkeri	3	5	
	Cq. perturbans	10	19	
	Cs. melanura	70	1002	
	Cx. erraticus	53	1229	
	Cx. mix	181	2544	**4**
	Cx. pipiens	24	136	
	Cx. restuans	20	241	**2**
	Cx. salinarius	55	1385	**1**
	Cx. territans	4	9	
	Oc. canadensis	1	2	
	Oc. cantator	14	49	
	Oc. sollicitans	11	146	
	Oc. taeniorhynchus	2	6	
	Oc. thibaulti	2	3	
	Oc. triseriatus	41	173	
	Oc. trivittatus	1	1	
	Ps. columbiae	1	10	
	Ur. sapphirina	3	9	
Somerset		**328**	**7298**	**23**
	Ae. vexans	7	13	
	An. barberi	2	2	
	An. punctipennis	11	30	
	An. quadrimaculatus	4	4	
	Cx. mix	170	6455	**20**
	Cx. pipiens	13	301	
	Cx. restuans	13	217	
	Cx. salinarius	3	5	
	Oc. canadensis	3	5	
	Oc. japonicus	50	124	**2**
	Oc. sticticus	1	1	
	Oc. stimulans	1	1	
	Oc. triseriatus	47	103	**1**
	Oc. trivittatus	2	36	
	Ps. ferox	1	1	
Sussex		**617**	**17819**	**15**
	Ae. cinereus	10	95	
	Ae. vexans	55	1878	
	An. punctipennis	25	269	
	An. quadrimaculatus	19	167	**1**
	An. walkeri	4	144	
	Cq. perturbans	44	1201	
	Cs. morsitans	1	1	
	Cx. mix	209	7809	**12**
	Cx. pipiens	3	55	
	Cx. restuans	13	343	
	Cx. salinarius	5	208	

	Cx. territans	2	28	
	Oc. aurifer	1	24	
	Oc. canadensis	19	421	
	Oc. fitchii	1	49	
	Oc. japonicus	57	443	**2**
	Oc. sticticus	21	651	
	Oc. stimulans	8	207	
	Oc. triseriatus	38	361	
	Oc. trivittatus	78	3441	
	Or. signifera	1	1	
	Ur. sapphirina	3	23	
Union		**136**	**3387**	**11**
	Ae. albopictus	6	11	
	Ae. vexans	5	26	
	An. punctipennis	4	7	
	An. quadrimaculatus	2	3	
	Cx. mix	48	1772	**11**
	Cx. pipiens	31	869	
	Cx. restuans	18	645	
	Cx. salinarius	4	21	
	Oc. japonicus	5	8	
	Oc. sollicitans	1	1	
	Oc. triseriatus	12	24	
Warren		**410**	**8897**	**4**
	Ae. cinereus	1	3	
	Ae. vexans	11	100	
	An. crucians	1	5	
	An. punctipennis	27	108	
	An. quadrimaculatus	24	293	
	An. walkeri	9	356	
	Cq. perturbans	11	115	
	Cx. mix	205	7221	**4**
	Cx. pipiens	10	64	
	Cx. restuans	8	59	
	Cx. salinarius	1	1	
	Oc. atropalpus	1	2	
	Oc. canadensis	1	11	
	Oc. japonicus	52	296	
	Oc. stimulans	2	8	
	Oc. triseriatus	37	229	
	Oc. trivittatus	6	23	
	Or. signifera	1	1	
	Ur. sapphirina	2	2	
Grand Total		**8260**	**161699**	**535**

Epizootic/Epidemic Activity by County through October 7, 2002

County	MIR for Oct, 7	Human Cases	Horse Cases	Number of Positive Mosquito Species
Essex	8.41			4
Cumberland	8.01		8	7
Monmouth	7.86		4	9
Middlesex	7.68		1	7
Mercer	6.88	4		2
Bergen	5.88			9
Passaic	4.8			3
Hudson	4.28	1		3
Morris	3.68			9
Union	3.25			1
Gloucester	3.17		2	2
Somerset	3.15			3
Ocean	2.85		2	4
Atlantic	2.48		1	4
Camden	1.96			2
Burlington	1.86	1	3	6
Salem	1.16		6	6
Sussex	0.84			3
Hunterdon	0.77			1
Cape May	0.53	1		3
Warren	0.45			1

Activity in New Jersey based on Minimum Infection Rates