

# VECTOR SURVEILLANCE SUMMARY SHEET

WEEK: 7

## *Culiseta melanura* Monitor July 14-18, 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 |
| <b>Green Bank</b><br>(Burlington Co.) | 2.5                      | 11.8                            | 807                     | 40                            | 2                      | <b>Waterford</b><br>(Camden Co.)      | 0.7                      | 0.1                             | 52                      | 17                            | 0                      |
| <b>Corbin City</b><br>(Atlantic Co.)  | 0.7                      | 0.6                             | 103                     | 33                            | 0                      | <b>Centerton</b><br>(Salem Co.)       | 2.9                      | 2.5                             | 793                     | 34                            | 0                      |
| <b>Dennisville</b><br>(Cape May Co.)  | 5.4                      | 3.7                             | 371                     | 20                            | 0                      | <b>Turkey Swamp</b><br>(Monmouth Co.) | NA                       | 0.3                             | 14                      | 11                            | 0                      |

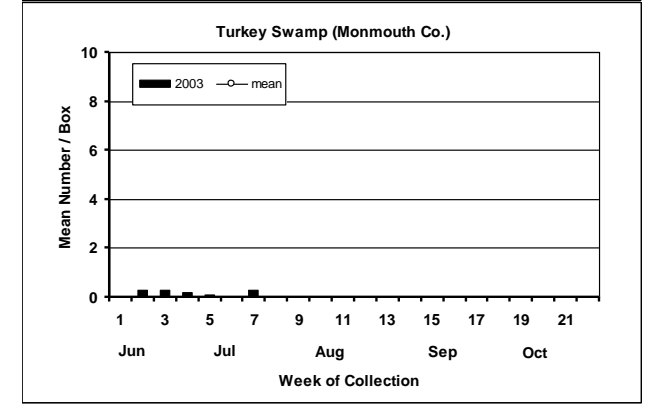
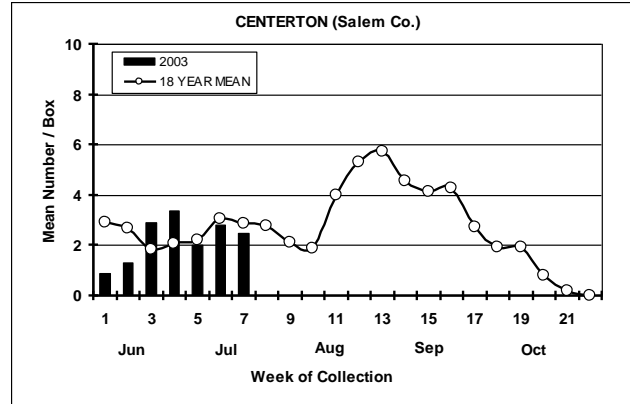
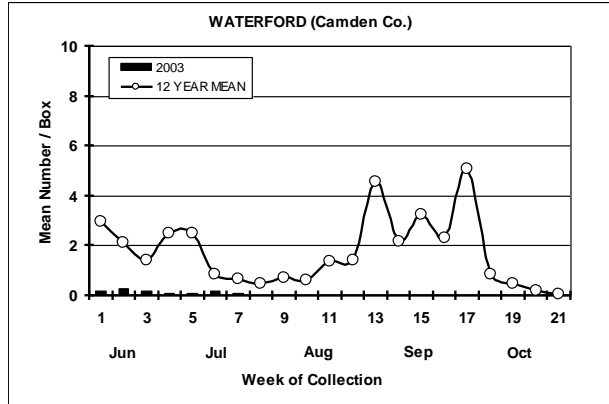
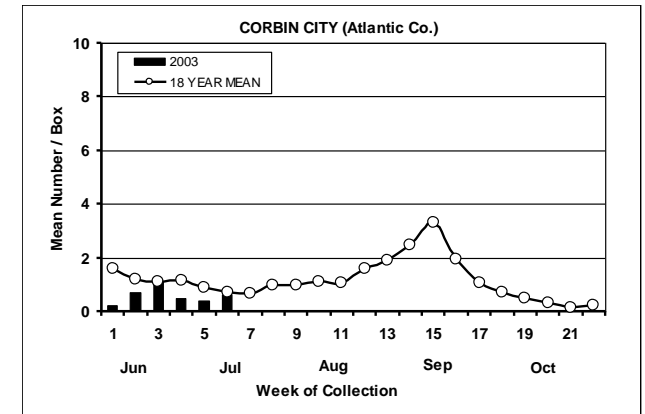
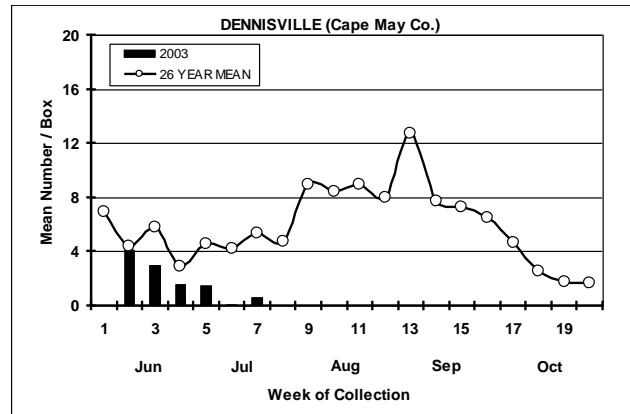
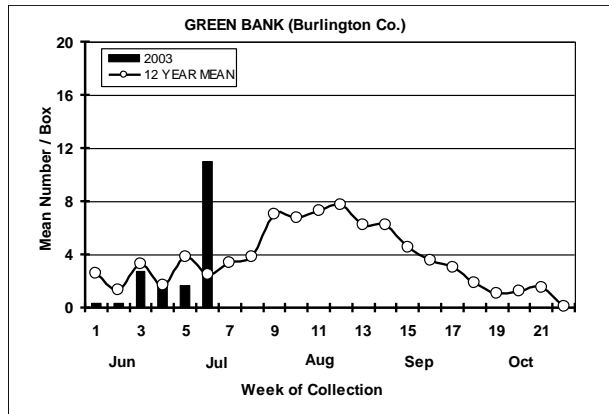
### Collections submitted to PHEL for West Nile Virus testing

| 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        |
|---------------------------|----------------|-----------------|----------------|-----------------|----------------|-----------------|-----------------|-----------------|------------------|----------------|-----------------|--------|---------------|
| <b>No. Pools</b>          | 93             | 275             | 53             | 1,224           | 143            | 247             | 57              | 114             | 49               | 155            | 18              | 703    | <b>3,130</b>  |
| <b>Total Specimens</b>    | 1,700          | 7,445           | 1,128          | 35,908          | 3,262          | 6,220           | 1,152           | 608             | 1,218            | 965            | 58              | 15,739 | <b>69,183</b> |
| <b>No. Positive Pools</b> | 1              | 0               | 0              | 3               | 0              | 1               | 0               | 0               | 0                | 0              | 0               | 0      | <b>5</b>      |

**Remarks:** *Cs. melanura* populations increased sharply during Week 7 at the Green bank study site indicating that the 2<sup>nd</sup> generation of this mosquito's bivoltine life cycle has emerged in that area. This is the study site where EEE was isolated from 11 Black-blooded *Cs. melanura* from a June 30 collection. A 2<sup>nd</sup> isolation from the Green Bank site was obtained from a pool of 50 Unengorged *Cs. melanura* collected on July 14. Emergence of the 2<sup>nd</sup> generation provides an influx of physiologically "young" *Cs. melanura* along the eastern seaboard that are fully capable of amplifying EEE in local bird populations. We anticipate similar phenomena at other study sites in the state and region-wide potential for EEE acquisition by bridge vectors. WNV is also being amplified by *Culex* mosquitoes, as evidenced by crow deaths in 7 new counties and recent positive mosquito pools from Ocean, Somerset, Atlantic and Gloucester counties. A positive pool of *Ochlerotatus canadensis* collected from the Mullica area of Atlantic Co. represents the first evidence that WNV is being passed on to bridge vectors. The Green Bank resting box site is also located along the Mullica River, indicating that both EEE & WNV are active this year in the drainage system immediately adjacent to NJ's Atlantic City resort area.

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| New Jersey Agricultural Experiment Station Publication No. PT-40500-07-03<br>Supported by State funds and funding by the NJ State Mosquito Control Commission.<br>Summary Prepared by: Wayne J. Crans, Rutgers University |
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# Culiseta melanura Population Graphs



## Mosquito Species Submitted for WNV Testing through July 18, 2003

| <b>Species</b>      | <b>Pools</b> | <b>Mosquitoes</b> |
|---------------------|--------------|-------------------|
| Ae. albopictus      | 18           | 58                |
| Ae. cinereus        | 13           | 36                |
| Ae. vexans          | 143          | 3262              |
| An. barberi         | 2            | 2                 |
| An. bradleyi        | 2            | 3                 |
| An. crucians        | 1            | 3                 |
| An. punctipennis    | 86           | 355               |
| An. quadrimaculatus | 58           | 1020              |
| An. walkeri         | 2            | 3                 |
| Cq. perturbans      | 40           | 1031              |
| Cs. inornata        | 1            | 2                 |
| Cs. melanura        | 161          | 2318              |
| Cx. erraticus       | 7            | 78                |
| Cx. mix             | 1224         | 35908             |
| Cx. pipiens         | 93           | 1700              |
| Cx. restuans        | 275          | 7445              |
| Cx. salinarius      | 53           | 1128              |
| Cx. territans       | 26           | 134               |
| Oc. abserratus      | 3            | 9                 |
| Oc. atlanticus      | 3            | 3                 |
| Oc. aurifer         | 8            | 176               |
| Oc. canadensis      | 247          | 6220              |
| Oc. cantator        | 98           | 1678              |
| Oc. excrucians      | 10           | 73                |
| Oc. grossbecki      | 48           | 557               |
| Oc. japonicus       | 155          | 965               |
| Oc. mitchellae      | 1            | 1                 |
| Oc. sollicitans     | 49           | 1218              |
| Oc. sticticus       | 64           | 1155              |
| Oc. stimulans       | 24           | 249               |
| Oc. taeniorhynchus  | 1            | 1                 |
| Oc. thibaulti       | 5            | 127               |
| Oc. triseriatus     | 114          | 608               |
| Oc. trivittatus     | 57           | 1152              |
| Or. signifera       | 2            | 16                |
| Ps. columbiae       | 4            | 11                |
| Ps. ferox           | 32           | 478               |
| <b>Grand Total</b>  | <b>3130</b>  | <b>69183</b>      |

## Submissions by County through July 18, 2003

| County            | Species             | Pools      | Mosquitoes  | Positives |
|-------------------|---------------------|------------|-------------|-----------|
| <b>Atlantic</b>   |                     | <b>195</b> | <b>6947</b> | <b>1</b>  |
|                   | Ae. vexans          | 9          | 385         |           |
|                   | An. punctipennis    | 1          | 1           |           |
|                   | Cq. perturbans      | 2          | 100         |           |
|                   | Cs. melanura        | 22         | 252         |           |
|                   | Cx. mix             | 61         | 2597        |           |
|                   | Cx. restuans        | 5          | 130         |           |
|                   | Cx. salinarius      | 2          | 52          |           |
|                   | Cx. territans       | 3          | 17          |           |
|                   | Oc. canadensis      | 29         | 1258        | 1         |
|                   | Oc. cantator        | 27         | 1114        |           |
|                   | Oc. grossbecki      | 4          | 59          |           |
|                   | Oc. japonicus       | 2          | 9           |           |
|                   | Oc. sollicitans     | 11         | 471         |           |
|                   | Oc. sticticus       | 5          | 124         |           |
|                   | Oc. triseriatus     | 3          | 101         |           |
|                   | Oc. trivittatus     | 2          | 98          |           |
|                   | Oc. thibaulti       | 5          | 127         |           |
|                   | Or. signifera       | 1          | 15          |           |
|                   | Ps. ferox           | 1          | 37          |           |
| <b>Bergen</b>     |                     | <b>223</b> | <b>8173</b> | <b>1</b>  |
|                   | Ae. albopictus      | 1          | 1           |           |
|                   | Ae. cinereus        | 1          | 10          |           |
|                   | Ae. vexans          | 9          | 402         |           |
|                   | An. punctipennis    | 2          | 8           |           |
|                   | An. quadrimaculatus | 4          | 4           |           |
|                   | Cx. mix             | 137        | 6412        | 1         |
|                   | Cx. pipiens         | 8          | 124         |           |
|                   | Cx. restuans        | 7          | 125         |           |
|                   | Cx. salinarius      | 9          | 437         |           |
|                   | Cx. territans       | 1          | 2           |           |
|                   | Oc. canadensis      | 4          | 111         |           |
|                   | Oc. grossbecki      | 1          | 19          |           |
|                   | Oc. japonicus       | 22         | 362         |           |
|                   | Oc. sticticus       | 1          | 15          |           |
|                   | Oc. triseriatus     | 15         | 121         |           |
|                   | Oc. trivittatus     | 1          | 20          |           |
| <b>Burlington</b> |                     | <b>182</b> | <b>2202</b> | <b>0</b>  |
|                   | Ae. albopictus      | 1          | 4           |           |
|                   | Ae. cinereus        | 4          | 4           |           |
|                   | Ae. vexans          | 13         | 153         |           |
|                   | An. punctipennis    | 7          | 30          |           |
|                   | Cq. perturbans      | 1          | 45          |           |
|                   | Cs. melanura        | 30         | 330         |           |
|                   | Cx. mix             | 49         | 773         |           |
|                   | Cx. restuans        | 5          | 28          |           |
|                   | Cx. salinarius      | 4          | 8           |           |
|                   | Oc. canadensis      | 29         | 604         |           |
|                   | Oc. cantator        | 6          | 34          |           |
|                   | Oc. grossbecki      | 8          | 31          |           |

|                     |            |             |          |
|---------------------|------------|-------------|----------|
| Oc. japonicus       | 2          | 5           |          |
| Oc. sollicitans     | 4          | 70          |          |
| Oc. sticticus       | 3          | 19          |          |
| Oc. stimulans       | 2          | 10          |          |
| Oc. triseriatus     | 6          | 12          |          |
| Oc. trivittatus     | 2          | 3           |          |
| An. barberi         | 1          | 1           |          |
| An. crucians        | 1          | 3           |          |
| Ps. ferox           | 2          | 33          |          |
| An. bradleyi        | 1          | 1           |          |
| Oc. mitchellae      | 1          | 1           |          |
| <b>Camden</b>       | <b>52</b>  | <b>392</b>  | <b>0</b> |
| Ae. albopictus      | 1          | 3           |          |
| Ae. vexans          | 3          | 5           |          |
| An. punctipennis    | 6          | 53          |          |
| An. quadrimaculatus | 1          | 2           |          |
| Cq. perturbans      | 1          | 1           |          |
| Cs. melanura        | 14         | 45          |          |
| Cx. mix             | 10         | 208         |          |
| Cx. restuans        | 6          | 51          |          |
| Cx. territans       | 2          | 3           |          |
| Oc. canadensis      | 2          | 5           |          |
| Oc. grossbecki      | 2          | 6           |          |
| Oc. sollicitans     | 1          | 1           |          |
| Oc. sticticus       | 1          | 1           |          |
| Oc. triseriatus     | 2          | 8           |          |
| <b>Cape May</b>     | <b>203</b> | <b>4691</b> | <b>0</b> |
| An. punctipennis    | 4          | 14          |          |
| An. quadrimaculatus | 21         | 932         |          |
| Cs. melanura        | 19         | 421         |          |
| Cx. mix             | 115        | 1999        |          |
| Cx. restuans        | 9          | 339         |          |
| Cx. salinarius      | 1          | 2           |          |
| Cx. territans       | 6          | 53          |          |
| Oc. canadensis      | 15         | 599         |          |
| Oc. cantator        | 7          | 110         |          |
| Oc. grossbecki      | 6          | 222         |          |
| <b>Cumberland</b>   | <b>59</b>  | <b>348</b>  | <b>0</b> |
| 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      | 14         | 74          |          |
| Oc. cantator        | 1          | 2           |          |
| Oc. grossbecki      | 5          | 8           |          |
| Oc. sticticus       | 8          | 64          |          |
| Oc. triseriatus     | 1          | 1           |          |
| Oc. trivittatus     | 3          | 5           |          |
| Ps. ferox           | 7          | 41          |          |
| Oc. atlanticus      | 2          | 2           |          |

|                   |            |             |          |
|-------------------|------------|-------------|----------|
| <b>Essex</b>      | <b>86</b>  | <b>1456</b> | <b>0</b> |
| Ae. vexans        | 18         | 487         |          |
| An. punctipennis  | 2          | 2           |          |
| Cx. mix           | 13         | 123         |          |
| Oc. canadensis    | 4          | 20          |          |
| Oc. japonicus     | 1          | 1           |          |
| Oc. sticticus     | 24         | 415         |          |
| Oc. stimulans     | 6          | 29          |          |
| Oc. triseriatus   | 1          | 1           |          |
| Oc. trivittatus   | 10         | 224         |          |
| Ps. ferox         | 7          | 154         |          |
| <b>Gloucester</b> | <b>161</b> | <b>4023</b> | <b>1</b> |
| Ae. albopictus    | 9          | 14          |          |
| Ae. vexans        | 6          | 107         |          |
| An. punctipennis  | 5          | 8           |          |
| Cx. mix           | 98         | 3406        | 1        |
| Cx. pipiens       | 2          | 3           |          |
| Cx. restuans      | 6          | 160         |          |
| Cx. salinarius    | 5          | 149         |          |
| Cx. territans     | 1          | 4           |          |
| Oc. canadensis    | 2          | 17          |          |
| Oc. excrucians    | 2          | 3           |          |
| Oc. japonicus     | 12         | 30          |          |
| Oc. sticticus     | 2          | 5           |          |
| Oc. triseriatus   | 6          | 10          |          |
| Oc. trivittatus   | 1          | 4           |          |
| Ps. ferox         | 3          | 101         |          |
| An. bradleyi      | 1          | 2           |          |
| <b>Hudson</b>     | <b>54</b>  | <b>1227</b> | <b>0</b> |
| Ae. albopictus    | 1          | 18          |          |
| Ae. vexans        | 3          | 145         |          |
| Cq. perturbans    | 4          | 151         |          |
| Cx. mix           | 23         | 130         |          |
| Cx. pipiens       | 5          | 107         |          |
| Cx. restuans      | 7          | 321         |          |
| Cx. salinarius    | 6          | 300         |          |
| Oc. sollicitans   | 1          | 7           |          |
| Oc. triseriatus   | 2          | 2           |          |
| Oc. trivittatus   | 1          | 44          |          |
| Aedes             | 1          | 2           |          |
| <b>Hunterdon</b>  | <b>100</b> | <b>4058</b> | <b>0</b> |
| Ae. vexans        | 1          | 4           |          |
| An. punctipennis  | 1          | 2           |          |
| Cx. mix           | 82         | 3909        |          |
| Oc. japonicus     | 7          | 40          |          |
| Oc. triseriatus   | 6          | 11          |          |
| Oc. trivittatus   | 3          | 92          |          |

| <b>Mercer</b>       | <b>295</b> | <b>6651</b> | <b>0</b>      |
|---------------------|------------|-------------|---------------|
| Ae. cinereus        | 2          | 4           |               |
| Ae. vexans          | 15         | 444         |               |
| An. punctipennis    | 12         | 62          |               |
| An. quadrimaculatus | 2          | 2           |               |
| Cq. perturbans      | 10         | 441         |               |
| Cs. melanura        | 2          | 2           |               |
| Cx. mix             | 11         | 262         |               |
| Cx. pipiens         | 21         | 193         |               |
| Cx. restuans        | 128        | 3732        |               |
| Cx. salinarius      | 10         | 50          |               |
| Cx. territans       | 2          | 5           |               |
| Oc. canadensis      | 41         | 1166        |               |
| Oc. cantator        | 1          | 2           |               |
| Oc. excrucians      | 3          | 7           |               |
| Oc. grossbecki      | 14         | 188         |               |
| Oc. japonicus       | 12         | 25          |               |
| Oc. sticticus       | 1          | 2           |               |
| Oc. triseriatus     | 2          | 4           |               |
| Oc. trivittatus     | 1          | 5           |               |
| Ps. columbiae       | 1          | 2           |               |
| Ps. ferox           | 3          | 52          |               |
| Oc. atlanticus      | 1          | 1           |               |
| <b>Middlesex</b>    | <b>106</b> | <b>1348</b> | <b>0</b>      |
| Ae. albopictus      | 1          | 1           |               |
| Ae. vexans          | 8          | 73          |               |
| An. punctipennis    | 4          | 4           |               |
| An. quadrimaculatus | 2          | 2           |               |
| Cq. perturbans      | 1          | 1           |               |
| Cx. mix             | 63         | 1020        |               |
| Oc. canadensis      | 5          | 47          |               |
| Oc. cantator        | 2          | 18          |               |
| Oc. excrucians      | 1          | 2           |               |
| Oc. grossbecki      | 1          | 1           |               |
| Oc. sollicitans     | 9          | 96          |               |
| Oc. triseriatus     | 1          | 1           |               |
| Oc. trivittatus     | 4          | 48          |               |
| Ps. columbiae       | 2          | 8           |               |
| Ps. ferox           | 2          | 26          |               |
| <b>Monmouth</b>     | <b>288</b> | <b>3821</b> | <b>1</b>      |
| Ae. albopictus      | 1          | 1           |               |
| Ae. vexans          | 13         | 287         |               |
| An. punctipennis    | 4          | 11          |               |
| An. quadrimaculatus | 4          | 7           |               |
| Cq. perturbans      | 3          | 7           |               |
| Cs. melanura        | 11         | 14          |               |
| Cx. mix             | 119        | 1565        |               |
| Cx. pipiens         | 25         | 774         | overwintering |
| Cx. restuans        | 13         | 209         |               |
| Cx. salinarius      | 2          | 12          |               |
| Cx. territans       | 1          | 3           |               |
| Oc. abserratus      | 2          | 6           |               |

|                     |            |             |          |
|---------------------|------------|-------------|----------|
| Oc. canadensis      | 24         | 294         |          |
| Oc. cantator        | 18         | 79          |          |
| Oc. excrucians      | 1          | 3           |          |
| Oc. japonicus       | 15         | 42          |          |
| Oc. sollicitans     | 15         | 365         |          |
| Oc. triseriatus     | 10         | 132         |          |
| Oc. trivittatus     | 3          | 4           |          |
| An. barberi         | 1          | 1           |          |
| Oc. taeniorhynchus  | 1          | 1           |          |
| Ps. ferox           | 2          | 4           |          |
| <b>Morris</b>       | <b>70</b>  | <b>1250</b> | <b>0</b> |
| Ae. cinereus        | 1          | 1           |          |
| Ae. vexans          | 4          | 12          |          |
| An. punctipennis    | 2          | 7           |          |
| An. quadrimaculatus | 1          | 1           |          |
| An. walkeri         | 1          | 2           |          |
| Cx. mix             | 21         | 814         |          |
| 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           |          |
| <b>Ocean</b>        | <b>181</b> | <b>3784</b> | <b>0</b> |
| Ae. albopictus      | 1          | 3           |          |
| Ae. vexans          | 11         | 211         |          |
| An. punctipennis    | 1          | 8           |          |
| Cq. perturbans      | 4          | 16          |          |
| Cs. inornata        | 1          | 2           |          |
| Cs. melanura        | 7          | 50          |          |
| Cx. mix             | 60         | 1882        |          |
| Cx. restuans        | 23         | 696         |          |
| Cx. salinarius      | 5          | 103         |          |
| Cx. territans       | 5          | 10          |          |
| Oc. canadensis      | 18         | 285         |          |
| Oc. cantator        | 15         | 195         |          |
| Oc. grossbecki      | 1          | 1           |          |
| Oc. japonicus       | 8          | 20          |          |
| Oc. sollicitans     | 8          | 208         |          |
| Oc. triseriatus     | 9          | 71          |          |
| Oc. trivittatus     | 1          | 2           |          |
| Or. signifera       | 1          | 1           |          |
| Ps. ferox           | 2          | 20          |          |



|                     |            |             |          |
|---------------------|------------|-------------|----------|
| <b>Passaic</b>      | <b>69</b>  | <b>1788</b> | <b>0</b> |
| An. punctipennis    | 2          | 5           |          |
| Cx. mix             | 28         | 1131        |          |
| Cx. pipiens         | 6          | 33          |          |
| Cx. restuans        | 16         | 558         |          |
| Cx. salinarius      | 1          | 1           |          |
| Oc. canadensis      | 2          | 20          |          |
| Oc. japonicus       | 9          | 29          |          |
| Oc. sticticus       | 3          | 8           |          |
| Oc. triseriatus     | 2          | 3           |          |
| <b>Salem</b>        | <b>219</b> | <b>3172</b> | <b>0</b> |
| Ae. albopictus      | 2          | 13          |          |
| Ae. vexans          | 6          | 12          |          |
| An. punctipennis    | 7          | 28          |          |
| An. quadrimaculatus | 11         | 45          |          |
| Cq. perturbans      | 5          | 7           |          |
| Cs. melanura        | 26         | 531         |          |
| Cx. erraticus       | 7          | 78          |          |
| Cx. mix             | 80         | 1360        |          |
| Cx. pipiens         | 15         | 319         |          |
| Cx. restuans        | 10         | 165         |          |
| Cx. salinarius      | 2          | 2           |          |
| Cx. territans       | 3          | 24          |          |
| Oc. canadensis      | 18         | 454         |          |
| Oc. cantator        | 17         | 107         |          |
| Oc. grossbecki      | 5          | 21          |          |
| Oc. triseriatus     | 3          | 4           |          |
| Ps. columbiae       | 1          | 1           |          |
| Ps. ferox           | 1          | 1           |          |
| <b>Somerset</b>     | <b>99</b>  | <b>2075</b> | <b>1</b> |
| An. punctipennis    | 3          | 3           |          |
| An. quadrimaculatus | 2          | 2           |          |
| Cx. mix             | 65         | 1911        | 1        |
| Cx. pipiens         | 1          | 1           |          |
| Cx. restuans        | 3          | 3           |          |
| Oc. japonicus       | 14         | 60          |          |
| Oc. triseriatus     | 6          | 8           |          |
| Oc. trivittatus     | 4          | 81          |          |
| Ps. ferox           | 1          | 6           |          |
| <b>Sussex</b>       | <b>225</b> | <b>5328</b> | <b>0</b> |
| Ae. cinereus        | 4          | 16          |          |
| Ae. vexans          | 12         | 436         |          |
| An. punctipennis    | 14         | 90          |          |
| An. quadrimaculatus | 4          | 17          |          |
| Cq. perturbans      | 9          | 262         |          |
| Cs. melanura        | 1          | 3           |          |
| Cx. mix             | 72         | 2159        |          |
| 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      | 11          | 285          |          |
| Oc. excrucians      | 3           | 58           |          |
| Oc. japonicus       | 25          | 274          |          |
| Oc. sticticus       | 12          | 488          |          |
| Oc. stimulans       | 10          | 174          |          |
| Oc. triseriatus     | 16          | 53           |          |
| Oc. trivittatus     | 13          | 500          |          |
| Ps. ferox           | 1           | 3            |          |
| <b>Union</b>        | <b>68</b>   | <b>1735</b>  | <b>0</b> |
| Ae. vexans          | 2           | 7            |          |
| Cx. mix             | 17          | 603          |          |
| 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     | 3           | 4            |          |
| Oc. trivittatus     | 2           | 5            |          |
| <b>Warren</b>       | <b>161</b>  | <b>4018</b>  | <b>0</b> |
| Ae. cinereus        | 1           | 1            |          |
| Ae. vexans          | 8           | 90           |          |
| An. punctipennis    | 8           | 18           |          |
| An. quadrimaculatus | 6           | 6            |          |
| An. walkeri         | 1           | 1            |          |
| Cx. mix             | 95          | 3638         |          |
| Cx. restuans        | 4           | 22           |          |
| Oc. aurifer         | 4           | 106          |          |
| Oc. canadensis      | 3           | 15           |          |
| Oc. cantator        | 4           | 17           |          |
| Oc. japonicus       | 12          | 45           |          |
| Oc. sticticus       | 1           | 9            |          |
| Oc. stimulans       | 5           | 34           |          |
| Oc. triseriatus     | 4           | 4            |          |
| Oc. trivittatus     | 5           | 12           |          |
| <b>Grand Total</b>  | <b>3096</b> | <b>68487</b> | <b>5</b> |