RUTGERS
New Jersey Agricultural Experiment Station

# VECTOR SURVEILLANCE IN NEW JERSEY
## EEE and WNV
## CDC WEEK 39: September 21 to September 27, 2008

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Supported by funding from the NJ State Mosquito Control Commission.

## *Culiseta melanura* and Eastern Equine Encephalitis

| SITE | Inland / Coastal | Historic Mean | Current Weekly Mean | Total Collected to Date* | Total Pools Submitted | EEE Isolations | MFIR |
|---|---|---|---|---|---|---|---|
| **Green Bank** (Burlington County) | Coastal | 2.5 | 0.5 | 177 | 34 | | |
| **Corbin City** (Atlantic County) | Coastal | 1.3 | 0 | 158 | 53 | | |
| **Dennisville** (Cape May County) | Coastal | 4.2 | 0.6 | 525 | 53 | (see remarks) | |
| **Waterford** (Camden County) | Inland | 5.1 | 0 | 35 | 4 | 2 | 57.14 |
| **Centerton** (Salem County) | Inland | 2.9 | 0.8 | 325 | 48 | 1 | 3.08 |
| **Turkey Swamp** (Monmouth County) | Inland | 0.9 | < 0.1 | 265 | 53 | | |
| **Glassboro** (Gloucester County) | Inland | no history | 0.1 | 58 | 25 | | |

*Including trial run last week in May.

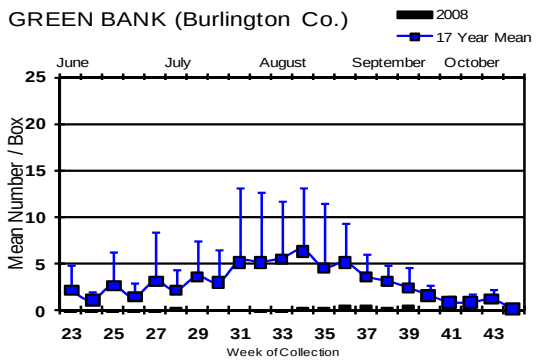
Remarks: Two additional positive EEE pools were detected at the Waterford monitoring site after a season-long absence of *Culiseta melanura*. These positive pools came at a time when historical trends at Waterford peaked (see population graph next page). This week, at this same site, the enzootic vector population is back down to zero captures in the resting boxes. The MFIR calculates out to a astounding 57. Last year in October, the Waterford site recorded the largest population peak for that site in its 17 years of operation, amid an otherwise unremarkable season.

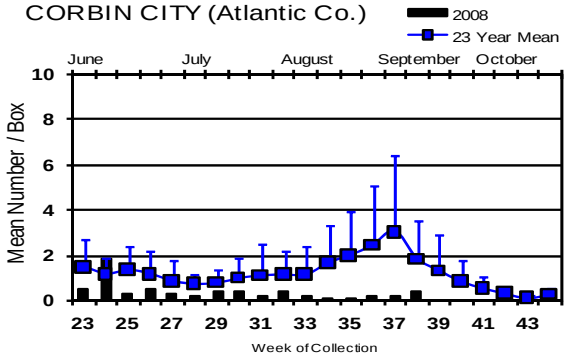
To date, 270 pools from 1483 *Cs. melanura* mosquitoes have been sent for EEE testing from the resting box collections. An additional EEE positive pool from Cape May had been detected by the Cape May Mosquito Control Department's lab for a statewide cumulative total of 4 positive pools. No horse or human cases have been reported to date.

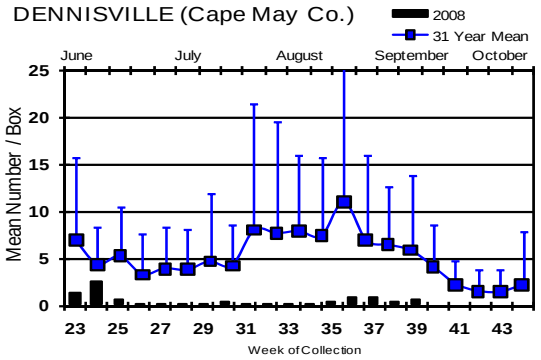
An additional 475 pools of 4117 individual mosquitoes from 31 species other than *Cs. melanura* have also been tested and all pools were found to be negative. These species include: *Aedes albopictus, Ae. canadensis canadensis, Ae. cantator, Ae. cinereus ,Ae. communis, Ae. grossbecki, Ae. japonicus, Ae. sollicitans, Ae. sticticus, Ae. taeniorhynchus, Ae. triseriatus, Ae. trivittatus, Ae. vexans, Anopheles bradleyi, An. crucians, An. punctipennis, An. quadrimaculatus, Coquillettidia perturbans, Culex erraticus, Cx. pipiens, Cx. restuans, Cx., salinarius, Mixed Culex, Cx. territans, Culiseta inornata, Orthopodomyia signifera, Psorophora ciliata, Ps. columbiae, Ps. cyanescens, Ps., ferox, Ps. howardii and Uranotaenia sapphirina.*

# *Culiseta melanura* Population Graphs

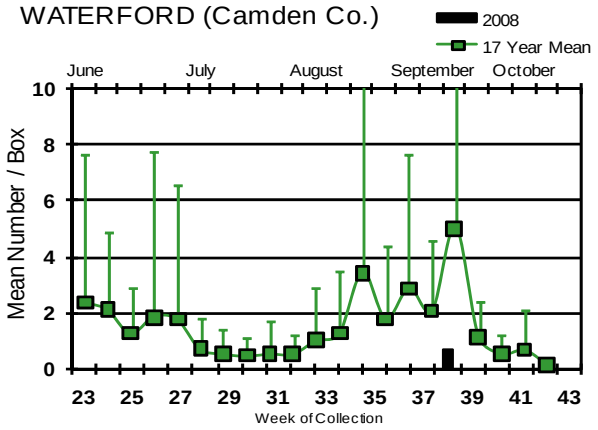
## Coastal

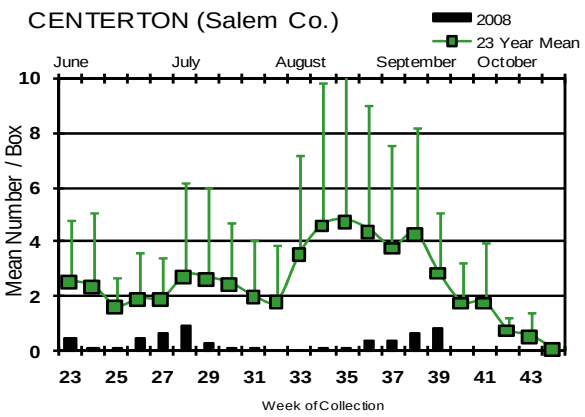


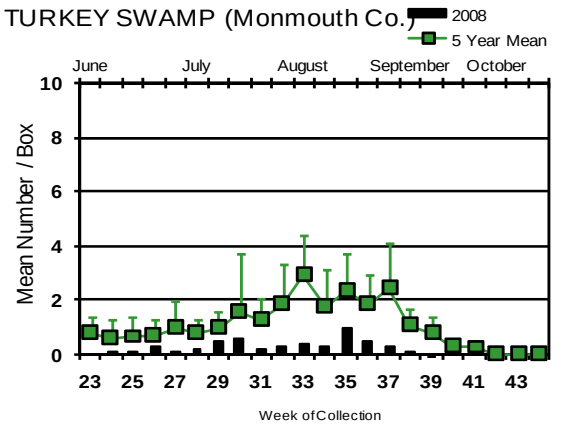




## Inland



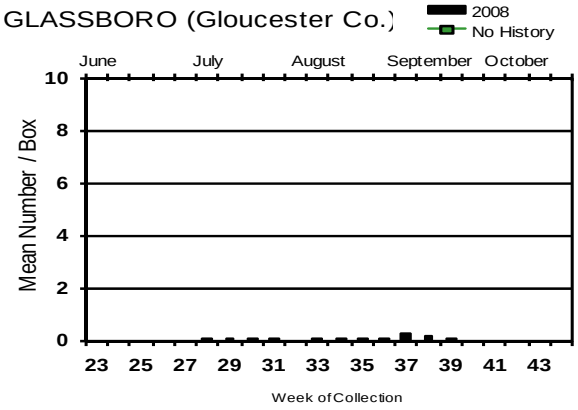




Figures: Inland and coastal resting box sites showing current weekly population levels (in bars) against historical trends (lines with standard deviation). The number of years for historical population levels varies by site.

An additional inland resting box site has been added. This site is located near Glassboro, in Gloucester County. The location is in a wildlife management area, with box location in a mixed forest swamp (Red Maple/White Pine).

*Cs. melanura* populations again disappeared from the resting boxes at the Waterford site, one week after positive pools were detected there. Populations at all monitoring sites remain low.



**EEE in US (2008 cumulative cases)**: (Red = new reported cases occurring)

- equine: 13(AL), 84(FL) 22(GA) 4(LA) 1(MA) 1(ME) 6(MS) 10(NC) 4(SC) 1(TN) 1(WI)
- mosquito: 1(AR) 3(FL) 2(GA) 5(LA) 10(MA) 4(MD) 3(NH) 4(NJ) 4(MD) 7(VA)
- sentinel: 3(AL) 91(FL74 wild) 16[2emu](NC) emu(NH) 2(VA)
- human: 1(AL) 1(FL)

# West Nile Virus

**West Nile in US (2008 cumulative cases)**: Single black values indicate no change from previous week. Black values / red values equals previous week/New totals.

| | Birds | Mosquito Pools | Sentinels | Horses | Humans |
|---|---|---|---|---|---|
| Alabama | | | | 1/4 | 7 |
| Alaska | | | | | |
| Arizona | 3 | 151/157 | 39/40 | | 43/49 |
| Arkansas | 2 | 15/20 | | 1 | 7/8 |
| California | 1965/2232 | 1723/1765 | 255/301 | 18/21 | 236/278 |
| Colorado | 4 | 55/61 | | 1 | 71/79 |
| Connecticut | | 174/187 | | | 6 |
| Delaware | | | 5 | | 1 |
| Florida | 3 live | | 7/9 | 1 | 3 |
| Georgia | | 8 | | | |
| Hawaii | | | | | |
| Idaho | 3 | 7 counties | | 1 | 32/34 |
| Illinois | 18/30 | 482/586 | | 1 | 6/13 |
| Indiana | 4/5 | 152/154 | | | 2/3 |
| Iowa | 3 | 4/5 | 2/3 | 3/4 | 8 |
| Kansas | | | | | 12/16 |
| Kentucky | 2 | 4/11 | | 1/3 | 1 |
| Louisiana | | 600 | 9 | 1 | 7 |
| Maine | | | | | |
| Maryland | | 5 | | 1 | 6/9 |
| Mass. | 57/63 | 116/131 | | | |
| Michigan | 3 | 1 | | 1? | 5/7 |
| Minnesota | 7 | 18/22 | | | 17/20 |
| Mississippi | | 3 | | 2/3 | 86/96 |
| Missouri | 29 | 191/193 | | 1 | 8/10 |
| Montana | | 5 | | 4/6 | 4/5 |
| Nebraska | 10 | 79 | | 1/2 | 29/37 |

| | Birds | Mosquito Pools | Sentinels | Horses | Humans |
|---|---|---|---|---|---|
| Nevada | 3/4 | 31/38 | | 2 | 11/15 |
| New Hampshire | | 1 | | | |
| New Jersey | 39/47 | 528/568 | | | 3 |
| New Mexico | | 3 | | 1 | 4/5 |
| New York | 102/136 | 325/348 | | 1/2 | 21/32 |
| North Carolina | | | | 1 | 1 |
| North Dakota | | | | 1 | 40/42 |
| Ohio | 9 | 246/337 | | | 6/10 |
| Oklahoma | | 12/15 | | | 8 |
| Oregon | 1 | 16/18 | | | 4/16 |
| Pennsylvania | 12/14 | 480/508 | | 1 | 5 |
| Rhode Island | | 10 | | | |
| South Carolina | 3 | 5/7 | | | |
| South Dakota | 1 | 38/39 | | 3/4 | 35/36 |
| Tennessee | | 523/592 | | | 8 |
| Texas | 1/2 | 100/111 | | 1/2 | 41/53 |
| Utah | 2 | 140 | 15/16 | 3/7 | 20/26 |
| Vermont | | 1 | | | |
| Virginia | | 571/667 | 1 | | 1 |
| Washington | 6/10 | 41 | | 27/35 | 2 |
| West Virginia | 2 | 10/36 | | 2 | 1 |
| Wisconsin | 31/34 | | | 3/4 | 5 |
| Wyoming | 1/5 | 14 | | 1 | 7 |

Note: Some data reported by states are provisional and are subject to change. Sources for this table can be found here.

**Protocol:** New Jersey Department of Health and Senior Services (NJDHSS Public Health and Environmental Laboratories, PHEL) tests mosquito pools using RT-PCR Taqman techniques.

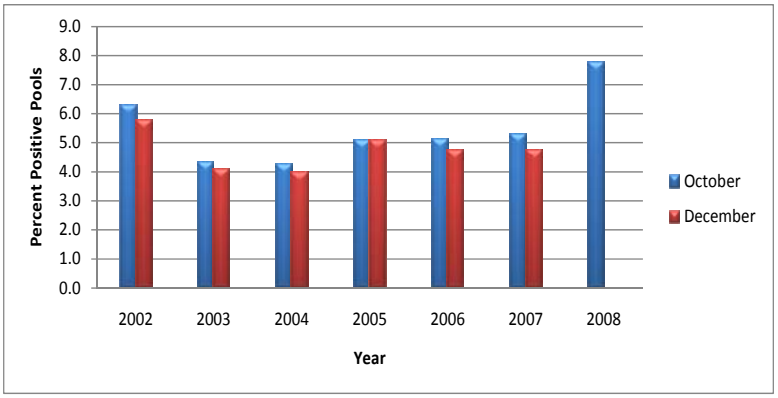
**Mosquito Species Submitted for West Nile Virus Testing through 02 October 2008**

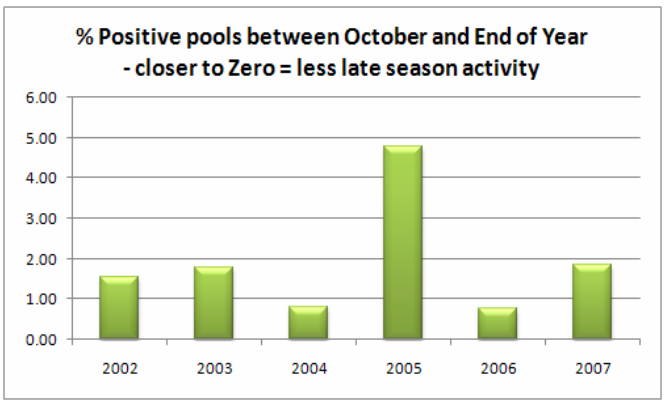
| Species | Pools | Mosquitoes | Positives | MFIR |
|---|---|---|---|---|
| *Aedes abserratus* | 1 | 9 | | |
| *Aedes albopictus* | 923 | 8426 | 2 | 0.24 |
| *Aedes atlanticus* | 1 | 4 | | |
| *Aedes atropalpus* | 1 | 1 | | |
| *Aedes canadensis canadensis* | 58 | 1256 | | |
| *Aedes cantator* | 27 | 362 | | |
| *Aedes cinereus* | 3 | 5 | | |
| *Aedes communis* | 1 | 1 | | |
| *Aedes grossbecki* | 3 | 4 | | |
| *Aedes japonicus* | 432 | 1947 | 1 | 0.51 |
| *Aedes sollicitans* | 46 | 844 | | |
| *Aedes sticticus* | 7 | 87 | | |
| *Aedes stimulans* | 1 | 1 | | |

| | | | | |
|---|---|---|---|---|
| *Aedes taeniorhynchus* | 30 | 593 | | |
| *Aedes thibaulti* | 5 | 13 | | |
| *Aedes triseriatus* | 211 | 623 | | |
| *Aedes trivittatus* | 15 | 117 | | |
| *Aedes vexans* | 236 | 3277 | | |
| *Anopheles atropos* | 1 | 1 | | |
| *Anopheles barberi* | 3 | 3 | | |
| *Anopheles bradleyi* | 62 | 973 | | |
| *Anopheles crucians* | 10 | 34 | | |
| *Anopheles earlei* | 1 | 1 | | |
| *Anopheles punctipennis* | 151 | 869 | | |
| *Anopheles quadrimaculatus* | 152 | 1883 | | |
| *Coquillettidia perturbans* | 103 | 934 | | |
| *Culex erraticus* | 126 | 828 | | |
| *Culex pipiens* | 832 | 19208 | 110 | 5.73 |
| *Culex restuans* | 381 | 4445 | 6 | 1.35 |
| *Culex salinarius* | 235 | 8935 | 2 | 0.22 |
| *Culex spp.* | 2661 | 98560 | 447 | 4.54 |
| *Culex territans* | 72 | 306 | | |
| *Culiseta inornata* | 3 | 5 | | |
| *Culiseta melanura* | 356 | 2010 | | |
| *Orthopodomyia signifera* | 11 | 20 | | |
| *Psorophora ciliata* | 9 | 54 | | |
| *Psorophora columbiae* | 30 | 196 | | |
| *Psorophora cyanescens* | 1 | 1 | | |
| *Psorophora ferox* | 30 | 139 | | |
| *Psorophora howardii* | 4 | 11 | | |
| *Uranotaenia sapphirina* | 22 | 109 | | |
| **State Total** | **7257** | **157095** | **568** | **3.62** |

**Remarks:** Submitted pools (7,257) comprised of 157,095 individual mosquitoes produced 568 positive pools from 19 different counties.

**When do we end the arbovirus surveillance season?** Traditionally, we look to October 15th as a potential end date to the New Jersey arboviral surveillance season. This date is modified depending on the amount of viral activity, weather and ultimately on the amount of adult mosquitoes present. In the graph to the left are the percent positive pools from pools submitted ending to date in October (blue) and then also for the entire year (red) from 2002-2008 (this is NOT MFIR values). The higher 2008 value represents the higher activity this year (but note that it is almost entirely within the enzootic vectors while early years include a variety of mosquito species). The green graph shows the number of positives found after Oct 2nd from 2002-2007. Green bars closer to zero suggests less late season activity. Of course, the season may ultimately end with a widespread hard frost, effectively killing mosquitoes on the wing.



**Humans, Horses and Wild Birds:** Previously reported: a 58 year old female (onset 26 Aug) from Burlington County, bringing the total to 3 (2 cases in Burlington County and 1 in Middlesex County). A fourth probable case was reported from Camden County (onset early September). For more details, see the PHEL's summary sheet:
http://www.state.nj.us/health/cd/westnile/documents/wnv_summary_sep26_08.pdf
No confirmed horse cases have occurred.
To date, there have been 155 dead birds submitted for West Nile virus testing with 47 positives Last year, there were 40 positive birds from 170 submissions to this point in time.

| 2008 Positive Mosquito pools to date / Total Mosquito Pools Submitted | This time last year |
|---|---|
| 568 / 7,257 | 325 / 6,120 |

**WNV Results by County through 02 October 2008**

| County | Species | Pools | Mosquitoes | Positives | MFIR |
|---|---|---|---|---|---|
| **Atlantic** | | **307** | **5970** | **9** | **1.51** |
| | *Aedes albopictus* | 35 | 746 | | |
| | *Aedes canadensis canadensis* | 3 | 12 | | |
| | *Aedes cantator* | 3 | 18 | | |
| | *Aedes japonicus* | 6 | 7 | | |
| | *Aedes sollicitans* | 12 | 350 | | |
| | *Aedes taeniorhynchus* | 20 | 479 | | |
| | *Aedes thibaulti* | 4 | 8 | | |
| | *Aedes triseriatus* | 8 | 19 | | |
| | *Aedes vexans* | 17 | 311 | | |
| | *Anopheles atropos* | 1 | 1 | | |
| | *Anopheles bradleyi* | 9 | 35 | | |
| | *Anopheles crucians* | 2 | 24 | | |
| | *Anopheles punctipennis* | 6 | 12 | | |
| | *Anopheles quadrimaculatus* | 2 | 4 | | |
| | *Coquillettidia perturbans* | 6 | 44 | | |
| | *Culex erraticus* | 9 | 132 | | |
| | *Culex pipiens* | 1 | 17 | | |
| | *Culex restuans* | 12 | 357 | 1 | 2.80 |
| | *Culex salinarius* | 3 | 3 | | |
| | *Culex sp.* | 76 | 3188 | 8 | 2.51 |
| | *Culex territans* | 9 | 22 | | |
| | *Culiseta melanura* | 57 | 164 | | |
| | *Orthopodomyia signifera* | 2 | 2 | | |
| | *Psorophora columbiae* | 1 | 1 | | |
| | *Psorophora ferox* | 3 | 14 | | |
| **Bergen** | | **590** | **27864** | **139** | **4.99** |
| | *Aedes albopictus* | 24 | 119 | | |
| | *Aedes canadensis candensis* | 1 | 6 | | |
| | *Aedes japonicus* | 31 | 162 | | |
| | *Aedes sollicitans* | 1 | 1 | | |
| | *Aedes triseriatus* | 13 | 42 | | |
| | *Aedes vexans* | 16 | 87 | | |
| | *Anopheles barberi* | 1 | 1 | | |
| | *Anopheles bradleyi* | 5 | 8 | | |
| | *Anopheles punctipennis* | 6 | 35 | | |
| | *Coquillettidia perturbans* | 27 | 185 | | |
| | *Culex pipiens* | 96 | 3507 | 15 | 4.28 |
| | *Culex restuans* | 32 | 321 | | |
| | *Culex salinarius* | 117 | 7283 | 1 | 0.14 |

| | | | | | |
|---|---|---|---|---|---|
| | *Culex spp.* | 218 | 16105 | 123 | 7.64 |
| | *Culex territans* | 1 | 1 | | |
| | *Orthopodomyia signifera* | 1 | 1 | | |
| **Burlington** | | **482** | **3745** | **5** | **1.34** |
| | *Aedes albopictus* | 52 | 543 | | |
| | *Aedes canadensis canadensis* | 22 | 608 | | |
| | *Aedes cantator* | 4 | 148 | | |
| | *Aedes cinereus* | 1 | 3 | | |
| | *Aedes grossbecki* | 1 | 1 | | |
| | *Aedes japonicus* | 22 | 67 | | |
| | *Aedes sollicitans* | 2 | 22 | | |
| | *Aedes sticticus* | 2 | 5 | | |
| | *Aedes taeniorhynchus* | 2 | 9 | | |
| | *Aedes triseriatus* | 17 | 44 | | |
| | *Aedes trivittatus* | 1 | 2 | | |
| | *Aedes vexans* | 55 | 505 | | |
| | *Anopheles bradleyi* | 3 | 15 | | |
| | *Anopheles crucians* | 8 | 10 | | |
| | *Anopheles punctipennis* | 21 | 55 | | |
| | *Anopheles quadrimaculatus* | 18 | 31 | | |
| | *Coquillettidia perturbans* | 22 | 237 | | |
| | *Culex erraticus* | 12 | 36 | | |
| | *Culex pipiens* | 18 | 178 | 3 | 16.85 |
| | *Culex restuans* | 16 | 98 | 1 | 10.20 |
| | *Culex salinarius* | 6 | 6 | | |
| | *Culex sp.* | 72 | 711 | 1 | 1.41 |
| | *Culex territans* | 12 | 23 | | |
| | *Culiseta inornata* | 1 | 3 | | |
| | *Culiseta melanura* | 58 | 308 | | |
| | *Orthopodomyia signifera* | 3 | 11 | | |
| | *Psorophora ciliata* | 6 | 10 | | |
| | *Psorophora columbiae* | 11 | 36 | | |
| | *Psorophora cyanescens* | 1 | 1 | | |
| | *Psorophora ferox* | 4 | 5 | | |
| | *Psorophora howardii* | 1 | 3 | | |
| | *Uranotaenia sapphirina* | 8 | 11 | | |
| **Camden** | | **202** | **3658** | **16** | **4.37** |
| | *Aedes albopictus* | 42 | 300 | | |
| | *Aedes canadensis canadensis* | 1 | 19 | | |
| | *Aedes cantator* | 1 | 22 | | |
| | *Aedes japonicus* | 15 | 32 | | |
| | *Aedes triseriatus* | 2 | 2 | | |
| | *Aedes trivittatus* | 1 | 1 | | |
| | *Aedes vexans* | 7 | 144 | | |
| | *Anopheles punctipennis* | 7 | 31 | | |
| | *Anopheles quadrimaculatus* | 7 | 12 | | |
| | *Coquillettidia perturbans* | 4 | 16 | | |
| | *Culex erraticus* | 2 | 8 | | |
| | *Culex pipiens* | 13 | 530 | | |
| | *Culex restuans* | 21 | 522 | | |
| | *Culex salinarius* | 4 | 15 | | |
| | *Culex sp.* | 65 | 1963 | 16 | 8.15 |
| | *Culiseta inornata* | 1 | 1 | | |
| | *Culiseta melanura* | 6 | 36 | | |

| | | | | | |
|---|---|---|---|---|---|
| | *Orthopodomyia signifera* | 2 | 3 | | |
| | *Psorophora columbiae* | 1 | 1 | | |
| **Cape_May** | | **471** | **6914** | **1** | **0.14** |
| | *Aedes albopictus* | 7 | 15 | | |
| | *Aedes canadensis canadensis* | 4 | 71 | | |
| | *Aedes cantator* | 8 | 82 | | |
| | *Aedes japonicus* | 7 | 17 | | |
| | *Aedes sollicitans* | 9 | 379 | | |
| | *Aedes taeniorhynchus* | 4 | 80 | | |
| | *Aedes triseriatus* | 1 | 1 | | |
| | *Aedes vexans* | 2 | 13 | | |
| | *Anopheles bradleyi* | 22 | 599 | | |
| | *Anopheles punctipennis* | 9 | 104 | | |
| | *Anopheles quadrimaculatus* | 21 | 606 | | |
| | *Coquillettidia perturbans* | 4 | 28 | | |
| | *Culex erraticus* | 10 | 104 | | |
| | *Culex pipiens* | 124 | 2021 | 1 | 0.49 |
| | *Culex restuans* | 117 | 1382 | | |
| | *Culex salinarius* | 12 | 426 | | |
| | *Culex sp.* | 41 | 399 | | |
| | *Culex territans* | 6 | 20 | | |
| | *Culiseta melanura* | 63 | 567 | | |
| **Cumberland** | | **244** | **2170** | **7** | **3.23** |
| | *Aedes albopictus* | 50 | 166 | | |
| | *Aedes japonicus* | 17 | 39 | | |
| | *Aedes sticticus* | 1 | 1 | | |
| | *Aedes triseriatus* | 8 | 12 | | |
| | *Aedes vexans* | 5 | 41 | | |
| | *Anopheles bradleyi* | 2 | 2 | | |
| | *Anopheles punctipennis* | 5 | 14 | | |
| | *Anopheles quadrimaculatus* | 2 | 4 | | |
| | *Coquillettidia perturbans* | 1 | 1 | | |
| | *Culex erraticus* | 21 | 67 | | |
| | *Culex pipiens* | 32 | 242 | 3 | 12.40 |
| | *Culex restuans* | 10 | 84 | 1 | 11.90 |
| | *Culex salinarius* | 3 | 3 | | |
| | *Culex spp.* | 74 | 1384 | 3 | 2.17 |
| | *Culex territans* | 2 | 5 | | |
| | *Culiseta melanura* | 7 | 100 | | |
| | *Psorophora columbiae* | 1 | 2 | | |
| | *Psorophora ferox* | 1 | 1 | | |
| | *Psorophora howardii* | 1 | 1 | | |
| | *Uranotaenia sapphirina* | 1 | 1 | | |
| **Essex** | | **300** | **3827** | **34** | **8.88** |
| | *Aedes albopictus* | 78 | 489 | | |
| | *Aedes japonicus* | 25 | 111 | 1 | 9.01 |
| | *Aedes triseriatus* | 21 | 36 | | |
| | *Aedes trivittatus* | 1 | 1 | | |

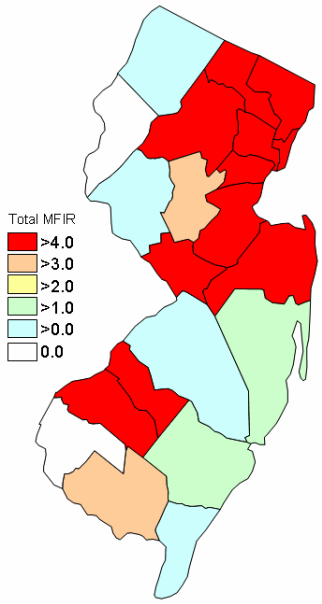
| | | | | | |
|---|---|---|---|---|---|
| | *Aedes vexans* | 11 | 39 | | |
| | *Anopheles punctipennis* | 6 | 6 | | |
| | *Anopheles quadrimaculatus* | 4 | 11 | | |
| | *Coquillettidia perturbans* | 2 | 2 | | |
| | *Culex pipiens* | 1 | 75 | 1 | 13.33 |
| | *Culex restuans* | 1 | 14 | | |
| | *Culex spp.* | 143 | 3032 | 32 | 10.55 |
| | *Culex territans* | 6 | 10 | | |
| | *Psorophora columbiae* | 1 | 1 | | |
| **Gloucester** | | **617** | **11988** | **51** | **4.25** |
| | *Aedes abserratus* | 1 | 9 | | |
| | *Aedes albopictus* | 63 | 470 | | |
| | *Aedes canadensis canadensis* | 7 | 245 | | |
| | *Aedes communis* | 1 | 1 | | |
| | *Aedes japonicus* | 32 | 136 | | |
| | *Aedes sollicitans* | 1 | 2 | | |
| | *Aedes thibaulti* | 1 | 5 | | |
| | *Aedes triseriatus* | 9 | 19 | | |
| | *Aedes vexans* | 9 | 269 | | |
| | *Anopheles bradleyi* | 4 | 86 | | |
| | *Anopheles earlei* | 1 | 1 | | |
| | *Anopheles punctipennis* | 22 | 78 | | |
| | *Anopheles quadrimaculatus* | 25 | 52 | | |
| | *Coquillettidia perturbans* | 8 | 38 | | |
| | *Culex erraticus* | 6 | 45 | | |
| | *Culex pipiens* | 339 | 9540 | 51 | 5.35 |
| | *Culex restuans* | 19 | 591 | | |
| | *Culex salinarius* | 6 | 34 | | |
| | *Culex territans* | 9 | 81 | | |
| | *Culiseta melanura* | 44 | 139 | | |
| | *Psorophora columbiae* | 4 | 113 | | |
| | *Psorophora ferox* | 3 | 9 | | |
| | *Uranotaenia sapphirina* | 3 | 25 | | |
| **Hudson** | | **181** | **8848** | **61** | **6.89** |
| | *Culex spp.* | 181 | 8848 | 61 | 6.89 |
| **Hunterdon** | | **269** | **12604** | **5** | **0.40** |
| | *Aedes albopictus* | 4 | 40 | | |
| | *Aedes japonicus* | 1 | 6 | | |
| | *Aedes trivittatus* | 1 | 18 | | |
| | *Aedes vexans* | 3 | 105 | | |
| | *Anopheles punctipennis* | 1 | 50 | | |
| | *Anopheles quadrimaculatus* | 2 | 25 | | |
| | *Culex erraticus* | 1 | 10 | | |
| | *Culex spp.* | 255 | 12349 | 5 | 0.40 |
| | *Culiseta inornata* | 1 | 1 | | |
| **Mercer** | | **480** | **5042** | **41** | **8013** |
| | *Aedes albopictus* | 203 | 2278 | 1 | 0.44 |
| | *Aedes atropalpus* | 1 | 1 | | |
| | *Aedes japonicus* | 61 | 107 | | |
| | *Aedes stimulans* | 1 | 1 | | |

| | | | | | |
|---|---|---|---|---|---|
| | *Aedes triseriatus* | 25 | 50 | | |
| | *Aedes vexans* | 4 | 14 | | |
| | *Anopheles punctipennis* | 1 | 1 | | |
| | *Culex erraticus* | 16 | 44 | | |
| | *Culex pipiens* | 92 | 1904 | 33 | 17.33 |
| | *Culex restuans* | 49 | 208 | 3 | 14.42 |
| | *Culex salinarius* | 13 | 162 | | |
| | *Culex spp.* | 11 | 267 | 4 | 14.98 |
| | *Culex territans* | 1 | 1 | | |
| | *Orthopodomyia signifera* | 1 | 1 | | |
| | *Psorophora columbiae* | 1 | 3 | | |
| **Middlesex** | | **327** | **7780** | **44** | **5.66** |
| | *Aedes albopictus* | 32 | 374 | | |
| | *Aedes japonicus* | 12 | 57 | | |
| | *Aedes triseriatus* | 5 | 22 | | |
| | *Aedes trivittatus* | 1 | 1 | | |
| | *Aedes vexans* | 21 | 512 | | |
| | *Culex erraticus* | 1 | 1 | | |
| | *Culex pipiens* | 23 | 215 | 1 | 4.65 |
| | *Culex restuans* | 11 | 137 | | |
| | *Culex salinarius* | 14 | 324 | 1 | 3.09 |
| | *Culex spp.* | 196 | 6067 | 42 | 6.92 |
| | *Culex territans* | 3 | 10 | | |
| | *Psorophora ciliata* | 3 | 44 | | |
| | *Psorophora columbiae* | 1 | 4 | | |
| | *Psorophora ferox* | 1 | 1 | | |
| | *Psorophora howardii* | 1 | 3 | | |
| | *Uranotaenia sapphirina* | 2 | 8 | | |
| **Monmouth** | | **552** | **5519** | **26** | **4.71** |
| | *Aedes albopictus* | 100 | 633 | | |
| | *Aedes canadensis canadensis* | 3 | 18 | | |
| | *Aedes cantator* | 4 | 5 | | |
| | *Aedes japonicus* | 22 | 60 | | |
| | *Aedes sollicitans* | 12 | 43 | | |
| | *Aedes taeniorhynchus* | 4 | 25 | | |
| | *Aedes triseriatus* | 9 | 19 | | |
| | *Aedes trivittatus* | 3 | 4 | | |
| | *Aedes vexans* | 26 | 122 | | |
| | *Anopheles barberi* | 1 | 1 | | |
| | *Anopheles punctipennis* | 16 | 30 | | |
| | *Anopheles quadrimaculatus* | 10 | 20 | | |
| | *Coquillettidia perturbans* | 4 | 5 | | |
| | *Culex erraticus* | 9 | 86 | | |
| | *Culex pipiens* | 59 | 580 | 1 | 1.72 |
| | *Culex restuans* | 42 | 254 | | |
| | *Culex salinarius* | 16 | 49 | | |
| | *Culex spp.* | 141 | 3189 | 25 | 7.84 |
| | *Culex territans* | 13 | 104 | | |
| | *Culiseta melanura* | 55 | 265 | | |
| | *Psorophora ferox* | 1 | 1 | | |
| | *Uranotaenia sapphirina* | 2 | 6 | | |
| **Morris** | | **220** | **6865** | **31** | **4.52** |
| | *Aedes albopictus* | 1 | 3 | | |

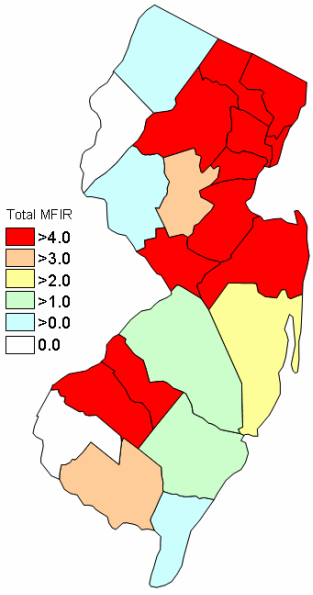
| | | | | | |
|---|---|---|---|---|---|
| | *Aedes japonicus* | 10 | 41 | | |
| | *Aedes triseriatus* | 2 | 4 | | |
| | *Anopheles punctipennis* | 1 | 4 | | |
| | *Coquillettidia perturbans* | 1 | 50 | | |
| | *Culex spp.* | 205 | 6763 | 31 | 4.58 |
| **Ocean** | | **363** | **5804** | **13** | **2.24** |
| | *Aedes albopictus* | 97 | 1376 | 1 | 0.73 |
| | *Aedes canadensis canadensis* | 7 | 83 | | |
| | *Aedes cantator* | 1 | 9 | | |
| | *Aedes japonicus* | 24 | 52 | | |
| | *Aedes sollicitans* | 6 | 43 | | |
| | *Aedes triseriatus* | 11 | 23 | | |
| | *Aedes trivittatus* | 1 | 1 | | |
| | *Aedes vexans* | 17 | 81 | | |
| | *Anopheles bradleyi* | 2 | 2 | | |
| | *Anopheles punctipennis* | 6 | 10 | | |
| | *Anopheles quadrimaculatus* | 5 | 15 | | |
| | *Coquillettidia perturbans* | 5 | 16 | | |
| | *Culex pipiens* | 9 | 249 | 1 | 4.02 |
| | *Culex restuans* | 19 | 249 | | |
| | *Culex salinarius* | 14 | 94 | | |
| | *Culex sp.* | 114 | 3363 | 11 | 3.27 |
| | *Culex territans* | 2 | 2 | | |
| | *Culiseta melanura* | 15 | 94 | | |
| | *Psorophora ferox* | 7 | 19 | | |
| | *Uranotaenia sapphirina* | 1 | 23 | | |
| **Passaic** | | **114** | **3755** | **32** | **8.52** |
| | *Aedes albopictus* | 14 | 80 | | |
| | *Aedes japonicus* | 8 | 89 | | |
| | *Aedes triseriatus* | 1 | 2 | | |
| | *Anopheles punctipennis* | 1 | 5 | | |
| | *Culex spp.* | 90 | 3579 | 32 | 8.94 |
| **Salem** | | **400** | **4876** | | |
| | *Aedes albopictus* | 34 | 127 | | |
| | *Aedes atlanticus* | 1 | 4 | | |
| | *Aedes canadensis canadensis* | 7 | 181 | | |
| | *Aedes cantator* | 6 | 78 | | |
| | *Aedes grossbecki* | 2 | 3 | | |
| | *Aedes japonicus* | 12 | 29 | | |
| | *Aedes sollicitans* | 1 | 1 | | |
| | *Aedes sticticus* | 3 | 80 | | |
| | *Aedes triseriatus* | 15 | 31 | | |
| | *Aedes vexans* | 22 | 876 | | |
| | *Anopheles bradleyi* | 15 | 226 | | |
| | *Anopheles punctipennis* | 30 | 414 | | |
| | *Anopheles quadrimaculatus* | 47 | 1094 | | |
| | *Coquillettidia perturbans* | 9 | 93 | | |
| | *Culex erraticus* | 39 | 295 | | |
| | *Culex pipiens* | 14 | 63 | | |
| | *Culex restuans* | 12 | 37 | | |
| | *Culex salinarius* | 23 | 528 | | |
| | *Culex spp.* | 36 | 233 | | |
| | *Culex territans* | 8 | 27 | | |

| | | | | | |
|---|---|---|---|---|---|
| | *Culiseta melanura* | 51 | 337 | | |
| | *Psorophora columbiae* | 4 | 27 | | |
| | *Psorophora ferox* | 6 | 83 | | |
| | *Psorophora howardii* | 1 | 4 | | |
| | *Uranotaenia sapphirina* | 2 | 5 | | |
| **Somerset** | | **272** | **3941** | **12** | **3.04** |
| | *Aedes albopictus* | 16 | 58 | | |
| | *Aedes canadensis canadensis* | 1 | 2 | | |
| | *Aedes japonicus* | 43 | 308 | | |
| | *Aedes triseriatus* | 37 | 153 | | |
| | *Aedes trivittatus* | 2 | 57 | | |
| | *Aedes vexans* | 1 | 50 | | |
| | *Anopheles barberi* | 1 | 1 | | |
| | *Anopheles punctipennis* | 8 | 9 | | |
| | *Anopheles quadrimaculatus* | 7 | 7 | | |
| | *Culex pipiens* | 2 | 22 | | |
| | *Culex restuans* | 2 | 19 | | |
| | *Culex spp.* | 147 | 3248 | 12 | 3.69 |
| | *Orthopodomyia signifera* | 2 | 2 | | |
| | *Psorophora ferox* | 2 | 4 | | |
| | *Uranotaenia sapphirina* | 1 | 1 | | |
| **Sussex** | | **406** | **11945** | **7** | **0.59** |
| | *Aedes canadensis canadensis* | 2 | 11 | | |
| | *Aedes cinereus* | 2 | 2 | | |
| | *Aedes japonicus* | 74 | 565 | | |
| | *Aedes sticticus* | 1 | 1 | | |
| | *Aedes triseriatus* | 24 | 141 | | |
| | *Aedes trivittatus* | 4 | 32 | | |
| | *Aedes vexans* | 5 | 35 | | |
| | *Anopheles punctipennis* | 3 | 8 | | |
| | *Anopheles quadrimaculatus* | 1 | 1 | | |
| | *Coquillettidia perturbans* | 10 | 219 | | |
| | *Culex pipiens* | 6 | 54 | | |
| | *Culex restuans* | 11 | 143 | | |
| | *Culex salinarius* | 2 | 5 | | |
| | *Culex spp.* | 258 | 10698 | 7 | 0.65 |
| | *Psorophora ferox* | 1 | 1 | | |
| | *Uranotaenia sapphirina* | 2 | 29 | | |
| **Union** | | **234** | **4677** | **34** | **7.27** |
| | *Aedes albopictus* | 71 | 609 | | |
| | *Aedes japonicus* | 8 | 13 | | |
| | *Aedes sollicitans* | 2 | 3 | | |
| | *Aedes triseriatus* | 3 | 3 | | |
| | *Aedes vexans* | 15 | 73 | | |
| | *Anopheles punctipennis* | 2 | 3 | | |
| | *Anopheles quadrimaculatus* | 1 | 1 | | |
| | *Culex pipiens* | 3 | 11 | | |

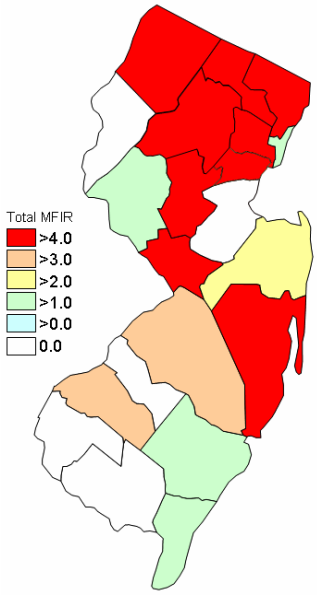
| | | | | | |
|---|---|---|---|---|---|
| | *Culex restuans* | 7 | 29 | | |
| | *Culex salinarius* | 2 | 3 | | |
| | *Culex spp.* | 114 | 3920 | 34 | 8.67 |
| | *Psorophora columbiae* | 5 | 8 | | |
| | *Psorophora ferox* | 1 | 1 | | |
| **Warren** | | **226** | **9303** | | |
| | *Aedes japonicus* | 2 | 49 | | |
| | *Culex spp.* | 224 | 9254 | | |
| **Grand Total** | | **7257** | **157095** | **568** | **3.62** |




Cumulative activity to last week




Cumulative activity to this week




Recent Activity 9/14 to 10/02)

**RAMP (Rapid Analyte Measurement Platform)**. More than half of the counties in New Jersey are incorporating the use of RAMP results in their vector surveillance programs. Counties participate with the PHEL Lab in monitoring the efficacy and sensitivity of the RAMP results by sending in samples to be confirmed. Note that not all samples done by the counties are sent in to PHEL and therefore the number of pools submitted can differ from the number of pools reported by the counties.

Note: PHEL reported additional positive RAMP pools for data not currently in the database. This table will be updated to include those positives when the database is up to date.

**RAMP Results for 02 October 2008**

| County | Species | Pools | Mosquitoes | Positives | PHEL (pools submitted/+/-) |
|---|---|---|---|---|---|
| **Monmouth** | | **75** | **671** | | |
| | *Aedes albopictus* | 4 | 11 | | |
| | *Aedes canadensis* | 8 | 38 | | |
| | *Aedes cantator* | 3 | 13 | | |
| | *Aedes japonicus* | 11 | 42 | | |
| | *Aedes triseriatus* | 1 | 1 | | |
| | *Anopheles punctipennis* | 3 | 6 | | |
| | *Coquillettidia perturbans* | 1 | 1 | | |
| | *Culex spp.* | 2 | 2 | | |
| | *Culiseta melanura* | 1 | 1 | | |
| **Warren** | | **51** | **1968** | | |

| | | | | |
|---|---|---|---|---|
| *Aedes japonicus* | 3 | 33 | | |
| *Aedes triseriatus* | 1 | 1 | | |
| *Aedes vexans* | 1 | 2 | | |
| *Culex restuans* | 1 | 4 | | |
| *Culex spp.* | 45 | 1928 | **2** | **9/0/2** |