**CSU Testing of Mosquito Pools for West Nile Virus, 2016 – Final Report**

**Summary for 2016 WNV testing season**

* During the 2016 season, CSU tested a total of 1365 mosquito pools (see section A below). Of these 1204 came from Fort Collins and 161 from Loveland. Of the Fort Collins mosquito pools, 617 were *Cx. tarsalis* and 587 were *Cx. pipiens*.
* All tested pools in Fort Collins were negative in weeks 24-26. WNV-positive pools were then recorded each week from Fort Collins in weeks 27-35 & week 37. All tested pools in Loveland were negative in weeks 24-25, 28, 31, & 35. WNV-positive pools were then recorded from week 26-27, 29-30, & 32-34 from Loveland.
* The overall numbers of WNV-positive pools were 101 from Fort Collins and 15 from Loveland. The greatest number of WNV-positive pools for a single week was recorded in week 32 (n=26 positive pools, of which 24 were from Fort Collins and 2 from Loveland).
* Compared to historical 2006-2015 averages for Fort Collins (see section B below), the citywide *Culex* abundance in 2016 was near or below the historical averages in Fort Collins for week 24-32, and 34-35. The citywide vector abundance was well above the historical average in week 33. Average *Culex* abundance >90 per trap night were recorded for the NE zones in weeks 32-33.
* Compared to historical 2006-2015 averages for Fort Collins (see section B below), citywide WNV infection rate in 2016 was above historical averages in Fort Collins for week 27, and 30-35.
* Compared to historical 2006-2015 averages for Fort Collins (see section B below), the citywide Vector Index in 2016 was above the historical average in weeks 227, 31-33, and 35. The Vector Index fell below the historical average in weeks 27-29 & 34-35.
* For the four Fort Collins zones, the Vector Index did exceed 0.75 in the NE zone in week 33 (VI= 0.93) (see section B below). The VI did exceed 0.5 in the NE zone in week 32. Peak weekly VIs were 0.47 for the SE zone (week 30), 0.93 for the NE zone (week 33), 0.28 for the NW zone (week 32) and 0.36 for the SW zone (week 31).
* Detailed weekly data for Vector Index, *Culex* abundance and WNV infection rate are shown in section C below.

**A. Summary of tested mosquito pools - 2016**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Week | Fort Collins | | | | Loveland | | | |
| *Culex pipiens* pools | | *Culex tarsalis* pools | | *Culex pipiens* pools | | *Culex tarsalis* pools | |
| No. tested | No. WNV positive | No. tested | No. WNV positive | No. tested | No. WNV positive | No. tested | No. WNV positive |
| 24 | 23 | 0 | 19 | 0 | 1 | 0 | 6 | 0 |
| 25 | 30 | 0 | 31 | 0 | 1 | 0 | 10 | 0 |
| 26 | 36 | 0 | 49 | 0 | 1 | 0 | 10 | 1 |
| 27 | 39 | 1 | 38 | 1 | 5 | 0 | 7 | 1 |
| 28 | 48 | 1 | 65 | 0 | 2 | 0 | 12 | 0 |
| 29 | 54 | 2 | 56 | 1 | 5 | 0 | 11 | 1 |
| 30 | 53 | 4 | 55 | 6 | 4 | 0 | 14 | 2 |
| 31 | 54 | 11 | 60 | 8 | 6 | 0 | 10 | 0 |
| 32 | 57 | 13 | 62 | 9 | 3 | 1 | 11 | 2 |
| 33 | 55 | 14 | 54 | 10 | 5 | 0 | 9 | 2 |
| 34 | 46 | 9 | 36 | 2 | 11 | 3 | 9 | 2 |
| 35 | 36 | 6 | 33 | 2 | 2 | 0 | 6 | 0 |
| 36 | 30 | 0 | 32 | 0 | 0 | 0 | 0 | 0 |
| 37 | 26 | 1 | 27 | 0 | 0 | 0 | 0 | 0 |
| **TOTAL** | **587** | **62** | **617** | **39** | **46** | **4** | **115** | **11** |

**B. Weekly data for 2016 in relation to historical averages**

**Table 1b. Vector Index for All *Culex* by week from June-August**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Week | FC – Zone NW | | FC – Zone NE | | FC – Zone SE | | FC – Zone SW | | FC – Citywide | | LV |
| Current year | Historical average1 | Current year | Historical average1 | Current year | Historical average1 | Current year | Historical average1 | Current year | Historical average1 |
| 24 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 25 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 26 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.02 | 0.00 | 0.01 | 0.00 | 0.01 | 0.05 |
| 27 | 0.00 | 0.00 | 0.00 | 0.04 | 0.11 | 0.01 | 0.00 | 0.00 | 0.04 | 0.01 | 0.11 |
| 28 | 0.00 | 0.00 | 0.04 | 0.04 | 0.00 | 0.12 | 0.00 | 0.01 | 0.01 | 0.05 | 0.00 |
| 29 | 0.11 | 0.11 | 0.04 | 0.16 | 0.01 | 0.36 | 0.00 | 0.04 | 0.04 | 0.18 | 0.07 |
| 30 | 0.00 | 0.13 | 0.10 | 0.18 | 0.47 | 0.31 | 0.00 | 0.09 | 0.19 | 0.19 | 0.12 |
| 31 | 0.25 | 0.20 | 0.45 | 0.18 | 0.40 | 0.21 | 0.36 | 0.06 | 0.37 | 0.19 | 0.00 |
| 32 | 0.28 | 0.15 | 0.58 | 0.31 | 0.38 | 0.39 | 0.30 | 0.09 | 0.44 | 0.26 | 0.49 |
| 33 | 0.20 | 0.19 | 0.93 | 0.35 | 0.41 | 0.26 | 0.22 | 0.06 | 0.48 | 0.22 | 0.19 |
| 34 | 0.11 | 0.14 | 0.10 | 0.16 | 0.19 | 0.33 | 0.00 | 0.05 | 0.11 | 0.19 | 0.24 |
| 35 | 0.08 | 0.04 | 0.15 | 0.14 | 0.25 | 0.20 | 0.00 | 0.15 | 0.15 | 0.14 | 0.00 |
| 362 | 0.00 | 0.05 | 0.00 | 0.08 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | NA |
| 372 | 0.093 | 0.00 | 0.00 | 0.05 | 0.00 | 0.03 | 0.00 | 0.00 | 0.02 | 0.02 | NA |

1 The historical average for Week 24-35 uses 2006-2015 historical data (2003-2005 surveillance data were excluded due to changes in trap locations from 2006 onwards). 2Weeks 36 & 37 are calculated from 2015 data only (2015 is the first year to have surveillance data collected into weeks 36 & 37).

**Table 2b. Vector abundance for All *Culex* by week from June-August**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Week | FC – Zone NW | | FC – Zone NE | | FC – Zone SE | | FC – Zone SW | | FC – Citywide | | LV |
| Current year | Historical average1 | Current year | Historical average1 | Current year | Historical average1 | Current year | Historical average1 | Current year | Historical average1 |
| 24 | 0.89 | 2.29 | 1.90 | 8.38 | 1.80 | 10.86 | 0.67 | 1.14 | 1.40 | 6.41 | 3.05 |
| 25 | 2.78 | 8.01 | 13.00 | 21.41 | 9.20 | 26.17 | 2.78 | 3.68 | 7.40 | 16.64 | 18.16 |
| 26 | 5.44 | 13.83 | 19.80 | 40.03 | 26.33 | 37.07 | 5.78 | 6.38 | 16.14 | 26.24 | 21.49 |
| 27 | 13.00 | 29.19 | 26.30 | 67.74 | 52.38 | 44.03 | 5.50 | 11.84 | 31.53 | 41.84 | 21.19 |
| 28 | 49.44 | 46.67 | 66.70 | 88.76 | 47.40 | 74.49 | 14.78 | 12.97 | 45.49 | 58.82 | 33.76 |
| 29 | 44.89 | 55.36 | 68.80 | 85.72 | 23.27 | 74.27 | 17.11 | 22.65 | 37.09 | 62.47 | 26.51 |
| 30 | 44.56 | 52.64 | 56.60 | 128.01 | 53.20 | 86.75 | 22.11 | 19.65 | 45.67 | 75.89 | 35.68 |
| 31 | 47.44 | 49.12 | 59.00 | 102.63 | 58.47 | 58.83 | 37.00 | 16.31 | 51.79 | 59.83 | 39.70 |
| 32 | 53.11 | 41.30 | 95.50 | 68.14 | 39.33 | 55.26 | 23.22 | 14.87 | 51.91 | 47.24 | 46.50 |
| 33 | 46.44 | 24.86 | 94.10 | 49.24 | 32.67 | 33.93 | 13.00 | 8.85 | 45.72 | 30.35 | 29.49 |
| 34 | 15.00 | 19.59 | 10.56 | 43.34 | 11.53 | 27.08 | 9.89 | 6.55 | 11.71 | 25.32 | 16.76 |
| 35 | 14.89 | 8.09 | 15.60 | 20.80 | 11.47 | 13.56 | 2.78 | 3.93 | 11.33 | 12.17 | 10.35 |
| 362 | 19.44 | 5.17 | 25.60 | 11.69 | 4.53 | 5.49 | 5.22 | 2.13 | 12.70 | 6.55 | NA |
| 372 | 21.56 | 4.37 | 10.40 | 8.06 | 2.13 | 5.26 | 1.44 | 2.86 | 7.98 | 5.36 | NA |

1 The historical average for Week 24-35 uses 2006-2015 historical data (2003-2005 surveillance data were excluded due to changes in trap locations from 2006 onwards). 2Weeks 36 & 37 are calculated from 2015 data only (2015 is the first year to have surveillance data collected into weeks 36 & 37).

**Table 3b. WNV infection rate per 1,000 females for All *Culex* by week from June-August**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Week | FC – Zone NW | | FC – Zone NE | | FC – Zone SE | | FC – Zone SW | | FC – Citywide | | LV |
| Current year | Historical average1 | Current year | Historical average1 | Current year | Historical average1 | Current year | Historical average1 | Current year | Historical average1 |
| 24 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.37 | 0.00 | 0.00 | 0.00 | 0.52 | 0.00 |
| 25 | 0.00 | 0.00 | 0.00 | 0.62 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.08 | 0.00 |
| 26 | 0.00 | 0.00 | 0.00 | 0.11 | 0.00 | 0.47 | 0.00 | 0.48 | 0.00 | 0.29 | 2.71 |
| 27 | 0.00 | 0.00 | 0.00 | 0.24 | 2.58 | 0.22 | 0.00 | 0.00 | 1.39 | 0.21 | 5.25 |
| 28 | 0.00 | 0.00 | 1.26 | 0.43 | 0.00 | 0.96 | 0.00 | 0.44 | 0.42 | 0.57 | 0.00 |
| 29 | 2.25 | 1.61 | 1.13 | 1.26 | 1.96 | 2.90 | 0.00 | 1.05 | 1.24 | 1.88 | 2.58 |
| 30 | 0.00 | 2.79 | 1.38 | 1.94 | 10.67 | 3.85 | 0.00 | 3.24 | 4.10 | 2.88 | 3.58 |
| 31 | 4.71 | 3.96 | 7.97 | 1.61 | 9.51 | 4.15 | 7.00 | 2.97 | 8.02 | 2.96 | 0.00 |
| 32 | 4.98 | 4.13 | 6.39 | 6.06 | 13.26 | 7.63 | 16.70 | 9.52 | 9.12 | 5.97 | 7.34 |
| 33 | 4.26 | 7.89 | 10.49 | 6.78 | 13.60 | 9.78 | 22.10 | 3.84 | 10.81 | 8.04 | 7.37 |
| 34 | 13.05 | 6.96 | 11.03 | 3.58 | 17.00 | 11.01 | 0.00 | 11.48 | 12.12 | 7.52 | 15.92 |
| 35 | 5.80 | 10.09 | 10.00 | 5.59 | 23.70 | 14.82 | 0.00 | 50.47 | 13.58 | 10.88 | 0.00 |
| 362 | 0.00 | 21.92 | 0.00 | 4.86 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.36 | NA |
| 372 | 4.42 | 0.00 | 0.00 | 5.04 | 0.00 | 3.70 | 0.00 | 0.00 | 2.51 | 3.51 | NA |

1 The historical average for Week 24-35 uses 2006-2015 historical data (2003-2005 surveillance data were excluded due to changes in trap locations from 2006 onwards). 2Weeks 36 & 37 are calculated from 2015 data only (2015 is the first year to have surveillance data collected into weeks 36 & 37).

**C. Detailed weekly data for Vector Index, *Culex* abundance and WNV infection rate**

***Week 24***

**Table 1a. Vector Index for current week**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **24** | Mean abundance of females per trap night1 | | Estimate for proportion of  females infected with WNV2 | | **Vector Index** | | |
| *Cx. pipiens* | *Cx. tarsalis* | *Cx.*  *pipiens* | *Cx.*  *tarsalis* | ***Cx. pipiens3*** | ***Cx. tarsalis4*** | **All**  ***Culex5*** |
| FC – Zone NW | 0.67 | 2.44 | 0.00 | 0.00 | **0.00** | **0.00** | **0.00** |
| FC – Zone NE | 1.00 | 12.10 | 0.00 | 0.00 | **0.00** | **0.00** | **0.00** |
| FC – Zone SE | 0.33 | 5.20 | 0.00 | 0.00 | **0.00** | **0.00** | **0.00** |
| FC – Zone SW | 1.56 | 3.89 | 0.00 | 0.00 | **0.00** | **0.00** | **0.00** |
| FC – Citywide | 0.81 | 5.95 | 0.00 | 0.00 | **0.00** | **0.00** | **0.00** |
|  |  |  |  |  |  |  |  |
| LV | 0.5 | 6.7 | 0 | 0.00 | **0** | **0.000** | **0.000** |

1From Table 2a (CDC light trap catches only).

2Derived from the data presented in Table 3a for estimated infection rate per 1,000 females (CDC light trap and gravid trap catches combined).

3Vector Index for *Cx. pipiens*= (Mean abundance of *Cx. pipiens*females per trap night) x (Estimate for proportion of all *Cx. pipiens*females infected with WNV).

4Vector Index for *Cx. tarsalis*= (Mean abundance of *Cx. tarsalis*females per trap night) x (Estimate for proportion of all *Cx. tarsalis*females infected with WNV).

5Vector Index for All *Culex*= (Vector Index for *Cx. pipiens*) *+* (Vector Index for *Cx. tarsalis*).

**Table 2a. Vector abundance for current week (CDC light trap catches only)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **24** | Total number  females collected | | | Number CDC light trap nights | Mean abundance of females per CDC light trap night | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens1* | *Cx. tarsalis2* | All  *Culex3* |
| FC – Zone NW | 6.00 | 22.00 | 28.00 | 9.00 | 0.67 | 2.44 | 3.11 |
| FC – Zone NE | 10.00 | 121.00 | 131.00 | 10.00 | 1.00 | 12.10 | 13.10 |
| FC – Zone SE | 5.00 | 78.00 | 83.00 | 15.00 | 0.33 | 5.20 | 5.53 |
| FC – Zone SW | 14.00 | 35.00 | 49.00 | 9.00 | 1.56 | 3.89 | 5.44 |
| FC – Citywide | 35.00 | 256.00 | 291.00 | 43.00 | 0.81 | 5.95 | 6.77 |
|  |  |  |  |  |  |  |  |
| LV | 17.00 | 242.00 | 259.00 | 36.00 | 0.47 | 6.72 | 7.19 |

1Mean abundance of *Cx. pipiens*females per CDC light trap night = (Total number *Cx. pipiens*females collected) / (Number CDC light trap nights).

2Mean abundance of *Cx. tarsalis*females per CDC light trap night = (Total number *Cx. tarsalis* females collected) / (Number CDC light trap nights).

3Mean abundance of All *Culex*females per CDC light trap night = (Total number All *Culex*females collected) / (Number CDC light trap nights).

**Table 3a. WNV infection rate per 1,000 females for current week (CDC light trap and gravid trap catches combined)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **24** | Total number individuals examined | | | Total number pools examined | | | Total number  WNV-infected pools | | | Estimate for WNV infection rate per 1,000 females1 | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* |
| FC – Zone NW | 10 | 22 | 32 | 5 | 7 | 12 | 0 | 0 | 0 | 0 | 0 | 0 |
| FC – Zone NE | 26 | 121 | 147 | 10 | 8 | 18 | 0 | 0 | 0 | 0 | 0 | 0 |
| FC – Zone SE | 118 | 78 | 196 | 9 | 12 | 21 | 0 | 0 | 0 | 0 | 0 | 0 |
| FC – Zone SW | 22 | 35 | 57 | 6 | 6 | 12 | 0 | 0 | 0 | 0 | 0 | 0 |
| FC – Citywide | 176 | 256 | 432 | 30 | 33 | 63 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| LV | 0 | 68 | 68 | 0 | 6 | 6 | 0 | 0 | 0 | 0 | 0 | 0 |

1Maximum likelihood estimate (MLE) for WNV infection rate per 1,000 females calculated using the CDC PooledInfRate 4.0 plug-in for Excel.

***Week 25***

**Table 1a. Vector Index for current week**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **25** | Mean abundance of females per trap night1 | | Estimate for proportion of  females infected with WNV2 | | **Vector Index** | | |
| *Cx. pipiens* | *Cx. tarsalis* | *Cx.*  *pipiens* | *Cx.*  *tarsalis* | ***Cx. pipiens3*** | ***Cx. tarsalis4*** | **All**  ***Culex5*** |
| FC – Zone NW | 0.89 | 21.33 | 0.00 | 0.00 | **0.00** | **0.00** | **0.00** |
| FC – Zone NE | 3.60 | 57.70 | 0.00 | 0.00 | **0.00** | **0.00** | **0.00** |
| FC – Zone SE | 1.07 | 69.27 | 0.00 | 0.00 | **0.00** | **0.00** | **0.00** |
| FC – Zone SW | 0.56 | 17.44 | 0.00 | 0.00 | **0.00** | **0.00** | **0.00** |
| FC – Citywide | 1.51 | 45.70 | 0.00 | 0.00 | **0.00** | **0.00** | **0.00** |
|  |  |  |  |  |  |  |  |
| LV | 0.6 | 106.5 | 0 | 0.00 | **0** | **0.000** | **0.000** |

1From Table 2a (CDC light trap catches only).

2Derived from the data presented in Table 3a for estimated infection rate per 1,000 females (CDC light trap and gravid trap catches combined).

3Vector Index for *Cx. pipiens*= (Mean abundance of *Cx. pipiens*females per trap night) x (Estimate for proportion of all *Cx. pipiens*females infected with WNV).

4Vector Index for *Cx. tarsalis*= (Mean abundance of *Cx. tarsalis*females per trap night) x (Estimate for proportion of all *Cx. tarsalis*females infected with WNV).

5Vector Index for All *Culex*= (Vector Index for *Cx. pipiens*) *+* (Vector Index for *Cx. tarsalis*).

**Table 2a. Vector abundance for current week (CDC light trap catches only)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **25** | Total number  females collected | | | Number CDC light trap nights | Mean abundance of females per CDC light trap night | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens1* | *Cx. tarsalis2* | All  *Culex3* |
| FC – Zone NW | 8 | 192 | 200 | 9 | 0.89 | 21.33 | 22.22 |
| FC – Zone NE | 36 | 577 | 613 | 10 | 3.60 | 57.70 | 61.30 |
| FC – Zone SE | 16 | 1039 | 1055 | 15 | 1.07 | 69.27 | 70.33 |
| FC – Zone SW | 5 | 157 | 162 | 9 | 0.56 | 17.44 | 18.00 |
| FC – Citywide | 65 | 1965 | 2030 | 43 | 1.51 | 45.70 | 47.21 |
|  |  |  |  |  |  |  |  |
| LV | 23 | 3941 | 3964 | 37 | 0.62 | 106.51 | 107.14 |

1Mean abundance of *Cx. pipiens*females per CDC light trap night = (Total number *Cx. pipiens*females collected) / (Number CDC light trap nights).

2Mean abundance of *Cx. tarsalis*females per CDC light trap night = (Total number *Cx. tarsalis* females collected) / (Number CDC light trap nights).

3Mean abundance of All *Culex*females per CDC light trap night = (Total number All *Culex*females collected) / (Number CDC light trap nights).

**Table 3a. WNV infection rate per 1,000 females for current week (CDC light trap and gravid trap catches combined)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **25** | Total number individuals examined | | | Total number pools examined | | | Total number  WNV-infected pools | | | Estimate for WNV infection rate per 1,000 females1 | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* |
| FC – Zone NW | 23 | 192 | 215 | 6 | 10 | 16 | 0 | 0 | 0 | 0 | 0 | 0 |
| FC – Zone NE | 77 | 578 | 655 | 10 | 18 | 28 | 0 | 0 | 0 | 0 | 0 | 0 |
| FC – Zone SE | 100 | 1040 | 1140 | 10 | 29 | 39 | 0 | 0 | 0 | 0 | 0 | 0 |
| FC – Zone SW | 11 | 157 | 168 | 5 | 9 | 14 | 0 | 0 | 0 | 0 | 0 | 0 |
| FC – Citywide | 211 | 1967 | 2178 | 31 | 66 | 97 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| LV | 0 | 1482 | 1482 | 0 | 33 | 33 | 0 | 0 | 0 | 0 | 0 | 0 |

1Maximum likelihood estimate (MLE) for WNV infection rate per 1,000 females calculated using the CDC PooledInfRate 4.0 plug-in for Excel.

***Week 26***

**Table 1a. Vector Index for current week**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **26** | Mean abundance of females per trap night1 | | Estimate for proportion of  females infected with WNV2 | | **Vector Index** | | |
| *Cx. Pipiens* | *Cx. tarsalis* | *Cx.*  *pipiens* | *Cx.*  *tarsalis* | ***Cx. pipiens3*** | ***Cx. tarsalis4*** | **All**  ***Culex5*** |
| FC – Zone NW | 2.56 | 31.89 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
| FC – Zone NE | 2.00 | 77.60 | 0.0000 | 0.0013 | **0.000** | **0.098** | **0.098** |
| FC – Zone SE | 3.47 | 67.07 | 0.0031 | 0.0000 | **0.011** | **0.000** | **0.011** |
| FC – Zone SW | 1.00 | 10.33 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
| FC – Citywide | 2.42 | 50.28 | 0.0019 | 0.0005 | **0.005** | **0.023** | **0.028** |
|  |  |  |  |  |  |  |  |
| LV | 1.0 | 59.0 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |

1From Table 2a (CDC light trap catches only).

2Derived from the data presented in Table 3a for estimated infection rate per 1,000 females (CDC light trap and gravid trap catches combined).

3Vector Index for *Cx. pipiens*= (Mean abundance of *Cx. pipiens*females per trap night) x (Estimate for proportion of all *Cx. pipiens*females infected with WNV).

4Vector Index for *Cx. tarsalis*= (Mean abundance of *Cx. tarsalis*females per trap night) x (Estimate for proportion of all *Cx. tarsalis*females infected with WNV).

5Vector Index for All *Culex*= (Vector Index for *Cx. pipiens*) *+* (Vector Index for *Cx. tarsalis*).

**Table 2a. Vector abundance for current week (CDC light trap catches only)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **26** | Total number  females collected | | | Number CDC light trap nights | Mean abundance of females per CDC light trap night | | |
| *Cx. Pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens1* | *Cx. tarsalis2* | All  *Culex3* |
| FC – Zone NW | 23 | 287 | 310 | 9 | 2.56 | 31.89 | 34.44 |
| FC – Zone NE | 20 | 776 | 796 | 10 | 2.00 | 77.60 | 79.60 |
| FC – Zone SE | 52 | 1006 | 1058 | 15 | 3.47 | 67.07 | 70.53 |
| FC – Zone SW | 9 | 93 | 102 | 9 | 1.00 | 10.33 | 11.33 |
| FC – Citywide | 104 | 2162 | 2266 | 43 | 2.42 | 50.28 | 52.70 |
|  |  |  |  |  |  |  |  |
| LV | 38 | 2182 | 2220 | 37 | 1.03 | 58.97 | 60.00 |

1Mean abundance of *Cx. pipiens*females per CDC light trap night = (Total number *Cx. pipiens*females collected) / (Number CDC light trap nights).

2Mean abundance of *Cx. tarsalis*females per CDC light trap night = (Total number *Cx. tarsalis* females collected) / (Number CDC light trap nights).

3Mean abundance of All *Culex*females per CDC light trap night = (Total number All *Culex*females collected) / (Number CDC light trap nights).

**Table 3a. WNV infection rate per 1,000 females for current week (CDC light trap and gravid trap catches combined)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **26** | Total number individuals examined | | | Total number pools examined | | | Total number  WNV-infected pools | | | Estimate for WNV infection rate per 1,000 females1 | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* |
| FC – Zone NW | 47 | 287 | 334 | 6 | 12 | 18 | 0 | 0 | 0 | 0.00 | 0.00 | 0 |
| FC – Zone NE | 128 | 800 | 928 | 12 | 23 | 35 | 0 | 1 | 1 | 0.00 | 1.26 | 1.08 |
| FC – Zone SE | 317 | 1006 | 1323 | 18 | 28 | 46 | 1 | 0 | 1 | 3.12 | 0.00 | 0.75 |
| FC – Zone SW | 26 | 93 | 119 | 8 | 9 | 17 | 0 | 0 | 0 | 0.00 | 0.00 | 0 |
| FC – Citywide | 518 | 2186 | 2704 | 44 | 72 | 116 | 1 | 1 | 2 | 1.93 | 0.46 | 0.75 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| LV | 14 | 587 | 601 | 4 | 14 | 18 | 0 | 0 | 0 | 0.00 | 0.00 | 0 |

1Maximum likelihood estimate (MLE) for WNV infection rate per 1,000 females calculated using the CDC PooledInfRate 4.0 plug-in for Excel.

***Week 27***

**Table 1a. Vector Index for current week**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **27** | Mean abundance of females per trap night1 | | Estimate for proportion of  females infected with WNV2 | | **Vector Index** | | |
| *Cx. Pipiens* | *Cx. tarsalis* | *Cx.*  *pipiens* | *Cx.*  *tarsalis* | ***Cx. pipiens3*** | ***Cx. tarsalis4*** | **All**  ***Culex5*** |
| FC – Zone NW | 5.56 | 12.44 | 0.0000 | 0.0000 | **0.00** | **0.00** | **0.00** |
| FC – Zone NE | 9.20 | 48.20 | 0.0000 | 0.0021 | **0.00** | **0.10** | **0.10** |
| FC – Zone SE | 2.53 | 49.80 | 0.0000 | 0.0000 | **0.00** | **0.00** | **0.00** |
| FC – Zone SW | 1.22 | 6.22 | 0.0000 | 0.0000 | **0.00** | **0.00** | **0.00** |
| FC – Citywide | 4.44 | 32.49 | 0.0000 | 0.0007 | **0.00** | **0.02** | **0.02** |
|  |  |  |  |  |  |  |  |
| LV | 1.7 | 49.5 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |

1From Table 2a (CDC light trap catches only).

2Derived from the data presented in Table 3a for estimated infection rate per 1,000 females (CDC light trap and gravid trap catches combined).

3Vector Index for *Cx. pipiens*= (Mean abundance of *Cx. pipiens*females per trap night) x (Estimate for proportion of all *Cx. pipiens*females infected with WNV).

4Vector Index for *Cx. tarsalis*= (Mean abundance of *Cx. tarsalis*females per trap night) x (Estimate for proportion of all *Cx. tarsalis*females infected with WNV).

5Vector Index for All *Culex*= (Vector Index for *Cx. pipiens*) *+* (Vector Index for *Cx. tarsalis*).

**Table 2a. Vector abundance for current week (CDC light trap catches only)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **27** | Total number  females collected | | | Number CDC light trap nights | Mean abundance of females per CDC light trap night | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens1* | *Cx. tarsalis2* | All  *Culex3* |
| FC – Zone NW | 50 | 112 | 162 | 9 | 5.56 | 12.44 | 18.00 |
| FC – Zone NE | 92 | 482 | 574 | 10 | 9.20 | 48.20 | 57.40 |
| FC – Zone SE | 38 | 747 | 785 | 15 | 2.53 | 49.80 | 52.33 |
| FC – Zone SW | 11 | 56 | 67 | 9 | 1.22 | 6.22 | 7.44 |
| FC – Citywide | 191 | 1397 | 1588 | 43 | 4.44 | 32.49 | 36.93 |
|  |  |  |  |  |  |  |  |
| LV | 62 | 1831 | 1893 | 37 | 1.68 | 49.49 | 51.16 |

1Mean abundance of *Cx. pipiens*females per CDC light trap night = (Total number *Cx. pipiens*females collected) / (Number CDC light trap nights).

2Mean abundance of *Cx. tarsalis*females per CDC light trap night = (Total number *Cx. tarsalis* females collected) / (Number CDC light trap nights).

3Mean abundance of All *Culex*females per CDC light trap night = (Total number All *Culex*females collected) / (Number CDC light trap nights).

**Table 3a. WNV infection rate per 1,000 females for current week (CDC light trap and gravid trap catches combined)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **27** | Total number individuals examined | | | Total number pools examined | | | Total number  WNV-infected pools | | | Estimate for WNV infection rate per 1,000 females1 | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* |
| FC – Zone NW | 57 | 112 | 169 | 9 | 8 | 17 | 0 | 0 | 0 | 0.00 | 0.00 | 0 |
| FC – Zone NE | 147 | 482 | 629 | 11 | 15 | 26 | 0 | 1 | 1 | 0.00 | 2.07 | 1.59 |
| FC – Zone SE | 245 | 748 | 993 | 16 | 25 | 41 | 0 | 0 | 0 | 0.00 | 0.00 | 0 |
| FC – Zone SW | 34 | 56 | 90 | 5 | 8 | 13 | 0 | 0 | 0 | 0.00 | 0.00 | 0 |
| FC – Citywide | 483 | 1398 | 1881 | 41 | 56 | 97 | 0 | 1 | 1 | 0.00 | 0.72 | 0.53 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| LV | 15 | 1224 | 1239 | 4 | 28 | 32 | 0 | 0 | 0 | 0.00 | 0.00 | 0 |

1Maximum likelihood estimate (MLE) for WNV infection rate per 1,000 females calculated using the CDC PooledInfRate 4.0 plug-in for Excel.

***Week 28***

**Table 1a. Vector Index for current week**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **28** | Mean abundance of females per trap night1 | | Estimate for proportion of  females infected with WNV2 | | **Vector Index** | | |
| *Cx. Pipiens* | *Cx. tarsalis* | *Cx.*  *pipiens* | *Cx.*  *tarsalis* | ***Cx. pipiens3*** | ***Cx. tarsalis4*** | **All**  ***Culex5*** |
| FC – Zone NW | 7.56 | 26.56 | 0.000 | 0.000 | **0.000** | **0.000** | **0.000** |
| FC – Zone NE | 8.40 | 113.70 | 0.000 | 0.001 | **0.000** | **0.100** | **0.100** |
| FC – Zone SE | 7.53 | 125.73 | 0.000 | 0.002 | **0.000** | **0.206** | **0.206** |
| FC – Zone SW | 2.56 | 8.78 | 0.000 | 0.000 | **0.000** | **0.000** | **0.000** |
| FC – Citywide | 6.70 | 77.70 | 0.000 | 0.001 | **0.000** | **0.095** | **0.095** |
|  |  |  |  |  |  |  |  |
| LV | 2.0 | 93.3 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |

1From Table 2a (CDC light trap catches only).

2Derived from the data presented in Table 3a for estimated infection rate per 1,000 females (CDC light trap and gravid trap catches combined).

3Vector Index for *Cx. pipiens*= (Mean abundance of *Cx. pipiens*females per trap night) x (Estimate for proportion of all *Cx. pipiens*females infected with WNV).

4Vector Index for *Cx. tarsalis*= (Mean abundance of *Cx. tarsalis*females per trap night) x (Estimate for proportion of all *Cx. tarsalis*females infected with WNV).

5Vector Index for All *Culex*= (Vector Index for *Cx. pipiens*) *+* (Vector Index for *Cx. tarsalis*).

**Table 2a. Vector abundance for current week (CDC light trap catches only)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **28** | Total number  females collected | | | Number CDC light trap nights | Mean abundance of females per CDC light trap night | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens1* | *Cx. tarsalis2* | All  *Culex3* |
| FC – Zone NW | 68 | 239 | 307 | 9 | 7.56 | 26.56 | 34.11 |
| FC – Zone NE | 84 | 1137 | 1221 | 10 | 8.40 | 113.70 | 122.10 |
| FC – Zone SE | 113 | 1886 | 1999 | 15 | 7.53 | 125.73 | 133.27 |
| FC – Zone SW | 23 | 79 | 102 | 9 | 2.56 | 8.78 | 11.33 |
| FC – Citywide | 288 | 3341 | 3629 | 43 | 6.70 | 77.70 | 84.40 |
|  |  |  |  |  |  |  |  |
| LV | 75 | 3451 | 3526 | 37 | 2.03 | 93.27 | 95.30 |

1Mean abundance of *Cx. pipiens*females per CDC light trap night = (Total number *Cx. pipiens*females collected) / (Number CDC light trap nights).

2Mean abundance of *Cx. tarsalis*females per CDC light trap night = (Total number *Cx. tarsalis* females collected) / (Number CDC light trap nights).

3Mean abundance of All *Culex*females per CDC light trap night = (Total number All *Culex*females collected) / (Number CDC light trap nights).

**Table 3a. WNV infection rate per 1,000 females for current week (CDC light trap and gravid trap catches combined)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **28** | Total number individuals examined | | | Total number pools examined | | | Total number  WNV-infected pools | | | Estimate for WNV infection rate per 1,000 females1 | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* |
| FC – Zone NW | 139 | 241 | 380 | 9 | 14 | 23 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| FC – Zone NE | 403 | 1137 | 1540 | 17 | 27 | 44 | 0 | 1 | 1 | 0.00 | 0.88 | 0.65 |
| FC – Zone SE | 258 | 1887 | 2145 | 16 | 46 | 62 | 0 | 3 | 3 | 0.00 | 1.63 | 1.43 |
| FC – Zone SW | 50 | 79 | 129 | 10 | 8 | 18 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| FC – Citywide | 850 | 3344 | 4194 | 52 | 95 | 147 | 0 | 4 | 4 | 0.00 | 1.22 | 0.97 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| LV | 24 | 1370 | 1394 | 4 | 31 | 35 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |

1Maximum likelihood estimate (MLE) for WNV infection rate per 1,000 females calculated using the CDC PooledInfRate 4.0 plug-in for Excel.

***Week 29***

**Table 1a. Vector Index for current week**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **29** | Mean abundance of females per trap night1 | | Estimate for proportion of  females infected with WNV2 | | **Vector Index** | | |
| *Cx. pipiens* | *Cx. tarsalis* | *Cx.*  *pipiens* | *Cx.*  *tarsalis* | ***Cx. pipiens3*** | ***Cx. tarsalis4*** | **All**  ***Culex5*** |
| FC – Zone NW | 11.44 | 45.00 | 0.008 | 0.000 | **0.09** | **0.00** | **0.09** |
| FC – Zone NE | 9.50 | 91.80 | 0.000 | 0.000 | **0.00** | **0.00** | **0.00** |
| FC – Zone SE | 9.93 | 108.20 | 0.000 | 0.000 | **0.00** | **0.00** | **0.00** |
| FC – Zone SW | 5.44 | 39.11 | 0.000 | 0.000 | **0.00** | **0.00** | **0.00** |
| FC – Citywide | 9.21 | 76.70 | 0.001 | 0.000 | **0.01** | **0.00** | **0.01** |
|  |  |  |  |  |  |  |  |
| LV | 1.8 | 90.7 | 0.000 | 0.001 | **0.00** | **0.08** | **0.08** |

1From Table 2a (CDC light trap catches only).

2Derived from the data presented in Table 3a for estimated infection rate per 1,000 females (CDC light trap and gravid trap catches combined).

3Vector Index for *Cx. pipiens*= (Mean abundance of *Cx. pipiens*females per trap night) x (Estimate for proportion of all *Cx. pipiens*females infected with WNV).

4Vector Index for *Cx. tarsalis*= (Mean abundance of *Cx. tarsalis*females per trap night) x (Estimate for proportion of all *Cx. tarsalis*females infected with WNV).

5Vector Index for All *Culex*= (Vector Index for *Cx. pipiens*) *+* (Vector Index for *Cx. tarsalis*).

**Table 2a. Vector abundance for current week (CDC light trap catches only)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **29** | Total number  females collected | | | Number CDC light trap nights | Mean abundance of females per CDC light trap night | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens1* | *Cx. tarsalis2* | All  *Culex3* |
| FC – Zone NW | 103 | 405 | 508 | 9 | 11.44 | 45.00 | 56.44 |
| FC – Zone NE | 95 | 918 | 1013 | 10 | 9.50 | 91.80 | 101.30 |
| FC – Zone SE | 149 | 1623 | 1772 | 15 | 9.93 | 108.20 | 118.13 |
| FC – Zone SW | 49 | 352 | 401 | 9 | 5.44 | 39.11 | 44.56 |
| FC – Citywide | 396 | 3298 | 3694 | 43 | 9.21 | 76.70 | 85.91 |
|  |  |  |  |  |  |  |  |
| LV | 67 | 3355 | 3422 | 37 | 1.81 | 90.68 | 92.49 |

1Mean abundance of *Cx. pipiens*females per CDC light trap night = (Total number *Cx. pipiens*females collected) / (Number CDC light trap nights).

2Mean abundance of *Cx. tarsalis*females per CDC light trap night = (Total number *Cx. tarsalis* females collected) / (Number CDC light trap nights).

3Mean abundance of All *Culex*females per CDC light trap night = (Total number All *Culex*females collected) / (Number CDC light trap nights).

**Table 3a. WNV infection rate per 1,000 females for current week (CDC light trap and gravid trap catches combined)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **29** | Total number individuals examined | | | Total number pools examined | | | Total number  WNV-infected pools | | | Estimate for WNV infection rate per 1,000 females1 | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* |
| FC – Zone NW | 133 | 405 | 538 | 10 | 14 | 24 | 1 | 0 | 1 | 8.08 | 0.00 | 1.87 |
| FC – Zone NE | 458 | 927 | 1385 | 19 | 23 | 42 | 0 | 0 | 0 | 0.00 | 0.00 | 0 |
| FC – Zone SE | 415 | 1630 | 2045 | 20 | 43 | 63 | 0 | 0 | 0 | 0.00 | 0.00 | 0 |
| FC – Zone SW | 85 | 352 | 437 | 7 | 12 | 19 | 0 | 0 | 0 | 0.00 | 0.00 | 0 |
| FC – Citywide | 1091 | 3314 | 4405 | 56 | 92 | 148 | 1 | 0 | 1 | 0.92 | 0.00 | 0.23 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| LV | 30 | 1089 | 1119 | 3 | 26 | 29 | 0 | 1 | 1 | 0.00 | 0.92 | 0.89 |

1Maximum likelihood estimate (MLE) for WNV infection rate per 1,000 females calculated using the CDC PooledInfRate 4.0 plug-in for Excel

***Week 30***

**Table 1a. Vector Index for current week**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **30** | Mean abundance of females per trap night1 | | Estimate for proportion of  females infected with WNV2 | | **Vector Index** | | |
| *Cx. pipiens* | *Cx. tarsalis* | *Cx.*  *pipiens* | *Cx.*  *tarsalis* | ***Cx. pipiens3*** | ***Cx. tarsalis4*** | **All**  ***Culex5*** |
| FC – Zone NW | 11.33 | 76.22 | 0.0000 | 0.0014 | **0.00** | **0.11** | **0.11** |
| FC – Zone NE | 13.00 | 178.00 | 0.0000 | 0.0006 | **0.00** | **0.10** | **0.10** |
| FC – Zone SE | 14.00 | 134.13 | 0.0056 | 0.0015 | **0.08** | **0.20** | **0.28** |
| FC – Zone SW | 4.56 | 35.67 | 0.0000 | 0.0000 | **0.00** | **0.00** | **0.00** |
| FC – Citywide | 11.23 | 111.60 | 0.0027 | 0.0011 | **0.03** | **0.12** | **0.15** |
|  |  |  |  |  |  |  |  |
| LV | 1.8 | 89.0 | 0.0000 | 0.0032 | **0.00** | **0.29** | **0.29** |

1From Table 2a (CDC light trap catches only).

2Derived from the data presented in Table 3a for estimated infection rate per 1,000 females (CDC light trap and gravid trap catches combined).

3Vector Index for *Cx. pipiens*= (Mean abundance of *Cx. pipiens*females per trap night) x (Estimate for proportion of all *Cx. pipiens*females infected with WNV).

4Vector Index for *Cx. tarsalis*= (Mean abundance of *Cx. tarsalis*females per trap night) x (Estimate for proportion of all *Cx. tarsalis*females infected with WNV).

5Vector Index for All *Culex*= (Vector Index for *Cx. pipiens*) *+* (Vector Index for *Cx. tarsalis*).

**Table 2a. Vector abundance for current week (CDC light trap catches only)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **30** | Total number  females collected | | | Number CDC light trap nights | Mean abundance of females per CDC light trap night | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens1* | *Cx. tarsalis2* | All  *Culex3* |
| FC – Zone NW | 102 | 686 | 788 | 9 | 11.33 | 76.22 | 87.56 |
| FC – Zone NE | 130 | 1780 | 1910 | 10 | 13.00 | 178.00 | 191.00 |
| FC – Zone SE | 210 | 2012 | 2222 | 15 | 14.00 | 134.13 | 148.13 |
| FC – Zone SW | 41 | 321 | 362 | 9 | 4.56 | 35.67 | 40.22 |
| FC – Citywide | 483 | 4799 | 5282 | 43 | 11.23 | 111.60 | 122.84 |
|  |  |  |  |  |  |  |  |
| LV | 67 | 3293 | 3360 | 37 | 1.81 | 89.00 | 90.81 |

1Mean abundance of *Cx. pipiens*females per CDC light trap night = (Total number *Cx. pipiens*females collected) / (Number CDC light trap nights).

2Mean abundance of *Cx. tarsalis*females per CDC light trap night = (Total number *Cx. tarsalis* females collected) / (Number CDC light trap nights).

3Mean abundance of All *Culex*females per CDC light trap night = (Total number All *Culex*females collected) / (Number CDC light trap nights).

**Table 3a. WNV infection rate per 1,000 females for current week (CDC light trap and gravid trap catches combined)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **30** | Total number individuals examined | | | Total number pools examined | | | Total number  WNV-infected pools | | | Estimate for WNV infection rate per 1,000 females1 | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* |
| FC – Zone NW | 170 | 687 | 857 | 11 | 19 | 30 | 0 | 1 | 1 | 0.00 | 1.44 | 1.16 |
| FC – Zone NE | 329 | 1786 | 2115 | 17 | 41 | 58 | 0 | 1 | 1 | 0.00 | 0.56 | 0.47 |
| FC – Zone SE | 570 | 2019 | 2589 | 24 | 50 | 74 | 3 | 3 | 6 | 5.63 | 1.52 | 2.42 |
| FC – Zone SW | 75 | 321 | 396 | 7 | 11 | 18 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| FC – Citywide | 1144 | 4813 | 5957 | 59 | 121 | 180 | 3 | 5 | 8 | 2.71 | 1.06 | 1.38 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| LV | 15 | 1303 | 1318 | 4 | 29 | 33 | 0 | 4 | 4 | 0.00 | 3.22 | 3.18 |

1Maximum likelihood estimate (MLE) for WNV infection rate per 1,000 females calculated using the CDC PooledInfRate 4.0 plug-in for Excel.

***Week 31***

**Table 1a. Vector Index for current week**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **31** | Mean abundance of females per trap night1 | | Estimate for proportion of  females infected with WNV2 | | **Vector Index** | | |
| *Cx. pipiens* | *Cx. tarsalis* | *Cx.*  *pipiens* | *Cx.*  *tarsalis* | ***Cx. pipiens3*** | ***Cx. tarsalis4*** | **All**  ***Culex5*** |
| FC – Zone NW | 9.00 | 45.33 | 0.020 | 0.000 | **0.18** | **0.00** | **0.18** |
| FC – Zone NE | 16.30 | 138.80 | 0.000 | 0.005 | **0.00** | **0.66** | **0.66** |
| FC – Zone SE | 9.47 | 49.33 | 0.004 | 0.003 | **0.04** | **0.13** | **0.18** |
| FC – Zone SW | 8.78 | 31.78 | 0.009 | 0.000 | **0.08** | **0.00** | **0.08** |
| FC – Citywide | 10.81 | 65.63 | 0.005 | 0.003 | **0.05** | **0.20** | **0.25** |
|  |  |  |  |  |  |  |  |
| LV | 3.3 | 42.5 | 0.000 | 0.006 | **0.00** | **0.27** | **0.27** |

1From Table 2a (CDC light trap catches only).

2Derived from the data presented in Table 3a for estimated infection rate per 1,000 females (CDC light trap and gravid trap catches combined).

3Vector Index for *Cx. pipiens*= (Mean abundance of *Cx. pipiens*females per trap night) x (Estimate for proportion of all *Cx. pipiens*females infected with WNV).

4Vector Index for *Cx. tarsalis*= (Mean abundance of *Cx. tarsalis*females per trap night) x (Estimate for proportion of all *Cx. tarsalis*females infected with WNV).

5Vector Index for All *Culex*= (Vector Index for *Cx. pipiens*) *+* (Vector Index for *Cx. tarsalis*).

**Table 2a. Vector abundance for current week (CDC light trap catches only)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **31** | Total number  females collected | | | Number CDC light trap nights | Mean abundance of females per CDC light trap night | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens1* | *Cx. tarsalis2* | All  *Culex3* |
| FC – Zone NW | 81 | 408 | 489 | 9 | 9.00 | 45.33 | 54.33 |
| FC – Zone NE | 163 | 1388 | 1551 | 10 | 16.30 | 138.80 | 155.10 |
| FC – Zone SE | 142 | 740 | 882 | 15 | 9.47 | 49.33 | 58.80 |
| FC – Zone SW | 79 | 286 | 365 | 9 | 8.78 | 31.78 | 40.56 |
| FC – Citywide | 465 | 2822 | 3287 | 43 | 10.81 | 65.63 | 76.44 |
|  |  |  |  |  |  |  |  |
| LV | 121 | 1574 | 1695 | 37 | 3.27 | 42.54 | 45.81 |

1Mean abundance of *Cx. pipiens*females per CDC light trap night = (Total number *Cx. pipiens*females collected) / (Number CDC light trap nights).

2Mean abundance of *Cx. tarsalis*females per CDC light trap night = (Total number *Cx. tarsalis* females collected) / (Number CDC light trap nights).

3Mean abundance of All *Culex*females per CDC light trap night = (Total number All *Culex*females collected) / (Number CDC light trap nights).

**Table 3a. WNV infection rate per 1,000 females for current week (CDC light trap and gravid trap catches combined)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **31** | Total number individuals examined | | | Total number pools examined | | | Total number  WNV-infected pools | | | Estimate for WNV infection rate per 1,000 females1 | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* |
| FC – Zone NW | 204 | 409 | 613 | 13.00 | 16.00 | 29.00 | 3.00 | 0.00 | 3.00 | 19.93 | 0.00 | 5.25 |
| FC – Zone NE | 591 | 1390 | 1981 | 21.00 | 35.00 | 56.00 | 0.00 | 6.00 | 6.00 | 0.00 | 4.76 | 3.24 |
| FC – Zone SE | 233 | 742 | 975 | 17.00 | 24.00 | 41.00 | 1.00 | 2.00 | 3.00 | 4.34 | 2.73 | 3.16 |
| FC – Zone SW | 129 | 287 | 416 | 9.00 | 12.00 | 21.00 | 1.00 | 0.00 | 1.00 | 8.57 | 0.00 | 2.45 |
| FC – Citywide | 1157 | 2828 | 3985 | 60.00 | 87.00 | 147.00 | 5.00 | 8.00 | 13.00 | 4.67 | 3.00 | 3.49 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| LV | 15 | 499 | 514 | 5.00 | 12.00 | 17.00 | 0.00 | 3.00 | 3.00 | 0.00 | 6.45 | 6.26 |

1Maximum likelihood estimate (MLE) for WNV infection rate per 1,000 females calculated using the CDC PooledInfRate 4.0 plug-in for Excel.

***Week 32***

**Table 1a. Vector Index for current week**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **32** | Mean abundance of females per trap night1 | | Estimate for proportion of  females infected with WNV2 | | **Vector Index** | | |
| *Cx. pipiens* | *Cx. tarsalis* | *Cx.*  *pipiens* | *Cx.*  *tarsalis* | ***Cx. pipiens3*** | ***Cx. tarsalis4*** | **All**  ***Culex5*** |
| FC – Zone NW | 11.00 | 30.78 | 0.000 | 0.004 | **0.000** | **0.114** | **0.114** |
| FC – Zone NE | 11.40 | 56.90 | 0.009 | 0.002 | **0.101** | **0.100** | **0.201** |
| FC – Zone SE | 10.67 | 23.67 | 0.015 | 0.000 | **0.158** | **0.000** | **0.158** |
| FC – Zone SW | 4.11 | 11.56 | 0.015 | 0.000 | **0.061** | **0.000** | **0.061** |
| FC – Citywide | 9.53 | 30.35 | 0.009 | 0.002 | **0.091** | **0.048** | **0.138** |
|  |  |  |  |  |  |  |  |
| LV | 4.8 | 24.9 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |

1From Table 2a (CDC light trap catches only).

2Derived from the data presented in Table 3a for estimated infection rate per 1,000 females (CDC light trap and gravid trap catches combined).

3Vector Index for *Cx. pipiens*= (Mean abundance of *Cx. pipiens*females per trap night) x (Estimate for proportion of all *Cx. pipiens*females infected with WNV).

4Vector Index for *Cx. tarsalis*= (Mean abundance of *Cx. tarsalis*females per trap night) x (Estimate for proportion of all *Cx. tarsalis*females infected with WNV).

5Vector Index for All *Culex*= (Vector Index for *Cx. pipiens*) *+* (Vector Index for *Cx. tarsalis*).

**Table 2a. Vector abundance for current week (CDC light trap catches only)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **32** | Total number  females collected | | | Number CDC light trap nights | Mean abundance of females per CDC light trap night | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens1* | *Cx. tarsalis2* | All  *Culex3* |
| FC – Zone NW | 99 | 277 | 376 | 9 | 11.00 | 30.78 | 41.78 |
| FC – Zone NE | 114 | 569 | 683 | 10 | 11.40 | 56.90 | 68.30 |
| FC – Zone SE | 160 | 355 | 515 | 15 | 10.67 | 23.67 | 34.33 |
| FC – Zone SW | 37 | 104 | 141 | 9 | 4.11 | 11.56 | 15.67 |
| FC – Citywide | 410 | 1305 | 1715 | 43 | 9.53 | 30.35 | 39.88 |
|  |  |  |  |  |  |  |  |
| LV | 179 | 921 | 1100 | 37 | 4.84 | 24.89 | 29.73 |

1Mean abundance of *Cx. pipiens*females per CDC light trap night = (Total number *Cx. pipiens*females collected) / (Number CDC light trap nights).

2Mean abundance of *Cx. tarsalis*females per CDC light trap night = (Total number *Cx. tarsalis* females collected) / (Number CDC light trap nights).

3Mean abundance of All *Culex*females per CDC light trap night = (Total number All *Culex*females collected) / (Number CDC light trap nights).

**Table 3a. WNV infection rate per 1,000 females for current week (CDC light trap and gravid trap catches combined)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **32** | Total number individuals examined | | | Total number pools examined | | | Total number  WNV-infected pools | | | Estimate for WNV infection rate per 1,000 females1 | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* |
| FC – Zone NW | 235 | 277 | 512 | 13 | 12 | 25 | 0 | 1 | 1 | 0.00 | 3.71 | 1.98 |
| FC – Zone NE | 241 | 572 | 813 | 15 | 16 | 31 | 2 | 1 | 3 | 8.88 | 1.76 | 3.85 |
| FC – Zone SE | 409 | 355 | 764 | 21 | 17 | 38 | 5 | 0 | 5 | 14.77 | 0.00 | 7.18 |
| FC – Zone SW | 77 | 104 | 181 | 8 | 9 | 17 | 1 | 0 | 1 | 14.95 | 0.00 | 5.85 |
| FC – Citywide | 962 | 1308 | 2270 | 57 | 54 | 111 | 8 | 2 | 10 | 9.50 | 1.57 | 4.75 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| LV | 22 | 234 | 256 | 6 | 8 | 14 | 0 | 0 | 0 | 0.00 | 0.00 | 0 |

1Maximum likelihood estimate (MLE) for WNV infection rate per 1,000 females calculated using the CDC PooledInfRate 4.0 plug-in for Excel.

***Week 33***

**Table 1a. Vector Index for current week**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **33** | Mean abundance of females per trap night1 | | Estimate for proportion of  females infected with WNV2 | | **Vector Index** | | |
| *Cx. pipiens* | *Cx. tarsalis* | *Cx.*  *pipiens* | *Cx.*  *tarsalis* | ***Cx. pipiens3*** | ***Cx. tarsalis4*** | **All**  ***Culex5*** |
| FC – Zone NW | 4.444 | 3.000 | 0.017 | 0.000 | **0.08** | **0.00** | **0.08** |
| FC – Zone NE | 14.100 | 12.700 | 0.010 | 0.000 | **0.14** | **0.00** | **0.14** |
| FC – Zone SE | 6.467 | 7.800 | 0.016 | 0.000 | **0.11** | **0.00** | **0.11** |
| FC – Zone SW | 3.111 | 1.667 | 0.000 | 0.000 | **0.00** | **0.00** | **0.00** |
| FC – Citywide | 7.116 | 6.651 | 0.012 | 0.000 | **0.09** | **0.00** | **0.09** |
|  |  |  |  |  |  |  |  |
| LV | 2.351 | 6.486 | 0.000 | 0.000 | **0.00** | **0.00** | **0.00** |

1From Table 2a (CDC light trap catches only).

2Derived from the data presented in Table 3a for estimated infection rate per 1,000 females (CDC light trap and gravid trap catches combined).

3Vector Index for *Cx. pipiens*= (Mean abundance of *Cx. pipiens*females per trap night) x (Estimate for proportion of all *Cx. pipiens*females infected with WNV).

4Vector Index for *Cx. tarsalis*= (Mean abundance of *Cx. tarsalis*females per trap night) x (Estimate for proportion of all *Cx. tarsalis*females infected with WNV).

5Vector Index for All *Culex*= (Vector Index for *Cx. pipiens*) *+* (Vector Index for *Cx. tarsalis*).

**Table 2a. Vector abundance for current week (CDC light trap catches only)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **33** | Total number  females collected | | | Number CDC light trap nights | Mean abundance of females per CDC light trap night | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens1* | *Cx. tarsalis2* | All  *Culex3* |
| FC – Zone NW | 40 | 27 | 67 | 9 | 4.44 | 3.00 | 7.44 |
| FC – Zone NE | 141 | 127 | 268 | 10 | 14.10 | 12.70 | 26.80 |
| FC – Zone SE | 97 | 117 | 214 | 15 | 6.47 | 7.80 | 14.27 |
| FC – Zone SW | 28 | 15 | 43 | 9 | 3.11 | 1.67 | 4.78 |
| FC – Citywide | 306 | 286 | 592 | 43 | 7.12 | 6.65 | 13.77 |
|  |  |  |  |  |  |  |  |
| LV | 87 | 240 | 327 | 37 | 2.35 | 6.49 | 8.84 |

1Mean abundance of *Cx. pipiens*females per CDC light trap night = (Total number *Cx. pipiens*females collected) / (Number CDC light trap nights).

2Mean abundance of *Cx. tarsalis*females per CDC light trap night = (Total number *Cx. tarsalis* females collected) / (Number CDC light trap nights).

3Mean abundance of All *Culex*females per CDC light trap night = (Total number All *Culex*females collected) / (Number CDC light trap nights).

**Table 3a. WNV infection rate per 1,000 females for current week (CDC light trap and gravid trap catches combined)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **33** | Total number individuals examined | | | Total number pools examined | | | Total number  WNV-infected pools | | | Estimate for WNV infection rate per 1,000 females1 | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* |
| FC – Zone NW | 49 | 29 | 78 | 5 | 7 | 12 | 1 | 0 | 1 | 16.90 | 0.00 | 12.1 |
| FC – Zone NE | 489 | 128 | 617 | 19 | 11 | 30 | 4 | 0 | 4 | 9.78 | 0.00 | 7.46 |
| FC – Zone SE | 312 | 117 | 429 | 19 | 15 | 34 | 4 | 0 | 4 | 16.30 | 0.00 | 11.02 |
| FC – Zone SW | 63 | 15 | 78 | 7 | 8 | 15 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| FC – Citywide | 913 | 289 | 1202 | 50 | 41 | 91 | 9 | 0 | 9 | 12.10 | 0.00 | 8.7 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| LV | 23 | 76 | 99 | 4 | 6 | 10 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |

1Maximum likelihood estimate (MLE) for WNV infection rate per 1,000 females calculated using the CDC PooledInfRate 4.0 plug-in for Excel.

***Week 34***

**Table 1a. Vector Index for current week**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **34** | Mean abundance of females per trap night1 | | Estimate for proportion of  females infected with WNV2 | | **Vector Index** | | |
| *Cx. pipiens* | *Cx. tarsalis* | *Cx.*  *pipiens* | *Cx.*  *tarsalis* | ***Cx. pipiens3*** | ***Cx. tarsalis4*** | **All**  ***Culex5*** |
| FC – Zone NW | 5.67 | 10.44 | 0.018 | 0.000 | **0.10** | **0.00** | **0.10** |
| FC – Zone NE | 10.10 | 7.20 | 0.016 | 0.000 | **0.16** | **0.00** | **0.16** |
| FC – Zone SE | 12.60 | 10.80 | 0.016 | 0.006 | **0.20** | **0.07** | **0.26** |
| FC – Zone SW | 1.22 | 5.44 | 0.017 | 0.000 | **0.02** | **0.00** | **0.02** |
| FC – Citywide | 8.19 | 8.77 | 0.017 | 0.003 | **0.14** | **0.02** | **0.17** |
|  |  |  |  |  |  |  |  |
| LV | 4.16 | 11.70 | 0.000 | 0.000 | **0.00** | **0.00** | **0.00** |

1From Table 2a (CDC light trap catches only).

2Derived from the data presented in Table 3a for estimated infection rate per 1,000 females (CDC light trap and gravid trap catches combined).

3Vector Index for *Cx. pipiens*= (Mean abundance of *Cx. pipiens*females per trap night) x (Estimate for proportion of all *Cx. pipiens*females infected with WNV).

4Vector Index for *Cx. tarsalis*= (Mean abundance of *Cx. tarsalis*females per trap night) x (Estimate for proportion of all *Cx. tarsalis*females infected with WNV).

5Vector Index for All *Culex*= (Vector Index for *Cx. pipiens*) *+* (Vector Index for *Cx. tarsalis*).

**Table 2a. Vector abundance for current week (CDC light trap catches only)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **34** | Total number  females collected | | | Number CDC light trap nights | Mean abundance of females per CDC light trap night | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens1* | *Cx. tarsalis2* | All  *Culex3* |
| FC – Zone NW | 51 | 94 | 145 | 9 | 5.67 | 10.44 | 16.11 |
| FC – Zone NE | 101 | 72 | 173 | 10 | 10.10 | 7.20 | 17.30 |
| FC – Zone SE | 189 | 162 | 351 | 15 | 12.60 | 10.80 | 23.40 |
| FC – Zone SW | 11 | 49 | 60 | 9 | 1.22 | 5.44 | 6.67 |
| FC – Citywide | 352 | 377 | 729 | 43 | 8.19 | 8.77 | 16.95 |
|  |  |  |  |  |  |  |  |
| LV | 154 | 433 | 587 | 37 | 4.16 | 11.70 | 15.86 |

1Mean abundance of *Cx. pipiens*females per CDC light trap night = (Total number *Cx. pipiens*females collected) / (Number CDC light trap nights).

2Mean abundance of *Cx. tarsalis*females per CDC light trap night = (Total number *Cx. tarsalis* females collected) / (Number CDC light trap nights).

3Mean abundance of All *Culex*females per CDC light trap night = (Total number All *Culex*females collected) / (Number CDC light trap nights).

**Table 3a. WNV infection rate per 1,000 females for current week (CDC light trap and gravid trap catches combined)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **34** | Total number individuals examined | | | Total number pools examined | | | Total number  WNV-infected pools | | | Estimate for WNV infection rate per 1,000 females1 | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* |
| FC – Zone NW | 536 | 95 | 631 | 19 | 10 | 29 | 7 | 0 | 7 | 18.07 | 0.00 | 14.48 |
| FC – Zone NE | 235 | 72 | 307 | 15 | 9 | 24 | 3 | 0 | 3 | 15.83 | 0.00 | 11.52 |
| FC – Zone SE | 874 | 164 | 1038 | 30 | 17 | 47 | 10 | 1 | 11 | 15.76 | 6.07 | 13.9 |
| FC – Zone SW | 58 | 49 | 107 | 6 | 9 | 15 | 1 | 0 | 1 | 17.07 | 0.00 | 10.86 |
| FC – Citywide | 1703 | 380 | 2083 | 70 | 45 | 115 | 21 | 1 | 22 | 17.48 | 2.63 | 13.89 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| LV | 37 | 146 | 183 | 6 | 6 | 12 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |

1Maximum likelihood estimate (MLE) for WNV infection rate per 1,000 females calculated using the CDC PooledInfRate 4.0 plug-in for Excel.

***Week 35***

**Table 1a. Vector Index for current week**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **35** | Mean abundance of females per trap night1 | | Estimate for proportion of  females infected with WNV2 | | **Vector Index** | | |
| *Cx. pipiens* | *Cx. tarsalis* | *Cx.*  *pipiens* | *Cx.*  *tarsalis* | ***Cx. pipiens3*** | ***Cx. tarsalis4*** | **All**  ***Culex5*** |
| FC – Zone NW | 2.67 | 2.67 | 0.05 | 0.00 | **0.13** | **0.00** | **0.13** |
| FC – Zone NE | 14.10 | 11.30 | 0.02 | 0.01 | **0.30** | **0.10** | **0.39** |
| FC – Zone SE | 12.47 | 4.80 | 0.02 | 0.03 | **0.27** | **0.14** | **0.41** |
| FC – Zone SW | 1.11 | 1.44 | 0.02 | 0.00 | **0.02** | **0.00** | **0.02** |
| FC – Citywide | 8.42 | 5.16 | 0.02 | 0.01 | **0.21** | **0.07** | **0.28** |
|  |  |  |  |  |  |  |  |
| LV | 0.11 | 3.19 | 0.00 | 0.02 | **0.00** | **0.06** | **0.06** |

1From Table 2a (CDC light trap catches only).

2Derived from the data presented in Table 3a for estimated infection rate per 1,000 females (CDC light trap and gravid trap catches combined).

3Vector Index for *Cx. pipiens*= (Mean abundance of *Cx. pipiens*females per trap night) x (Estimate for proportion of all *Cx. pipiens*females infected with WNV).

4Vector Index for *Cx. tarsalis*= (Mean abundance of *Cx. tarsalis*females per trap night) x (Estimate for proportion of all *Cx. tarsalis*females infected with WNV).

5Vector Index for All *Culex*= (Vector Index for *Cx. pipiens*) *+* (Vector Index for *Cx. tarsalis*).

**Table 2a. Vector abundance for current week (CDC light trap catches only)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **35** | Total number  females collected | | | Number CDC light trap nights | Mean abundance of females per CDC light trap night | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens1* | *Cx. tarsalis2* | All  *Culex3* |
| FC – Zone NW | 24 | 24 | 48 | 9 | 2.67 | 2.67 | 5.33 |
| FC – Zone NE | 141 | 113 | 254 | 10 | 14.10 | 11.30 | 25.40 |
| FC – Zone SE | 187 | 72 | 259 | 15 | 12.47 | 4.80 | 17.27 |
| FC – Zone SW | 10 | 13 | 23 | 9 | 1.11 | 1.44 | 2.56 |
| FC – Citywide | 362 | 222 | 584 | 43 | 8.42 | 5.16 | 13.58 |
|  |  |  |  |  |  |  |  |
| LV | 4 | 118 | 122 | 37 | 0.11 | 3.19 | 3.30 |

1Mean abundance of *Cx. pipiens*females per CDC light trap night = (Total number *Cx. pipiens*females collected) / (Number CDC light trap nights).

2Mean abundance of *Cx. tarsalis*females per CDC light trap night = (Total number *Cx. tarsalis* females collected) / (Number CDC light trap nights).

3Mean abundance of All *Culex*females per CDC light trap night = (Total number All *Culex*females collected) / (Number CDC light trap nights).

**Table 3a. WNV infection rate per 1,000 females for current week (CDC light trap and gravid trap catches combined)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **35** | Total number individuals examined | | | Total number pools examined | | | Total number  WNV-infected pools | | | Estimate for WNV infection rate per 1,000 females1 | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* |
| FC – Zone NW | 154 | 24 | 178 | 12 | 6 | 18 | 4 | 0 | 4 | 47.26 | 0.00 | 35.8 |
| FC – Zone NE | 398 | 113 | 511 | 17 | 10 | 27 | 6 | 1 | 7 | 20.94 | 8.51 | 17.66 |
| FC – Zone SE | 458 | 72 | 530 | 24 | 15 | 39 | 7 | 2 | 9 | 21.75 | 29.05 | 23.46 |
| FC – Zone SW | 159 | 13 | 172 | 8 | 6 | 14 | 2 | 0 | 2 | 15.24 | 0.00 | 14.35 |
| FC – Citywide | 1169 | 222 | 1391 | 61 | 37 | 98 | 19 | 3 | 22 | 24.78 | 13.76 | 22.36 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| LV | 4 | 118 | 122 | 2 | 7 | 9 | 0 | 2 | 2 | 0.00 | 18.20 | 17.85 |

1Maximum likelihood estimate (MLE) for WNV infection rate per 1,000 females calculated using the CDC PooledInfRate 4.0 plug-in for Excel.

***Week 36***

**Table 1a. Vector Index for current week**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **35** | Mean abundance of females per trap night1 | | Estimate for proportion of  females infected with WNV2 | | **Vector Index** | | |
| *Cx. pipiens* | *Cx. tarsalis* | *Cx.*  *pipiens* | *Cx.*  *tarsalis* | ***Cx. pipiens3*** | ***Cx. tarsalis4*** | **All**  ***Culex5*** |
| FC – Zone NW | 2.222 | 0.333 | 0.023 | 0.000 | **0.05** | **0.00** | **0.05** |
| FC – Zone NE | 16.200 | 2.500 | 0.005 | 0.000 | **0.08** | **0.00** | **0.08** |
| FC – Zone SE | 8.333 | 0.600 | 0.000 | 0.000 | **0.00** | **0.00** | **0.00** |
| FC – Zone SW | 0.889 | 0.111 | 0.000 | 0.000 | **0.00** | **0.00** | **0.00** |
| FC – Citywide | 7.326 | 0.884 | 0.005 | 0.000 | **0.04** | **0.00** | **0.04** |
|  |  |  |  |  |  |  |  |
| LV | NA | NA | NA | NA | **NA** | **NA** | **NA** |

1From Table 2a (CDC light trap catches only).

2Derived from the data presented in Table 3a for estimated infection rate per 1,000 females (CDC light trap and gravid trap catches combined).

3Vector Index for *Cx. pipiens*= (Mean abundance of *Cx. pipiens*females per trap night) x (Estimate for proportion of all *Cx. pipiens*females infected with WNV).

4Vector Index for *Cx. tarsalis*= (Mean abundance of *Cx. tarsalis*females per trap night) x (Estimate for proportion of all *Cx. tarsalis*females infected with WNV).

5Vector Index for All *Culex*= (Vector Index for *Cx. pipiens*) *+* (Vector Index for *Cx. tarsalis*).

**Table 2a. Vector abundance for current week (CDC light trap catches only)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **35** | Total number  females collected | | | Number CDC light trap nights | Mean abundance of females per CDC light trap night | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens1* | *Cx. tarsalis2* | All  *Culex3* |
| FC – Zone NW | 20 | 3 | 23 | 9 | 2.22 | 0.33 | 2.56 |
| FC – Zone NE | 162 | 25 | 187 | 10 | 16.20 | 2.50 | 18.70 |
| FC – Zone SE | 125 | 9 | 134 | 15 | 8.33 | 0.60 | 8.93 |
| FC – Zone SW | 8 | 1 | 9 | 9 | 0.89 | 0.11 | 1.00 |
| FC – Citywide | 315 | 38 | 353 | 43 | 7.33 | 0.88 | 8.21 |
|  |  |  |  |  |  |  |  |
| LV | NA | NA | NA | NA | NA | NA | NA |

1Mean abundance of *Cx. pipiens*females per CDC light trap night = (Total number *Cx. pipiens*females collected) / (Number CDC light trap nights).

2Mean abundance of *Cx. tarsalis*females per CDC light trap night = (Total number *Cx. tarsalis* females collected) / (Number CDC light trap nights).

3Mean abundance of All *Culex*females per CDC light trap night = (Total number All *Culex*females collected) / (Number CDC light trap nights).

**Table 3a. WNV infection rate per 1,000 females for current week (CDC light trap and gravid trap catches combined)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **35** | Total number individuals examined | | | Total number pools examined | | | Total number  WNV-infected pools | | | Estimate for WNV infection rate per 1,000 females1 | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* |
| FC – Zone NW | 48 | 3 | 51 | 7 | 2 | 9 | 1 | 0 | 1 | 23.28 | 0.00 | 21.92 |
| FC – Zone NE | 377 | 25 | 402 | 16 | 6 | 22 | 2 | 0 | 2 | 5.16 | 0.00 | 4.86 |
| FC – Zone SE | 174 | 9 | 183 | 17 | 6 | 23 | 0 | 0 | 0 | 0.00 | 0.00 | 0 |
| FC – Zone SW | 18 | 5 | 23 | 4 | 2 | 6 | 0 | 0 | 0 | 0.00 | 0.00 | 0 |
| FC – Citywide | 617 | 42 | 659 | 44 | 16 | 60 | 3 | 0 | 3 | 4.90 | 0.00 | 3.36 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| LV | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

1Maximum likelihood estimate (MLE) for WNV infection rate per 1,000 females calculated using the CDC PooledInfRate 4.0 plug-in for Excel.

***Week 37***

**Table 1a. Vector Index for current week**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **35** | Mean abundance of females per trap night1 | | Estimate for proportion of  females infected with WNV2 | | **Vector Index** | | |
| *Cx. pipiens* | *Cx. tarsalis* | *Cx.*  *pipiens* | *Cx.*  *tarsalis* | ***Cx. pipiens3*** | ***Cx. tarsalis4*** | **All**  ***Culex5*** |
| FC – Zone NW | 1.44 | 1.11 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
| FC – Zone NE | 9.20 | 1.60 | 0.0055 | 0.0000 | **0.050** | **0.000** | **0.050** |
| FC – Zone SE | 7.20 | 0.27 | 0.0038 | 0.0000 | **0.027** | **0.000** | **0.027** |
| FC – Zone SW | 0.56 | 1.11 | 0.0000 | 0.0000 | **0.000** | **0.000** | **0.000** |
| FC – Citywide | 5.07 | 0.93 | 0.0042 | 0.0000 | **0.021** | **0.000** | **0.021** |
|  |  |  |  |  |  |  |  |
| LV | NA | NA | NA | NA | **NA** | **NA** | **NA** |

1From Table 2a (CDC light trap catches only).

2Derived from the data presented in Table 3a for estimated infection rate per 1,000 females (CDC light trap and gravid trap catches combined).

3Vector Index for *Cx. pipiens*= (Mean abundance of *Cx. pipiens*females per trap night) x (Estimate for proportion of all *Cx. pipiens*females infected with WNV).

4Vector Index for *Cx. tarsalis*= (Mean abundance of *Cx. tarsalis*females per trap night) x (Estimate for proportion of all *Cx. tarsalis*females infected with WNV).

5Vector Index for All *Culex*= (Vector Index for *Cx. pipiens*) *+* (Vector Index for *Cx. tarsalis*).

**Table 2a. Vector abundance for current week (CDC light trap catches only)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **35** | Total number  females collected | | | Number CDC light trap nights | Mean abundance of females per CDC light trap night | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens1* | *Cx. tarsalis2* | All  *Culex3* |
| FC – Zone NW | 13 | 10 | 23 | 9 | 1.44 | 1.11 | 2.56 |
| FC – Zone NE | 92 | 16 | 108 | 10 | 9.20 | 1.60 | 10.80 |
| FC – Zone SE | 108 | 4 | 112 | 15 | 7.20 | 0.27 | 7.47 |
| FC – Zone SW | 5 | 10 | 15 | 9 | 0.56 | 1.11 | 1.67 |
| FC – Citywide | 218 | 40 | 258 | 43 | 5.07 | 0.93 | 6.00 |
|  |  |  |  |  |  |  |  |
| LV | NA | NA | NA | NA | NA | NA | NA |

1Mean abundance of *Cx. pipiens*females per CDC light trap night = (Total number *Cx. pipiens*females collected) / (Number CDC light trap nights).

2Mean abundance of *Cx. tarsalis*females per CDC light trap night = (Total number *Cx. tarsalis* females collected) / (Number CDC light trap nights).

3Mean abundance of All *Culex*females per CDC light trap night = (Total number All *Culex*females collected) / (Number CDC light trap nights).

**Table 3a. WNV infection rate per 1,000 females for current week (CDC light trap and gravid trap catches combined)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Week: **35** | Total number individuals examined | | | Total number pools examined | | | Total number  WNV-infected pools | | | Estimate for WNV infection rate per 1,000 females1 | | |
| *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* | *Cx. pipiens* | *Cx. tarsalis* | All *Culex* |
| FC – Zone NW | 30 | 10 | 40 | 6 | 5 | 11 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| FC – Zone NE | 194 | 17 | 211 | 13 | 9 | 22 | 1 | 0 | 1 | 5.48 | 0.00 | 5.04 |
| FC – Zone SE | 260 | 4 | 264 | 15 | 3 | 18 | 1 | 0 | 1 | 3.75 | 0.00 | 3.70 |
| FC – Zone SW | 10 | 10 | 20 | 2 | 4 | 6 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| FC – Citywide | 494 | 41 | 535 | 36 | 21 | 57 | 2 | 0 | 2 | 4.23 | 0.00 | 3.51 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| LV | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

1Maximum likelihood estimate (MLE) for WNV infection rate per 1,000 females calculated using the CDC PooledInfRate 4.0 plug-in for Excel.