**CSU Testing of Mosquito Pools for West Nile Virus, 2015 – Final Report**

**Summary for 2015 WNV testing season**

* During the 2015 season, CSU tested a total of 1770 mosquito pools (see section A below). Of these 1522 came from Fort Collins and 248 from Loveland. Of the Fort Collins mosquito pools, 831 were *Cx. tarsalis* and 641 were *Cx. pipiens*.
* All tested pools in Fort Collins were negative in weeks 24-25. WNV-positive pools were then recorded each week from Fort Collins in weeks 26-37. All teste pools in Loveland were negative in weeks 24-28, & 32-34. WNV-positive pools were then recorded from week 29-31 from Loveland.
* The overall numbers of WNV-positive pools were 106 from Fort Collins and 10 from Loveland. The greatest number of WNV-positive pools for a single week was recorded in week 35 (n=24 positive pools, of which 22 were from Fort Collins and 2 from Loveland).
* Compared to historical 2006-2013 averages for Fort Collins (see section B below), the citywide *Culex* abundance in 2015 was distinctly higher in weeks 25, 26, & 28-30. Average *Culex* abundance >150 per trap night were recorded for the NE zones in weeks 30-31.
* Compared to historical 2006-2013 averages for Fort Collins (see section B below), citywide WNV infection rate in 2015 was near or below historical averages in Fort Collins for week 24-34. The citywide WNV infection rate was well above the historical average for week 35.
* Compared to historical 2006-2013 averages for Fort Collins (see section B below), the citywide Vector Index in 2015 was above the historical average in weeks 26-28, 31, & 35. The Vector Index fell below the historical average in weeks 29-30 & 32-34.
* For the four Fort Collins zones, there were no weekly records of the Vector Index exceeding 0.75 (see section B below). The VI did exceed 0.5 in the NE zone in week 31. Peak weekly VIs were 0.41 for the SE zone (week 35), 0.66 for the NE zone (week 31), 0.18 for the NW zone (week 31) and 0.08 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 - 2015**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 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 | 30 | 0 | 33 | 0 | 0 | 0 | 6 | 0 |
| 25 | 31 | 0 | 66 | 0 | 0 | 0 | 33 | 0 |
| 26 | 44 | 1 | 72 | 1 | 4 | 0 | 14 | 0 |
| 27 | 41 | 0 | 56 | 1 | 4 | 0 | 28 | 0 |
| 28 | 52 | 0 | 95 | 4 | 4 | 0 | 31 | 0 |
| 29 | 56 | 1 | 92 | 0 | 3 | 0 | 26 | 1 |
| 30 | 59 | 3 | 121 | 5 | 4 | 0 | 29 | 4 |
| 31 | 60 | 5 | 87 | 8 | 5 | 0 | 12 | 3 |
| 32 | 57 | 8 | 54 | 2 | 6 | 0 | 8 | 0 |
| 33 | 50 | 9 | 41 | 0 | 4 | 0 | 6 | 0 |
| 34 | 70 | 21 | 40 | 1 | 6 | 0 | 6 | 0 |
| 35 | 61 | 19 | 37 | 3 | 2 | 0 | 7 | 2 |
| 36 | 44 | 3 | 16 | 0 | NA | NA | NA | NA |
| 37 | 36 | 2 | 21 | 9 | NA | NA | NA | NA |
| **TOTAL** | **691** | **72** | **831** | **34** | **42** | **0** | **206** | **10** |

**B. Weekly data for 2015 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 | 0.10 | 0.00 | 0.01 | 0.02 | 0.00 | 0.01 | 0.03 | 0.01 | 0.00 |
| 27 | 0.00 | 0.00 | 0.10 | 0.03 | 0.00 | 0.01 | 0.00 | 0.00 | 0.02 | 0.01 | 0.00 |
| 28 | 0.00 | 0.00 | 0.10 | 0.03 | 0.21 | 0.11 | 0.00 | 0.01 | 0.10 | 0.05 | 0.00 |
| 29 | 0.09 | 0.12 | 0.00 | 0.17 | 0.00 | 0.40 | 0.00 | 0.04 | 0.01 | 0.2 | 0.08 |
| 30 | 0.11 | 0.13 | 0.10 | 0.18 | 0.28 | 0.31 | 0.00 | 0.10 | 0.15 | 0.19 | 0.29 |
| 31 | 0.18 | 0.2 | 0.66 | 0.13 | 0.18 | 0.21 | 0.08 | 0.06 | 0.25 | 0.18 | 0.27 |
| 32 | 0.11 | 0.16 | 0.20 | 0.33 | 0.16 | 0.41 | 0.06 | 0.09 | 0.14 | 0.27 | 0.00 |
| 33 | 0.08 | 0.20 | 0.14 | 0.38 | 0.11 | 0.28 | 0.00 | 0.06 | 0.09 | 0.24 | 0.00 |
| 34 | 0.10 | 0.15 | 0.16 | 0.16 | 0.26 | 0.34 | 0.02 | 0.06 | 0.17 | 0.19 | 0.00 |
| 35 | 0.13 | 0.03 | 0.39 | 0.11 | 0.41 | 0.18 | 0.02 | 0.16 | 0.28 | 0.13 | 0.06 |
| 36 | 0.05 | N/A | 0.08 | N/A | 0.00 | N/A | 0.00 | N/A | 0.04 | N/A | N/A |
| 37 | 0.00 | N/A | 0.05 | N/A | 0.03 | N/A | 0.00 | N/A | 0.02 | N/A | N/A |

12006-2013 (2003-2005 were excluded due to changes in trap locations from 2006 onwards).

**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 | 3.11 | 2.20 | 13.10 | 7.84 | 5.53 | 11.49 | 5.44 | 0.64 | 6.77 | 6.37 | 7.19 |
| 25 | 22.22 | 6.39 | 61.30 | 16.88 | 70.33 | 21.12 | 18.00 | 1.92 | 47.21 | 13.09 | 107.14 |
| 26 | 34.44 | 11.54 | 79.60 | 35.48 | 70.53 | 33.09 | 11.33 | 5.81 | 52.70 | 23.19 | 60.00 |
| 27 | 18.00 | 30.65 | 57.40 | 68.92 | 52.33 | 43.03 | 7.44 | 12.58 | 36.93 | 42.47 | 51.16 |
| 28 | 34.11 | 48.06 | 122.10 | 84.97 | 133.27 | 67.44 | 11.33 | 13.15 | 84.40 | 55.87 | 95.30 |
| 29 | 56.44 | 55.24 | 101.30 | 83.97 | 118.13 | 69.09 | 44.56 | 20.03 | 85.91 | 59.75 | 92.49 |
| 30 | 87.56 | 48.71 | 191.00 | 120.93 | 148.13 | 79.38 | 40.22 | 17.11 | 122.84 | 70.39 | 90.81 |
| 31 | 54.33 | 48.48 | 155.10 | 96.73 | 58.80 | 58.83 | 40.56 | 12.95 | 76.44 | 57.79 | 45.81 |
| 32 | 41.75 | 41.25 | 68.30 | 68.12 | 34.33 | 57.75 | 15.67 | 14.77 | 39.88 | 48.11 | 29.73 |
| 33 | 7.44 | 27.04 | 26.80 | 52.01 | 14.27 | 36.50 | 4.78 | 9.36 | 13.77 | 32.44 | 8.84 |
| 34 | 16.11 | 20.04 | 17.30 | 46.60 | 23.40 | 27.58 | 6.67 | 6.54 | 16.95 | 26.43 | 15.86 |
| 35 | 5.33 | 8.45 | 25.40 | 20.21 | 17.27 | 13.06 | 2.56 | 4.12 | 13.58 | 11.98 | 3.30 |
| 36 | 2.56 | N/A | 18.70 | N/A | 8.93 | N/A | 1.00 | N/A | 8.21 | N/A | N/A |
| 37 | 2.56 | N/A | 10.80 | N/A | 7.47 | N/A | 1.67 | N/A | 6.00 | N/A | N/A |

12006-2013 (2003-2005 were excluded due to changes in trap locations from 2006 onwards).

**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 | 1.52 | 0.00 | 0.00 | 0.00 | 0.58 | 0.00 |
| 25 | 0.00 | 0.00 | 0.00 | 0.69 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.09 | 0.00 |
| 26 | 0.00 | 0.00 | 1.08 | 0.00 | 0.75 | 0.44 | 0.00 | 0.54 | 0.75 | 0.24 | 0.00 |
| 27 | 0.00 | 0.00 | 1.59 | 0.09 | 0.00 | 0.25 | 0.00 | 0.00 | 0.53 | 0.17 | 0.00 |
| 28 | 0.00 | 0.00 | 0.65 | 0.41 | 1.43 | 0.90 | 0.00 | 0.49 | 0.97 | 0.53 | 0.00 |
| 29 | 1.87 | 1.58 | 0.00 | 1.40 | 0.00 | 3.22 | 0.00 | 1.17 | 0.23 | 2.07 | 0.89 |
| 30 | 1.16 | 2.97 | 0.47 | 2.10 | 2.42 | 4.01 | 0.00 | 3.60 | 1.38 | 3.05 | 3.18 |
| 31 | 5.25 | 4.29 | 3.24 | 1.42 | 3.16 | 4.27 | 2.45 | 3.40 | 3.49 | 3.27 | 6.26 |
| 32 | 1.98 | 4.37 | 3.85 | 6.30 | 7.18 | 7.68 | 5.85 | 9.92 | 4.75 | 6.11 | 0.00 |
| 33 | 12.10 | 8.34 | 7.46 | 7.54 | 11.02 | 10.85 | 0.00 | 4.80 | 8.70 | 8.96 | 0.00 |
| 34 | 14.48 | 6.89 | 11.52 | 3.03 | 13.90 | 12.02 | 10.86 | 12.99 | 13.89 | 7.66 | 0.00 |
| 35 | 35.8 | 8.13 | 17.66 | 4.78 | 23.46 | 15.6 | 14.35 | 61.3 | 22.36 | 10.8 | 17.85 |
| 36 | 21.92 | N/A | 4.86 | N/A | 0.00 | N/A | 0.00 | N/A | 3.36 | N/A | N/A |
| 37 | 0.00 | N/A | 5.04 | N/A | 3.70 | N/A | 0.00 | N/A | 3.51 | N/A | N/A |

12006-2013 (2003-2005 were excluded due to changes in trap locations from 2006 onwards).

**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.