

# NORTHWEST MOSQUITO ABATEMENT DISTRICT

Keeping the community safe

Weekly mosquito report for epidemiological week 28 (July 6 – July 12).

## **Mosquito Surveillance:**

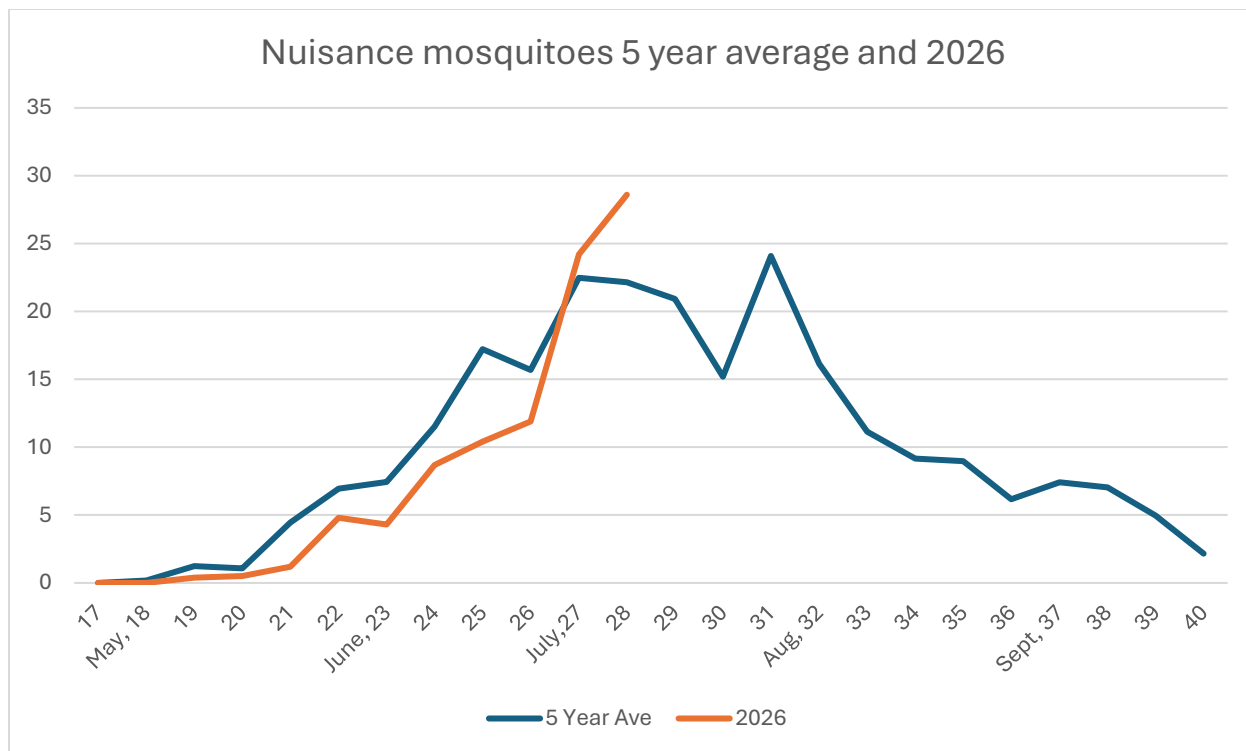
Northwest Mosquito Abatement District operates 36 mosquito traps throughout the 242 square miles we cover. These traps help us track mosquito populations and West Nile virus. Traps run continuously from May 1 until October, and mosquitoes are collected everyday Monday through Friday. All mosquitoes are identified to the species level. We test certain mosquito species for the presence of West Nile virus.

## **Floodwater/nuisance mosquitoes.**

These are the species of mosquitoes which are more likely to take blood meals from humans. These species come out 5-10 days after rainfall. These species populations tend to be higher in the late spring and early summer – historically peaking around the beginning of July. These mosquitoes live for about 2 weeks and tend to prefer shady forest areas.

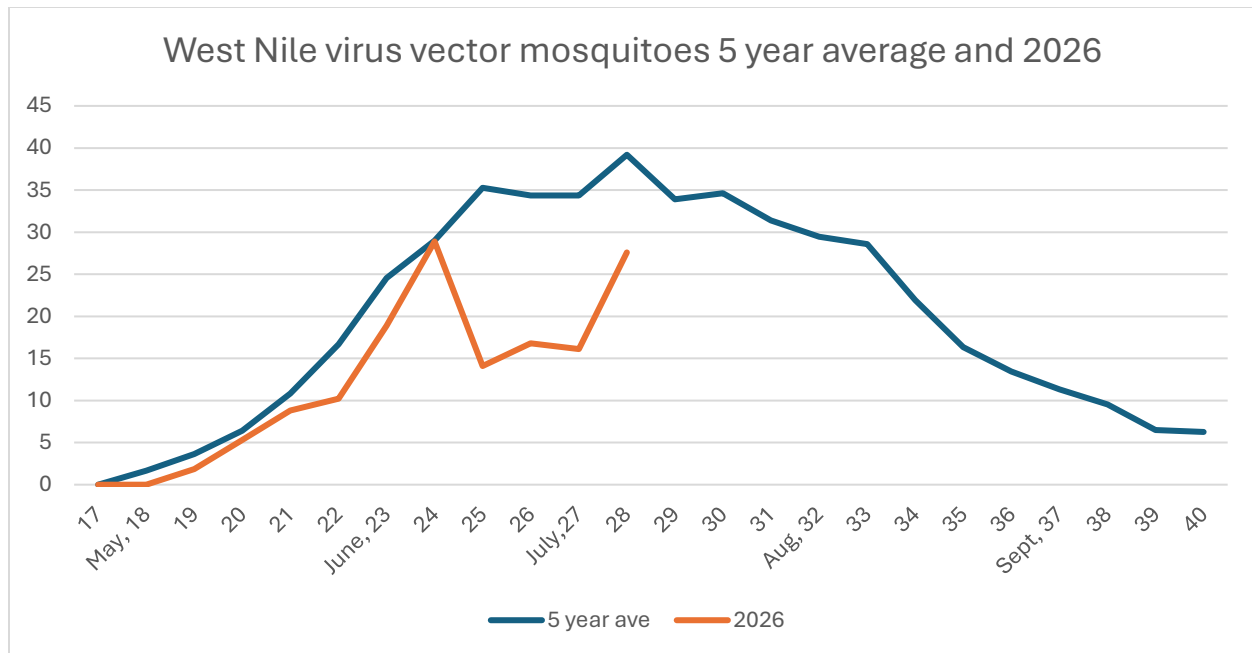
With the warmer weather and additional rain, we are seeing nuisance mosquitoes – especially in wooded areas with shade.

We are seeing a significant increase in nuisance mosquitoes, primarily in the western part of the district. These are species which are notoriously difficult to trap using our standard mosquito traps and are not reflected in our average nuisance graph.



## West Nile virus vector mosquitoes.

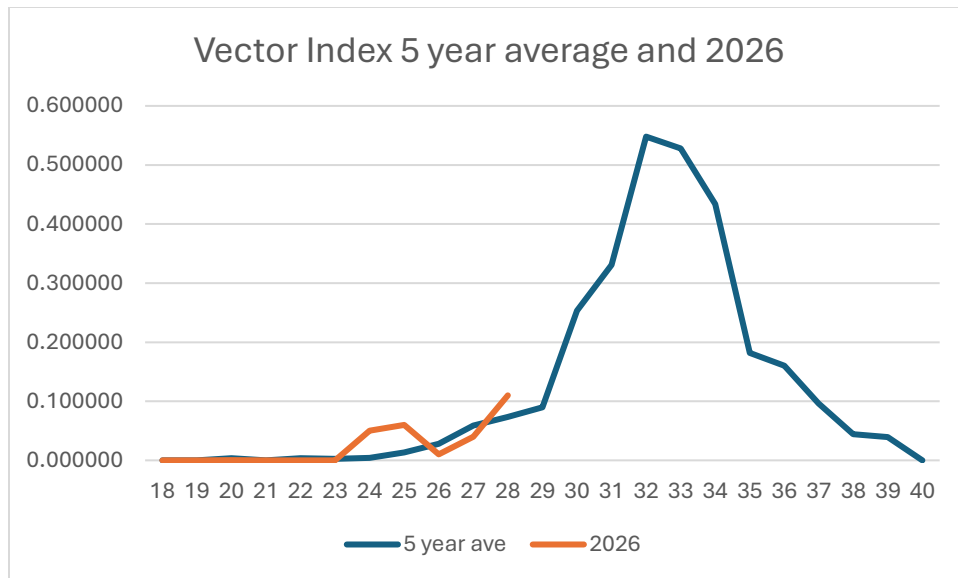
There are two main species of WNV vector mosquitoes, *Culex pipiens* and *Culex restuans*. These species prefer to feed on birds (which are the reservoir hosts for WNV) but will feed on humans opportunistically. In general, we tend to see the population of these mosquitoes increase during drought-like conditions. We are below average for these species of mosquitoes for this time of year.



## West Nile virus detection in mosquitoes.

In our lab we test most, if not all, WNV vector mosquitoes for West Nile virus daily. From this data we can calculate the risk of transmission (Vector Index), allow us to monitor the infection rate over time, and better inform our field operations on where to focus our abatement. We tested 87 batches of mosquitoes last week and had 10 WNV positive. The Vector Index for the district was 0.11

| VI Range    | Risk     |
|-------------|----------|
| 0.0 - 0.2   | Very low |
| 0.21 - 0.99 | Low      |
| 1.0 - 1.99  | Moderate |
| > 2.0       | High     |



| Location Code     | Test Last Week | Positives Last Week | Total Tests | Total Positives |
|-------------------|----------------|---------------------|-------------|-----------------|
| Arlington Heights | 7              | 0                   | 38          | 2               |
| Buffalo Grove     | 2              | 0                   | 15          | 0               |
| Barrington        | 2              | 0                   | 9           | 1               |
| Bartlett          | 2              | 0                   | 26          | 0               |
| Des Plaines       | 3              | 0                   | 12          | 0               |
| Elk Grove         | 7              | 1                   | 35          | 2               |
| Elgin             | 4              | 0                   | 16          | 1               |
| Glenview          | 4              | 0                   | 19          | 0               |
| Hoffman Estates   | 1              | 0                   | 18          | 0               |
| Hanover Park      | 0              | 0                   | 15          | 0               |
| Mount Prospect    | 16             | 5                   | 61          | 9               |
| Northbrook        | 5              | 0                   | 5           | 5               |
| Palatine          | 8              | 0                   | 24          | 1               |
| Prospect Heights  | 4              | 1                   | 24          | 1               |
| Park Ridge        | 4              | 0                   | 25          | 1               |
| Schaumburg        | 6              | 0                   | 41          | 1               |
| Streamwood        | 3              | 0                   | 16          | 1               |
| Wheeling          | 9              | 3                   | 32          | 5               |

|              |           |           |            |           |
|--------------|-----------|-----------|------------|-----------|
| <b>Total</b> | <b>87</b> | <b>10</b> | <b>431</b> | <b>25</b> |
|--------------|-----------|-----------|------------|-----------|

---

## **Mosquito Abatement Activities**

The District has about 80,000 storm water catch basins which are the primary habitat for the aquatic stages of West Nile virus vector mosquitoes. We also have approximately 10,000 above ground aquatic sources where other species of mosquitoes may be found. Above ground sources that permanently hold water generally do not produce mosquitoes.

To date we have treated 76,119 catch basins.

We have inspected 110 above ground water sources and treated 30. We concentrate on catch basins early in the year to reduce the WNV vector mosquitoes and switch to above ground sources once most basins are treated.

## **Tick Surveillance**

As the spring and early summer tick season winds down, we have observed a rapid decrease in both dog and deer tick activity over the past two weeks.

While the risk of encountering a tick has lowered, they have not disappeared entirely. A small number remain active, but far fewer are currently seeking host blood meals. We anticipate a secondary increase in deer tick activity later this autumn, typically stretching from late September through early November.