

Entomology Report July 2025

1. Below is the week 29 mosquito report.
2. We are entering the 2 months of the season when we see more WNV in mosquitoes.
3. IVAN bylaw questions and edits raised by Carolyn and I have been addressed by the Associations attorney to my satisfaction and bylaws will be ratified soon. Joe Cleary was thankful for the comments. SCCMAD will be joining IVAN as a founding member, but will need to show they are making strides to meet all the legal requirements for a MAD.
4. We have been evaluating the larvicides in catch basins this season. I checked 153 catch basins where Natular XRT were used. I'm recommending we retreat all the Natular basins with Sumilarv.

| Map Number | Township | Pos larvae | Neg larvae | Total Basins | % Positive | Comment |
|------------|----------|------------|------------|--------------|------------|----------------------------|
| 6 | N | 5 | 1 | 6 | 83% | |
| 17 | N | 4 | 7 | 11 | 36% | shallow - saw briquet in 5 |
| 19 | P | 7 | 3 | 10 | 70% | |
| 21 | P | 9 | 2 | 11 | 82% | |
| 22 | P | 3 | 3 | 6 | 50% | |
| 10 | W | 7 | 3 | 10 | 70% | |
| 11 | W | 2 | 8 | 10 | 20% | |
| 15 | W | 2 | 8 | 10 | 20% | shallow - saw briquet in 7 |
| 17 | W | 9 | 4 | 13 | 69% | |
| 18 | W | 10 | 0 | 10 | 100% | |
| 25 | W | 4 | 4 | 8 | 50% | |
| 26 | W | 5 | 2 | 7 | 71% | |
| 28 | W | 2 | 1 | 3 | 67% | |
| 30 | W | 15 | 3 | 18 | 83% | |
| 31 | W | 8 | 2 | 10 | 80% | |
| 33 | W | 5 | 5 | 10 | 50% | |

| | | | | | |
|-------|----|----|-----|-----|--|
| Total | 97 | 56 | 153 | 63% | |
|-------|----|----|-----|-----|--|

5. I'm going out with someone from Clarke mosquito next week to show him our Natular treated basins and explain to him why this formulation is failing.
6. We are setting out BG sentinel traps on the eastern part of our district to monitor for the invasive mosquito species *Ae. albopictus*. We have seen a small but steady increase in these mosquitoes over the past 3 years.
7. We sent 280 adult deer ticks and 99 nymphal deer ticks to the CDC for pathogen testing at the beginning of July. It will be a couple of months until we get results back.
8. We are in the process of conducting adulticide resistance testing. We did this 5 years ago and want to see if we have any changes. We will be the active ingredients we use for our night spray and DDT. We're curious to see if our mosquitoes are still resistant to DDT after 50 plus years since its last use.

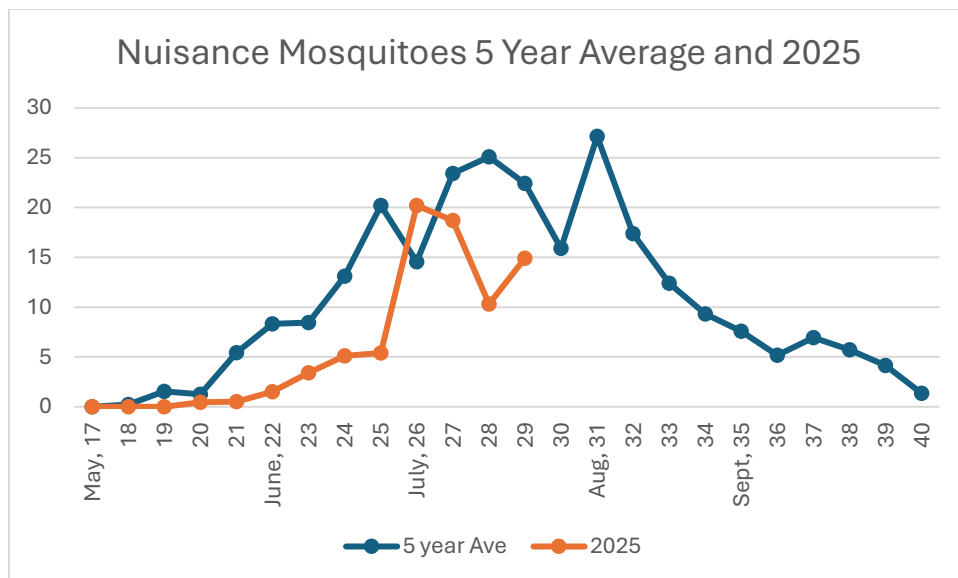
Weekly mosquito report for week 29

Mosquito Surveillance:

Northwest Mosquito Abatement District operates 31 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 species. We test certain mosquito species for the presence of West Nile virus.

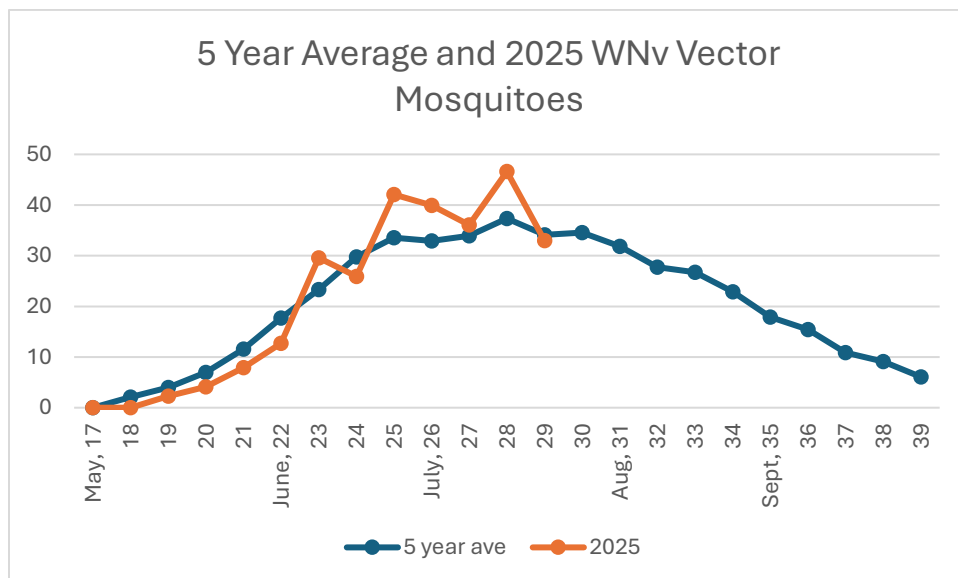
Floodwater/nuisance mosquitoes.

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.



West Nile virus vector mosquitoes.

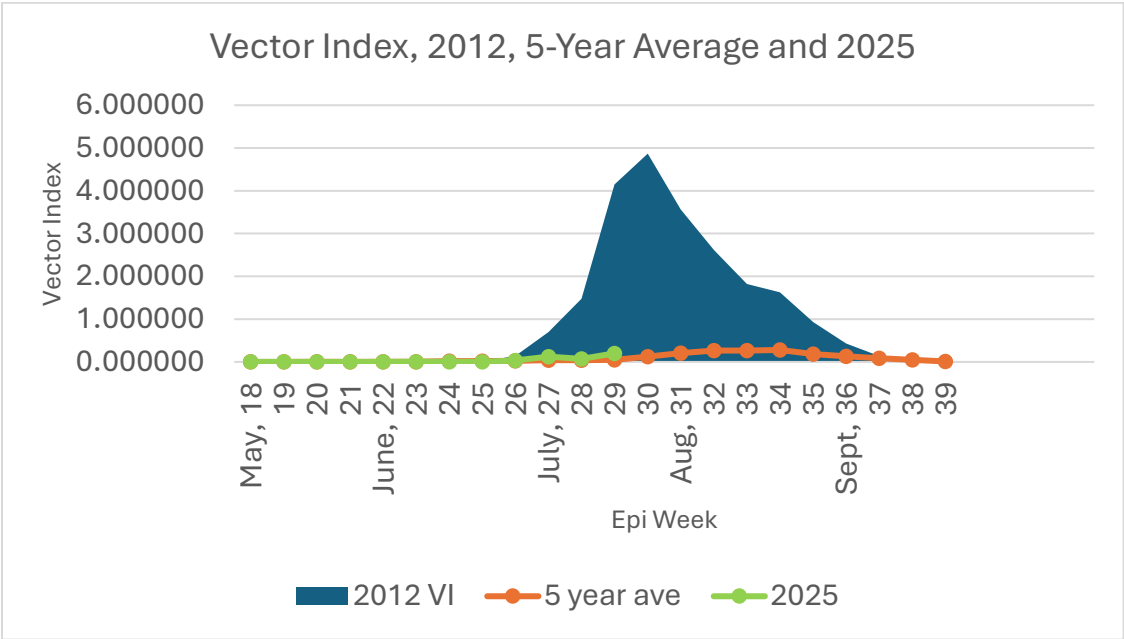
There are two main species of WNV vector mosquitoes, *Culex pipiens* and *Culex restuans*. These species prefer to feed on birds (which are the reservoir hosts for WNV) but will feed on humans opportunistically. In general, we tend to see the population of these mosquitoes increase during drought-like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



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 103 batches of mosquitoes last week and had 19 WNV positives. The Vector Index for the district is 0.2.

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



| | | | | |
|-------------------|-----|----|-----|----|
| Arlington Heights | 9 | 3 | 84 | 5 |
| Buffalo Grove | 8 | 3 | 45 | 5 |
| Barrington | 9 | 1 | 67 | 1 |
| Bartlett | 3 | 1 | 27 | 1 |
| Des Plaines | 2 | 0 | 27 | 0 |
| Elgin | 8 | 2 | 54 | 2 |
| Elk Grove | 7 | 0 | 70 | 4 |
| Glenview | 3 | 0 | 30 | 0 |
| Hoffman Estates | 7 | 0 | 82 | 2 |
| Northbrook | 10 | 1 | 104 | 4 |
| Palatine | 3 | 0 | 34 | 1 |
| Prospect Heights | 2 | 1 | 24 | 2 |
| Park Ridge | 14 | 4 | 109 | 7 |
| Rolling Meadows | 7 | 3 | 53 | 3 |
| Schaumburg | 4 | 0 | 41 | 0 |
| Streamwood | 1 | 0 | 13 | 1 |
| Total | 103 | 19 | 876 | 38 |
| | | | | |

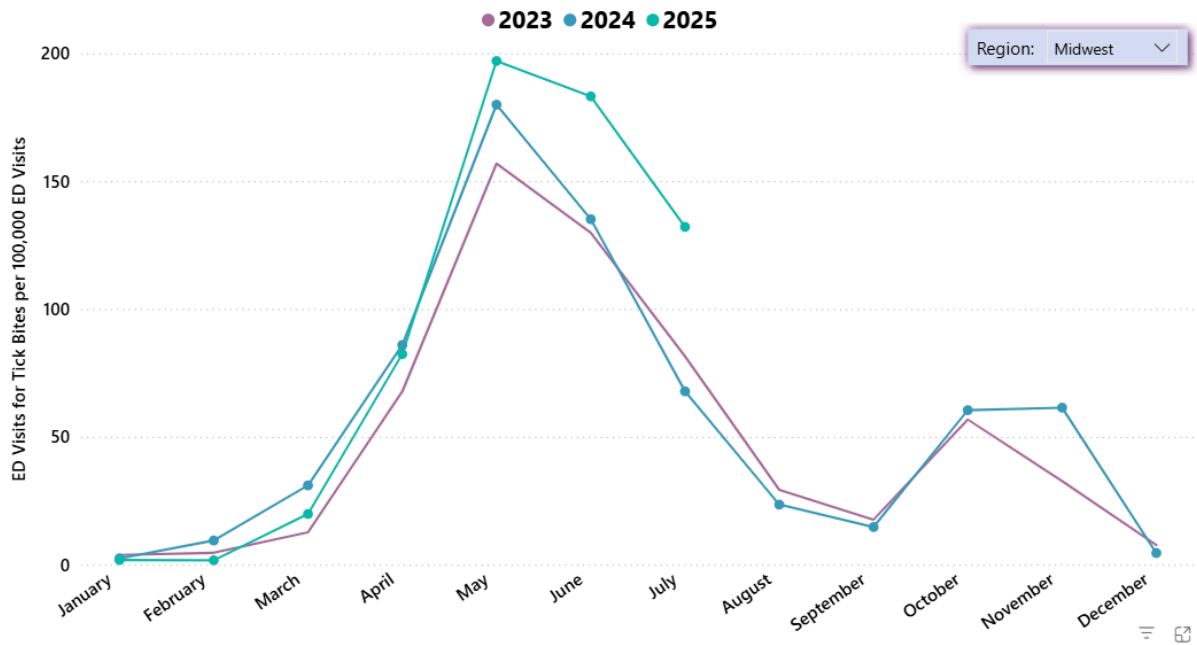
Tick Surveillance

We have sent all our deer ticks to CDC for pathogen testing. It may take a couple of months to get results back, but I will include them in the weekly report as soon as we get the results.

We have conducted 65 separate drags (and found at least 1 tick during 59 of them) since mid-March through last week.

| Tick Species (Common Name) | Life Stage | Number |
|--------------------------------|------------|--------|
| D. variabilis (Dog Tick) | Adult | 370 |
| I. scapularis (Deer Tick) | Adult | 280 |
| I. scapularis (Deer Tick) | Nymph | 99 |
| A. americanum (Lone Star Tick) | Nymph | 1 |

Emergency Department (ED) Visits for Tick Bites by Month*, United States, 2023-2025



From the CDC