NWMAD Mosquito Report week 29

Northwest Mosquito Abatement District operates 35 mosquito traps throughout the 242 square miles we cover. These traps help us track mosquito populations and West Nile virus. Traps are 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.

Nuisance mosquito numbers spiked higher last week (Figure 1). We are seeing them primarily in forested areas.

One nuisance mosquito trap site (heavily forested area) is skewing the average higher – this trap had an average of 325 mosquitoes per night. Calculating the weekly average with this traps data removed we have an average of 14 nuisance mosquitoes per trap night.

Nuisance mosquitoes are the species that like to bite humans, they come out 5-10 days after a significant rain event. These mosquitoes live for about 2 weeks, tend to prefer shady forest areas. Historically, we see nuisance mosquitoes peak right around the beginning of July.

Figure 1.

West Nile virus vector mosquito numbers fell slightly this past week. (Figure 2).

We have tested 721 mosquito pools for West Nile virus this season. Table 1. Is a list of the positive mosquito pools we’ve detected this year.

Figure 2.

Table 1.

|  |  |
| --- | --- |
| Date | Village |
| 06/21/22 | Buffalo Grove |
| 07/05/22 | Prospect Heights |
| 07/11/22 | Buffalo Grove |
| 07/12/22 | Arlington Heights |
| 07/18/22 | Hoffman Estates |
| 07/18/22 | Elk Grove |
| 07/20/22 | Elk Grove |
| 07/22/22 | Buffalo Grove |
| 07/22/22 | Park Ridge |
| 07/22/22 | Elk Grove |
| 07/25/22 | Prospect Heights |

Vector Index

The Vector Index (VI) is a measure of risk for WNv. the calculation involves the maximum likelihood estimate and the average abundance of WNv vector mosquitoes. Based on past VI and reported human cases of WNv we have established the following thresholds for the district. Figure 4. is the Vector Index for the 2022 season to date, the 5 year average and the VI for the WNv outbreak year 2012.

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

Figure 4.

District wide we are in the very low risk category for WNv transmission to humans.