

Mosquito Surveillance Report: Week of July 5th

Summary & Average Trap Counts

A total of 16,271 mosquitoes were caught throughout Western Manitoba during the week of July 5th with an overall average of 1,044 mosquitoes per trap per night. The highest number of mosquitoes collected in a single trap was 11,772 mosquitoes collected in Cypress River on July 5th. In 2020, an average of 430 mosquitoes were caught per trap per night for the same week (Table 1). As the temperatures have dropped and overnight lows fell below 10 °C in Manitoba, mosquito trap counts have declined across Western Manitoba. Additionally, the city of Brandon fogged for mosquitoes on July 3 and 4 in Brandon, which resulted in significantly reduced trap counts in Brandon especially when combined with the temperature decline.

Table 1. The average number of mosquitoes trapped per trap per night in each community for the week of **July 5th, 2021**. The 2020 average trap counts for the same week have also been included.

| Community | 2021 Average Trap Count | 2020 Average Trap Count |
|---------------|-------------------------|-------------------------|
| Boissevain | 398 | 29 |
| Brandon | 14 | 1,484 |
| Carberry | 26 | 31 |
| Cypress River | 6,164 | 548 |
| Killarney | 25 | 228 |
| Shoal Lake | 102 | 122 |
| Souris | 349 | 187 |
| Virden | 1,071 | 71 |

Mosquito Species

A total of 15,143 mosquitoes representing 8 mosquito species that are capable of transmitting pathogens to humans were identified from the mosquitoes collected this week (Table 2).

The most numerous mosquito species caught was *Coquillettidia perturbans*, the cattail mosquito, representing 73% of identified mosquitoes. The majority of *Coquillettidia perturbans* were caught in Cypress River and Virden. This mosquito plays a minor role in the transmission of California serogroup, West Nile, and Eastern Equine encephalitis viruses.

Followed behind *Coquillettidia perturbans* was *Aedes vexans*, the inland floodwater mosquito, representing 20% of identified mosquitoes. *Aedes vexans* was present throughout all the traps. This mosquito plays a role in the transmission of California serogroup viruses to humans and is a major nuisance mosquito in Manitoba.

The other mosquito species caught includes a variety of *Aedes*, *Culex* and *Anopheles* mosquitoes, all of which can act as vectors for California serogroup viruses and/or West Nile virus (Table 2).

Satellite Trapping

One satellite trap was deployed this week in Newdale and caught approximately 2,528 mosquitoes. The majority of these were identified to be *Aedes vexans*, *Aedes trivittatus* and *Coquillettidia perturbans* mosquitoes (Table 2).

Table 2. The numbers of 8 mosquito species caught throughout Manitoba during the week of July 5th, 2021.

| Species | Boissevain | Brandon | Cypress | | | Shoal | | | Total | |
|----------------------------------|------------|---------|----------|-------|-----------|---------|------|--------|-------|--------|
| | | | Carberry | River | Killarney | Newdale | Lake | Souris | | Virden |
| <i>Aedes dorsalis</i> | 176 | 2 | 2 | 0 | 2 | 64 | 2 | 21 | 1 | 270 |
| <i>Aedes flavescens</i> | 5 | 0 | 2 | 0 | 0 | 0 | 2 | 1 | 0 | 10 |
| <i>Aedes trivittatus</i> | 0 | 0 | 0 | 0 | 0 | 696 | 0 | 0 | 11 | 707 |
| <i>Aedes vexans</i> | 446 | 11 | 12 | 156 | 11 | 1544 | 150 | 339 | 314 | 2983 |
| <i>Anopheles earlei</i> | 0 | 0 | 0 | 24 | 0 | 0 | 0 | 1 | 3 | 28 |
| <i>Coquillettidia perturbans</i> | 5 | 1 | 0 | 10280 | 10 | 64 | 0 | 0 | 736 | 11096 |
| <i>Culex restuans</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 |
| <i>Culex tarsalis</i> | 15 | 8 | 5 | 1 | 6 | | | 2 | 0 | 37 |
| Total | 647 | 22 | 21 | 10461 | 29 | 2368 | 154 | 364 | 1067 | 15133 |