Mosquito Surveillance Report: Week of July 19th

Summary & Average Trap Counts

A total of 8,245 mosquitoes were caught throughout Western Manitoba during the week of July 19th with an overall average of 550 mosquitoes per trap per night. The highest number of mosquitoes collected in a single trap was 5,072 mosquitoes collected in Cypress River on July 19th. In 2020, an average of 524 mosquitoes were caught per trap per night for the same week (Table 1).

Table 1. The average number of mosquitoes trapped per trap per night in each community for the week of **July 19th, 2021.** The 2020 average trap counts for the same week have also been included.

Community	2021 Average Trap Count	2020 Average Trap Count
Boissevain	522	343
Brandon	164	587
Carberry	34	33
Cypress River	5,072	1,148
Killarney	5	545
Shoal Lake	317	415
Souris	77	880
Virden	469	244

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Mosquito Species

A total of 5,978 mosquitoes representing 9 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 67% 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 22% 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 average number of *Culex tarsalis* mosquitoes per trap has continued to increase this week with an overall average of 31 per trap per trap night in Western Manitoba. *Culex tarsalis* mosquitoes were present in all communities this week and represented 8% of identified mosquitoes. This is up from an average of 23 *Culex tarsalis* per trap last week. The increase observed is consistent with data published by Manitoba Health wherein an increase of *Culex tarsalis* mosquitoes has also been observed. *Culex tarsalis* is the primary vector for West Nile virus in Manitoba and is also involved in the transmission of Western equine encephalitis and California serogroup viruses.

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).

Table 2. The numbers of 9 mosquito species caught throughout Manitoba during the week of July 19th, 2021.

Species	Boissevain	Brandon	Carberry	Cypress River	Killarney	Shoal Lake	Souris	Virden	Total
Ae. canadensis	0	3	0	0	0	0	0	0	3
Ae. dorsalis	21	4	0	0	1	0	6	1	33
Ae. flavescens	14	0	0	0	0	4	0	0	18
Ae. trivittatus	0	0	0	0	0	0	0	1	1
Ae. vexans	457	246	2	16	1	359	60	197	1338
An. earlei	10	0	0	8	2	54	2	7	83
Cq. perturbans	5	0	11	3400	0	4	4	586	4010
Cx. restuans	0	4	0	0	0	0	0	0	4
Cx. tarsalis	236	36	37	4	2	114	57	2	488
Total	743	293	50	3428	6	535	129	794	5978

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