Mosquito Surveillance Report: Week of June 7th

Summary

Mosquito trapping occurs twice per week on Monday and Tuesday nights. Due to trap counts varying considerably day-to-day, the average trap count is reported for the week for each location.

In the second week of mosquito surveillance, we have continued to observe very low trap counts compared to last year except for in Cypress River (Table 1). Many mosquito species require water or moisture for their eggs to hatch. As a result, it is likely that the low trap counts observed are due to the dry weather Manitoba has been experiencing in recent weeks (Environment Canada, 2021).

Average Trap Counts

A total of 705 mosquitoes were caught across Western Manitoba during the week of June 7th, with an average of 44 mosquitoes per trap night (Table 1). Of these, 621 were caught in Cypress River. In 2020, an average of 135 mosquitoes were caught per trap night for the same week. The relatively low trap counts observed are consistent with other areas of the province where low trap counts are also being observed.

Table 1. The average number of mosquitoes trapped per trap night in each community for the week of **June 7th, 2021.** The 2020 average trap counts for the same week have also been included.

Community	2021 Average Trap Count	2020 Average Trap Count
Boissevain	9	92
Brandon	4	114
Carberry	2	66
Cypress River	311	100
Killarney	2	35
Shoal Lake	17	190
Souris	5	100
Virden	2	13

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Mosquito Species

A total of 560 mosquitoes representing 11 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 *Aedes vexans*, the inland floodwater mosquito, representing 60% of identified mosquitoes. These mosquitoes are aggressive biters and can transmit California serogroup viruses.

Followed behind *Aedes vexans* is *Coquillettidia perturbans*, the cattail mosquito, representing 17% of identified mosquitoes. This mosquito plays a minor role in the transmission of California serogroup, West Nile, and Eastern Equine encephalitis viruses 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).

Virus Screening

575 mosquitoes caught between May 31st and June 8th were screened for the presence of California serogroup viruses by PCR. No virus detections were made.

Table 2. The numbers of 11 mosquito species caught throughout Manitoba during the week of June 7th, 2021.

	Mosquito Species											
Location	*Aedes communis*	*Aedes dorsalis*	*Aedes excrucians*	*Aedes flavescens*	*Aedes spencerii*	*Aedes trivittatus*	*Aedes vexans*	*Anopheles earlei*	*Coquillettidia perturbans*	*Culex restuans*	*Culex tarsalis*	Total
Boissevain	0	5	0	0	0	0	2	1	0	0	0	8
Brandon	0	5	0	0	1	0	1	0	0	2	2	11
Carberry	0		0	0	0	0	1	0	0	0	0	1
Cypress River	0	26	0	0	0	26	331	11	95	5	2	496
Killarney	0	3	0	0	0	0	0	0	0	0	0	3
Shoal Lake	23	1	1	3	0	0	2	1	0	1	0	32
Souris	0	6	0	0	0	0	0	0	0	0	1	7
Virden	0	0	0	0	0	0	0	2	0	0	0	2
Total	23	46	1	3	1	26	337	15	95	8	5	560