

Mosquito Surveillance Report: Week of May 31st

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 first week of mosquito surveillance, we have observed very low trap counts compared to last year. 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 (Environment Canada, 2021).

Average Trap Counts

A total of 228 mosquitoes were caught across Western Manitoba during the week of May 31st, 2021, with an average of 12 mosquitoes per trap per night (Table 1). In 2020, an average of 160 mosquitoes were caught per trap per night for the same week. The low numbers 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 night per trap in each community for the week of **May 31st, 2021**. The 2020 average trap counts for the same week have also been included.

Community	2021 Average Trap Count	2020 Average Trap Count
Boissevain	16	187
Brandon	4	32
Carberry	4	171
Cypress River	23	25
Killarney	0	55
Shoal Lake	63	393
Souris	0	202
Virden	1	17

Mosquito Species

A total of 185 mosquitoes representing five mosquito species were identified from the 228 mosquitoes collected this week (Table 2). These include *Anopheles walkeri*, *Aedes communis*, *Aedes dorsalis*, *Culex restuans*, and *Culex tarsalis*.

Anopheles walkeri mosquitoes were collected from Shoal Lake and Cypress River. *An. walkeri* mosquitoes are not currently responsible for transmitting pathogens to humans in Manitoba but their bites can be a nuisance.

Four mosquito species of medical importance were identified from the mosquitoes caught during the week of May 31st, 2021. *Aedes communis*, also known as the snow mosquito, was identified from Shoal Lake traps. *Ae. communis* is a cold-hardy mosquito that often hatches shortly after snow melt in vernal pools. *Ae. communis* mosquitoes are involved in the transmission of Jamestown Canyon virus.

Aedes dorsalis, the summer salt marsh mosquito, was identified from Carberry and Shoal Lake and are known to be involved in the transmission of California serogroup viruses. Compared to last year, a significant decrease in *Ae. dorsalis* mosquitoes has been observed.

Culex tarsalis mosquitoes were identified in very low numbers from Brandon and Cypress River traps. *Cx. tarsalis* plays an important role in the transmission of West Nile virus in Manitoba and a minor role in the transmission of California serogroup viruses.

Culex restuans mosquitoes were identified from Boissevain and Cypress River traps. *Cx. restuans* mosquitoes play a role in the transmission of both West Nile virus and California serogroup viruses.

Table 2. The numbers of five mosquito species caught throughout Manitoba during the week of May 31st, 2021.

Location	<i>Ae. communis</i>	<i>Ae. dorsalis</i>	<i>An. walkeri</i>	<i>Cx. restuans</i>	<i>Cx. tarsalis</i>	Total
Boissevain	0	0	0	28	0	28
Brandon	0	0	0	0	2	2
Carberry	0	2	0	0	0	2
Cypress River	0	0	21	14	1	36
Shoal Lake	86	4	26	0	0	116
Virden	0	0	0	0	1	1
Total	86	6	47	42	4	185