

APPENDIX S1: SUPPLEMENTARY METHODS

Manuscript title: “Local environment and sampling bias drive parasite prevalence estimates in freshwater fish communities”

Journal: *Oikos*

TABLE S1. Geographical and morphometric lake characteristics of the 15 lakes sampled.

Lake	Watershed ¹	Latitude ²	Longitude ²	Area (km ²) ²	Maximum depth (m) ²	Mean depth (m) ²	Residence time (year) ²	Drainage area (km ²) ²	Elevation (m) ²	Perimeter (m) ³	Distance to nearest lake (m) ^{3,4}
Achigan	Achigan	45°56'34" N	73°58'41" W	5.320	26.5	12.3	1.18	97.060	209.0	22834.0	1459.406
Beaver	Achigan	45°55'30" N	74°03'50" W	0.037	6.2	2.0	0.85	0.151	360.0	924.0	272.174
Coeur	Coeur	45°58'06" N	74°00'36" W	0.437	7.6	3.1	1.30	1.736	349.0	7359.4	999.039
Cornu	Cornu	45°52'53" N	74°00'02" W	0.218	15.3	6.3	2.30	1.059	236.8	3533.0	845.637
Corriveau	Achigan	45°58'38" N	74°00'03" W	0.057	14.4	6.8	0.06	11.230	324.5	1332.1	959.488
Croche	Achigan	45°59'34" N	74°00'34" W	0.179	11.4	4.7	1.40	1.072	358.7	4550.9	452.447
Cromwell	Achigan	45°59'21" N	73°59'55" W	0.102	9.8	3.5	0.08	8.136	336.8	1916.9	785.556
Echo	Echo	45°53'14" N	74°01'24" W	1.600	9.0	1.8	0.43	12.020	233.0	12151.0	809.508
Fournelle	Connelly	45°54'53" N	74°02'28" W	0.189	8.4	2.9	0.22	4.390	279.6	3082.2	785.674
Montaubois	Achigan	45°55'20" N	74°04'23" W	0.166	32.6	13.7	7.80	0.508	350.0	2359.6	514.664
Morency	Morency	45°55'40" N	74°02'09" W	0.256	20.3	8.8	0.60	2.380	271.0	2934.6	1131.794
Pin rouge	Achigan	45°57'39" N	74°02'28" W	0.152	14.0	4.9	0.17	7.560	322.0	2181.6	511.121
St-Onge	Connelly	45°54'52" N	73°57'44" W	0.014	3.5	1.8	0.05	0.875	216.7	492.1	1580.956
Tracy	Achigan	45°55'38" N	74°03'57" W	0.083	24.5	8.2	1.40	0.881	345.2	1291.5	272.174
Triton	Achigan	45°59'16" N	74°00'29" W	0.017	4.3	2.5	0.46	0.163	364.0	680.0	452.447

¹ The data was extracted from the government of Québec documentation (Atlas de l'eau).² The data was extracted from the bathymetric maps available on <https://crelaurentides.org/atlas-des-lacs/>.³ The estimations were computed on QGIS.⁴ The measurement was made from centroid to centroid.

TABLE S2. Determination of the sampling effort within lakes according to the lake area.

Area class (km ²)	Nb. lakes	Nb. transects	Nb. seine nets	Nb. minnow traps	Nb. samplings
]0; 0.1[5	2	4	15	21
[0.1; 0.2[5	3	5	15	23
[0.2; 1.0[3	4	6	15	25
[1.0; 2.0[1	5	7	15	27
[2; ...[1	6	8	15	29

Table S3. Fishing gear dimensions.

Gear ID	Gear type	Length (cm)	Width (cm)	Mesh (cm)	Diameter (cm)	Opening (cm)
S1	Seine net	1450	84	3.0	NA	NA
S2	Seine net	1840	170	2.0	NA	NA
N1 ¹	Minnow trap	43	23	0.2	NA	5
N2 ¹	Minnow trap	40	23	0.2	NA	5
N3 ¹	Minnow trap	40	23	0.2	NA	5
N4 ¹	Minnow trap	40	23	0.2	NA	5
N5 ¹	Minnow trap	40	23	0.2	NA	5
N6 ²	Minnow trap	58	NA	1.0	30	13
N7 ²	Minnow trap	58	NA	1.0	30	13
N8 ²	Minnow trap	58	NA	1.2	30	13
N9 ²	Minnow trap	58	NA	1.2	30	13
N10 ²	Minnow trap	60	NA	1.3	30	13
N11 ²	Minnow trap	59	NA	2.0	30	15
N12 ¹	Minnow trap	42	23	0.2	NA	5
N13 ¹	Minnow trap	40	23	0.2	NA	5
N14 ¹	Minnow trap	42	23	0.2	NA	5
N15 ¹	Minnow trap	40	23	0.2	NA	5
N16 ²	Minnow trap	58	NA	1.0	30	13
N17 ²	Minnow trap	58	NA	1.2	30	13

¹ Squared minnow trap² Rounded minnow trap