THE DISTRICT MUNICIPALITY OF MUSKOKA

Aquatic Invertebrate Data Sheet

Walker Lake

Township of Lake of Bays

Common Name	Site 1[R]										Scientific Name
	2006	2007	2012	2013	2016	2017	2019	2022	2024	2025	
Hydras											Coelenterata
Flatworms	2		3	3	3						Turbellaria
Roundworms	7			20			12	2			Nematoda
Aquatic Earthworms		5	18	4	5	4	1		1		Oligochaeta
Leeches	1		2				2				Hirudinaea
Sow Bugs									1		Isopoda
Clams & Mussels			1								Bivalvia
Scuds	125	37	81	77	119	120	165	59	49	25	Amphipoda
Crayfish											Decapoda
Mites	13	30	19	56	14	14	10	8	5	18	Hydracarina
Mayflies	126	180	188	208	104	199	5	72	33	48	Ephemeroptera
Dragonflies	48	55	21	42	15	9	37	11	13	26	Anisoptera
Damselflies	19	4	6	10	31	25	65	22	19	33	Zygoptera
Stoneflies											Plecoptera
True Bugs										2	Hemiptera
Fishflies & Alderflies								1			Megaloptera
Caddisflies	13	2	2	2	7	2	3	6	1	1	Trichoptera
Aquatic Moths	1										Lepidoptera
Beetles	6	1	1	1	6	1	8		1	1	Coleoptera
Snails & Limpets	1	2	2	3			1	1		1	Gastropoda
Midges	19	34	40	2	12	2	13	3	8	4	Chironomidae
Horse & Deer Flies											Tabanidae
Mosquitos						2					Culicidae
No-see-ums	2	1	11	12	1	2		1	2	1	Ceratopogonidae
Craneflies											Tipulidae
Blackflies											Simuliidae
Misc. True Flies											Misc. Diptera
Total Count	383	351	395	440	317	380	322	186	133	160	
Number of Taxa	14	11	14	13	11	11	12	11	11	11	
											Muskoka Average *
Richness	14	11	14	13	11	11	12	11	11	11	**13**
% EOT	54	69	55	60	50	51	34	60	50	68	**17**
% Chironomids	5	10	11	1	4	0.5	4	2	6	3	**8**
% Predators	24	26	16	28	22	13	38	23	30	51	**24**
% Shredders	4	1	1	1	2	1	1	3	1	1	**2**
% Collectors/Gatherers	71	73	83	66	76	86	57	72	69	48	**68**
Hilsenhoff Index	5.52	5.46	5.67	5.41	5.69	5.54	6.00	5.61	5.86	6.24	**6.27**

R = Reference Site

* The Muskoka Average is based on 228 samples collected at 94 reference sites between 2013 and 2023. Data prior to 2021 is based on three subsamples (min. 300 count) per site while data from 2021 on is based on one sample (min. 100 count) per site.

THE DISTRICT MUNICIPALITY OF MUSKOKA

Aquatic Invertebrate Data Sheet

Walker Lake

Township of Lake of Bays

Common Name	Site 3[R]								Scientific Name
	2010	2011	2014	2015	2018	2022	2024	2025	
Hydras									Coelenterata
Flatworms	1	2	10	4					Turbellaria
Roundworms	2		10			1	1	1	Nematoda
Aquatic Earthworms	7	9	6	13	20			2	Oligochaeta
Leeches	3				2				Hirudinaea
Sow Bugs									Isopoda
Clams & Mussels	3	2							Bivalvia
Scuds	79	76	67	63	67	37	21	11	Amphipoda
Crayfish									Decapoda
Mites	24	29	81	18	89	5	4	26	Hydracarina
Mayflies	26	116	77	123	37	82	57	24	Ephemeroptera
Dragonflies	17	42	62	56	66	19	17	21	Anisoptera
Damselflies	5	16	7	11	26	9	21	14	Zygoptera
Stoneflies					8				Plecoptera
True Bugs	1								Hemiptera
Fishflies & Alderflies			8	2	1				Megaloptera
Caddisflies	5	2	5		1				Trichoptera
Aquatic Moths	1								Lepidoptera
Beetles	3	6		4	9		5		Coleoptera
Snails & Limpets	19	15	4		10	1	1	1	Gastropoda
Midges	50	23	22	30	41	3	7	2	Chironomidae
Horse & Deer Flies									Tabanidae
Mosquitos			1						Culicidae
No-see-ums	11	11	9	4		2	3	2	Ceratopogonidae
Craneflies									Tipulidae
Blackflies									Simuliidae
Misc. True Flies	1		2						Misc. Diptera
Total Count	258	349	371	328	377	159	137	104	
Number of Taxa	18	13	15	11	13	9	10	10	
									Muskoka Average *
Richness	18	13	15	11	13	9	10	10	**13**
% EOT	21	50	42	58	35	69	69	57	**17**
% Chironomids	19	7	3	9	11	2	5	2	**8**
% Predators	25	30	49	30	53	22	36	61	**24**
% Shredders	2	1	1	0	1	0	0	0	**2**
% Collectors/Gatherers	63	64	45	70	43	77	62	38	**68**
Hilsenhoff Index	6.14	5.71	5.54	5.60	5.88	5.44	5.59	5.85	**6.27**

R = Reference Site

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THE DISTRICT MUNICIPALITY OF MUSKOKA

Aquatic Invertebrate Data Sheet

Walker Lake

Township of Lake of Bays

Common Name	Site 4 R			Scientific Name
	2004	2005	2023	
Hydras				Coelenterata
Flatworms		1		Turbellaria
Roundworms		9	4	Nematoda
Aquatic Earthworms	11		1	Oligochaeta
Leeches				Hirudinaea
Sow Bugs				Isopoda
Clams & Mussels	1	1		Bivalvia
Scuds	78	31	35	Amphipoda
Crayfish				Decapoda
Mites	45	43	8	Hydracarina
Mayflies	77	80	35	Ephemeroptera
Dragonflies	47	53	21	Anisoptera
Damselflies	2	7	20	Zygoptera
Stoneflies				Plecoptera
True Bugs				Hemiptera
Fishflies & Alderflies			1	Megaloptera
Caddisflies	4	1	3	Trichoptera
Aquatic Moths				Lepidoptera
Beetles	17	17	8	Coleoptera
Snails & Limpets	3	5	1	Gastropoda
Midges	36	27	11	Chironomidae
Horse & Deer Flies				Tabanidae
Mosquitos				Culicidae
No-see-ums			1	Ceratopogonidae
Craneflies				Tipulidae
Blackflies				Simuliidae
Misc. True Flies				Misc. Diptera
Total Count	321	275	149	
Number of Taxa	11	12	13	
				Muskoka Average *
Richness	11	12	13	**13**
% EOT	40	51	53	**17**
% Chironomids	12	10	7	**8**
% Predators	34	44	40	**24**
% Shredders	1	0	2	**2**
% Collectors/Gatherers	63	50	55	**68**
Hilsenhoff Index	5.67	5.49	5.66	**6.27**

R = Reference Site

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THE DISTRICT MUNICIPALITY OF MUSKOKA

Aquatic Invertebrate Data Sheet

Walker Lake

Township of Lake of Bays

Common Name	Site 5					Scientific Name
	2004	2005	2008	2021	2023	
Hydras						Coelenterata
Flatworms			1			Turbellaria
Roundworms	1	5	6		3	Nematoda
Aquatic Earthworms	6	5	7		5	Oligochaeta
Leeches						Hirudinaea
Sow Bugs						Isopoda
Clams & Mussels		1	4			Bivalvia
Scuds	81	52	82	22	48	Amphipoda
Crayfish						Decapoda
Mites	39	12	40	1	4	Hydracarina
Mayflies	151	197	103	98	22	Ephemeroptera
Dragonflies	29	19	4		8	Anisoptera
Damselflies	3	3	15	2	5	Zygoptera
Stoneflies						Plecoptera
True Bugs						Hemiptera
Fishflies & Alderflies					2	Megaloptera
Caddisflies		1	2		1	Trichoptera
Aquatic Moths						Lepidoptera
Beetles	1	6	1		1	Coleoptera
Snails & Limpets	2		4			Gastropoda
Midges	16	8	32	1	1	Chironomidae
Horse & Deer Flies			2			Tabanidae
Mosquitos						Culicidae
No-see-ums		2	2		2	Ceratopogonidae
Craneflies			2			Tipulidae
Blackflies						Simuliidae
Misc. True Flies						Misc. Diptera
Total Count	329	311	307	124	102	
Number of Taxa	10	12	16	5	12	
						Muskoka Average *
Richness	9	13	16	5	12	**13**
% EOT	56	72	40	81	35	**17**
% Chironomids	5	3	10	1	1	**8**
% Predators	22	18	21	2	22	**24**
% Shredders	0	0	1	0	1	**2**
% Collectors/Gatherers	77	82	73	98	75	**68**
Hilsenhoff Index	5.55	5.43	5.84	5.23	5.75	**6.27**

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