THE DISTRICT MUNICIPALITY OF MUSKOKA

Aquatic Invertebrate Data Sheet
Peninsula Lake
Township of Lake of Bays

Common Name	Site 1[R]										Scientific Name
	2004	2005	2008	2010	2013	2015	2017	2019	2022	2024	
Hydras											Coelenterata
Flatworms	1		1	6	3	7	2		5	2	Turbellaria
Roundworms		2			18			3	23	7	Nematoda
Aquatic Earthworms	50	42	70	7	1	13	38	25	6		Oligochaeta
Leeches	5	1	9		3		2	9	1		Hirudinaea
Sow Bugs	4	27	62	39	99	112	63	32	96	22	Isopoda
Clams & Mussels	3	5									Bivalvia
Scuds	117	173	131	255	221	112	196	123	102	45	Amphipoda
Crayfish											Decapoda
Mites		9	8	6	8		21	11	10	11	Hydracarina
Mayflies	69	31	48	16	69	40	52	104	14		Ephemeroptera
Dragonflies	9	9	2	1	8	9		1		1	Anisoptera
Damselflies	1										Zygoptera
Stoneflies	3		1	2	1	2		10	1		Plecoptera
True Bugs	2			1			1				Hemiptera
Fishflies & Alderflies	8	12		2	4	2				2	Megaloptera
Caddisflies	10	12	5	21	10	8	7	18	5	3	Trichoptera
Aquatic Moths											Lepidoptera
Beetles	12	18	19	20	27	32	10	10	12		Coleoptera
Snails & Limpets	14	5	3	8	8	11	3	1		9	Gastropoda
Midges	13	6	1	3	14	1	17	4	2	7	Chironomidae
Horse & Deer Flies											Tabanidae
Mosquitos											Culicidae
No-see-ums	1		2		1						Ceratopogonidae
Craneflies											Tipulidae
Blackflies											Simuliidae
Misc. True Flies	47		2						8		Misc. Diptera
Total Count	369	352	364	387	495	349	412	351	285	109	
Number of Taxa	18	14	15	14	16	12	12	13	13	10	
											Muskoka Average *
Richness	18	14	15	14	16	12	12	13	13	10	**13**
% EOT	24	15	15	10	18	16	14	35	7	3.7	**17**
% Chironomids	4	2	0	1	3	0	4	1	1	6.4	**8**
% Predators	11	14	12	10	11	15	9	12	10	15	**24**
% Shredders	3	3	1	5	2	2	2	5	2	2.8	**2**
% Collectors/Gatherers	81	49	86	83	82	80	88	82	80	68	**68**
Hilsenhoff Index	5.86	4.28	6.49	5.94	6.08	6.30	6.32	5.78	6.40	6.35	**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

Peninsula Lake

Township of Lake of Bays

Common Name	Site 2[R]		Scientific Name
	2007	2014	
Hydras			Coelenterata
Flatworms	1	5	Turbellaria
Roundworms		2	Nematoda
Aquatic Earthworms	1	10	Oligochaeta
Leeches	11		Hirudinaea
Sow Bugs		38	Isopoda
Clams & Mussels		2	Bivalvia
Scuds	297	82	Amphipoda
Crayfish			Decapoda
Mites	13	33	Hydracarina
Mayflies	4	18	Ephemeroptera
Dragonflies	5	20	Anisoptera
Damselflies	1		Zygoptera
Stoneflies			Plecoptera
True Bugs			Hemiptera
Fishflies & Alderflies	2	6	Megaloptera
Caddisflies	4	26	Trichoptera
Aquatic Moths			Lepidoptera
Beetles		32	Coleoptera
Snails & Limpets	7	30	Gastropoda
Midges	35	21	Chironomidae
Horse & Deer Flies			Tabanidae
Mosquitos			Culicidae
No-see-ums	5		Ceratopogonidae
Craneflies			Tipulidae
Blackflies			Simuliidae
Misc. True Flies		7	Misc. Diptera
Total Count	386	332	
Number of Taxa	13	15	
			Muskoka Average *
Richness	13	15	**13**
% EOT	4	19	**17**
% Chironomids	9	6	**8**
% Predators	10	28	**24**
% Shredders	1	8	**2**
% Collectors/Gatherers	87	53	**68**
Hilsenhoff Index	6.11	5.90	**6.27**

R = Reference Site

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THE DISTRICT MUNICIPALITY OF MUSKOKA

Aquatic Invertebrate Data Sheet
Peninsula Lake
Township of Lake of Bays

Common Name	Site 3 [R]						Scientific Name
	2011	2012	2018	2023	2024	2025	
Hydras		2					Coelenterata
Flatworms	9	3	3	1	2	4	Turbellaria
Roundworms				2	8	5	Nematoda
Aquatic Earthworms	2	21	35	3	6		Oligochaeta
Leeches		1	6				Hirudinaea
Sow Bugs	26	30	61	6	32	57	Isopoda
Clams & Mussels	2						Bivalvia
Scuds	209	197	131	43	50	204	Amphipoda
Crayfish							Decapoda
Mites	25	116	123	62	27	19	Hydracarina
Mayflies	7	21			2	2	Ephemeroptera
Dragonflies	9	23	9	2	3	9	Anisoptera
Damselflies	1	3			1	2	Zygoptera
Stoneflies			9				Plecoptera
True Bugs							Hemiptera
Fishflies & Alderflies	5	12	7	2	3	22	Megaloptera
Caddisflies	5	34	1		1	3	Trichoptera
Aquatic Moths							Lepidoptera
Beetles	9	49	2				Coleoptera
Snails & Limpets	7	15	5		5		Gastropoda
Midges	17	63	39	11	6	20	Chironomidae
Horse & Deer Flies							Tabanidae
Mosquitos	1						Culicidae
No-see-ums		8	2		2	3	Ceratopogonidae
Craneflies							Tipulidae
Blackflies							Simuliidae
Misc. True Flies							Misc. Diptera
Total Count	334	598	433	132	148	350	
Number of Taxa	15	16	14	9	14	12	
							Muskoka Average *
Richness	15	16	14	9	14	12	**13**
% EOT	7	9	4	2	5	5	**17**
% Chironomids	5	7	9	8	4	6	**8**
% Predators	18	23	37	51	26	17	**24**
% Shredders	5	4	2	0	1	1	**2**
% Collectors/Gatherers	78	73	61	48	65	81	**68**
Hilsenhoff Index	6.04	5.94	6.36	6.14	6.43	6.42	**6.27**

R = Reference Site

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THE DISTRICT MUNICIPALITY OF MUSKOKA

Aquatic Invertebrate Data Sheet

Peninsula Lake

Township of Lake of Bays

Common Name	Site 4 2023	Scientific Name
Hydras		Coelenterata
Flatworms		Turbellaria
Roundworms		Nematoda
Aquatic Earthworms	9	Oligochaeta
Leeches		Hirudinaea
Sow Bugs	128	Isopoda
Clams & Mussels		Bivalvia
Scuds	74	Amphipoda
Crayfish		Decapoda
Mites	20	Hydracarina
Mayflies		Ephemeroptera
Dragonflies	1	Anisoptera
Damselflies		Zygoptera
Stoneflies		Plecoptera
True Bugs		Hemiptera
Fishflies & Alderflies	2	Megaloptera
Caddisflies	1	Trichoptera
Aquatic Moths		Lepidoptera
Beetles	1	Coleoptera
Snails & Limpets	1	Gastropoda
Midges	1	Chironomidae
Horse & Deer Flies		Tabanidae
Mosquitos		Culicidae
No-see-ums		Ceratopogonidae
Craneflies		Tipulidae
Blackflies		Simuliidae
Misc. True Flies		Misc. Diptera
Total Count	238	
Number of Taxa	10	
		Muskoka Average *
Richness	10	**13**
% EOT	1	**17**
% Chironomids	0	**8**
% Predators	10	**24**
% Shredders	0	**2**
% Collectors/Gatherers	89	**68**
Hilsenhoff Index	7.12	**6.27**

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THE DISTRICT MUNICIPALITY OF MUSKOKA

Aquatic Invertebrate Data Sheet

Peninsula Lake

Township of Lake of Bays

Common Name	Site 5		Scientific Name
	2024	2025	
Hydras			Coelenterata
Flatworms			Turbellaria
Roundworms	3		Nematoda
Aquatic Earthworms	2		Oligochaeta
Leeches	1		Hirudinaea
Sow Bugs	19	25	Isopoda
Clams & Mussels		1	Bivalvia
Scuds	18	107	Amphipoda
Crayfish			Decapoda
Mites	35	51	Hydracarina
Mayflies	1	1	Ephemeroptera
Dragonflies	2	2	Anisoptera
Damselflies	6	11	Zygoptera
Stoneflies			Plecoptera
True Bugs			Hemiptera
Fishflies & Alderflies	2		Megaloptera
Caddisflies	3	3	Trichoptera
Aquatic Moths	1		Lepidoptera
Beetles			Coleoptera
Snails & Limpets			Gastropoda
Midges	24	3	Chironomidae
Horse & Deer Flies			Tabanidae
Mosquitos		3	Culicidae
No-see-ums		1	Ceratopogonidae
Craneflies			Tipulidae
Blackflies			Simuliidae
Misc. True Flies			Misc. Diptera
Total Count	117	208	
Number of Taxa	13	11	
			Muskoka Average *
Richness	13	11	**13**
% EOT	10	8	**17**
% Chironomids	21	1	**8**
% Predators	39	31	**24**
% Shredders	3	1	**2**
% Collectors/Gatherers	55	67	**68**
Hilsenhoff Index	6.50	6.05	**6.27**

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