THE DISTRICT MUNICIPALITY OF MUSKOKA

Aquatic Invertebrate Data Sheet

Hoc Roc River

Town of Gravenhurst

Common Name	Site 1[R]														Scientific Name
	2008	2009	2010	2011	2014	2015	2016	2017	2018	2019	2021	2022	2024	2025	
Hydras															Coelenterata
Flatworms			1	9	6		5				1			1	Turbellaria
Roundworms	13					1					5	1			Nematoda
Aquatic Earthworms	2	3	7	5	13	1	2	19	6	3	5		1		Oligochaeta
Leeches	1	4	2	3	2	6	4	3	1	1	1		1		Hirudinaea
Sow Bugs	97	800	348	86	70	57	116	184	105	147	61	25	74	67	Isopoda
Clams & Mussels		6	7	7	7	1	6	16	12	2	17	1	2	8	Bivalvia
Scuds	49	70	82	151	50	295	97	2	149	129	28	122	67	19	Amphipoda
Crayfish		1													Decapoda
Mites	92		3	7	54	10	27	18	65	3	17	9	6	1	Hydracarina
Mayflies	2	2	3	16	9	9	16		4	13		4	1		Ephemeroptera
Dragonflies	1	11	8	21	9	3	6	2		3	2		1		Anisoptera
Damselflies	18	3	8	77	2	12	13		2	7	2	3	3		Zygoptera
Stoneflies									3						Plecoptera
True Bugs	1	3	5					1							Hemiptera
Fishflies & Alderflies	2	17	12	10	5	8	2		3	5		1	4	2	Megaloptera
Caddisflies	2	9	5	13	12	6	2	2		2	1	4	5	2	Trichoptera
Aquatic Moths				1	1										Lepidoptera
Beetles		3		10	7		4			2			1		Coleoptera
Snails & Limpets		9		24	14	4	10	7	13	1	17	12		5	Gastropoda
Midges	31	21	77	117	56	52	110	59	25	20	73	11	27	8	Chironomidae
Horse & Deer Flies	1	1	1	2			2								Tabanidae
Mosquitos															Culicidae
No-see-ums				1	3	1	1			2			2		Ceratopogonidae
Craneflies	15														Tipulidae
Blackflies															Simuliidae
Misc. True Flies	1	1									3	2			Misc. Diptera
Total Count	328	964	569	560	320	466	423	313	388	340	233	195	195	113	
Number of Taxa	16	17	15	18	17	15	17	11	12	15	14	12	14	9	
															Muskoka Average *
Richness	16	17	15	18	17	15	17	11	12	15	14	12	14	9	**13**
% EOT	7	3	4	23	10	6	9	1	2	7	2	6	5	2	**17**
% Chironomids	9	2	14	21	18	11	26	19	6	6	31	6	14	7	**8**
% Predators	35	4	7	25	28	9	15	8	19	7	10	7	9	4	**24**
% Shredders	5	1	1	3	4	1	0	1	0	1	0	2	3	2	**2**
% Collectors/Gatherers	55	93	91	67	62	89	81	84	74	92	73	84	87	83	**68**
Hilsenhoff Index	7.04	7.65	7.3	6.5	6.5	6.3	6.8	7.6	6.7	6.9	7.1	6.3	6.8	6.3	**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.

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Common Name	Site 2 2010	Scientific Name
Hydras		Coelenterata
Flatworms		Turbellaria
Roundworms		Nematoda
Aquatic Earthworms	2	Oligochaeta
Leeches		Hirudinaea
Sow Bugs	50	Isopoda
Clams & Mussels		Bivalvia
Scuds	1	Amphipoda
Crayfish		Decapoda
Mites	2	Hydracarina
Mayflies	3	Ephemeroptera
Dragonflies	2	Anisoptera
Damselflies	1	Zygoptera
Stoneflies		Plecoptera
True Bugs		Hemiptera
Fishflies & Alderflies	9	Megaloptera
Caddisflies	10	Trichoptera
Aquatic Moths		Lepidoptera
Beetles	1	Coleoptera
Snails & Limpets	7	Gastropoda
Midges	73	Chironomidae
Horse & Deer Flies		Tabanidae
Mosquitos		Culicidae
No-see-ums	1	Ceratopogonidae
Craneflies		Tipulidae
Blackflies		Simuliidae
Misc. True Flies	2	Misc. Diptera
Total Count	164	
Number of Taxa	14	
		Muskoka Average *
Richness	14	**13**
% EOT	10	**17**
% Chironomids	45	**8**
% Predators	10	**24**
% Shredders	6	**2**
% Collectors/Gatherers	80	**68**
Hilsenhoff Index	6.84	**6.27**

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THE DISTRICT MUNICIPALITY OF MUSKOKA

Aquatic Invertebrate Data Sheet

Hoc Roc River

Town of Gravenhurst

Common Name	Site 3[R]				Scientific Name
	2011	2012	2013	2014	
Hydras					Coelenterata
Flatworms	3	29	3	4	Turbellaria
Roundworms			11	20	Nematoda
Aquatic Earthworms	30	186	17	5	Oligochaeta
Leeches					Hirudinaea
Sow Bugs	1	29	57	42	Isopoda
Clams & Mussels	3	1	1	7	Bivalvia
Scuds		7	3	12	Amphipoda
Crayfish	1				Decapoda
Mites	6	15	12	36	Hydracarina
Mayflies	23	31	19	10	Ephemeroptera
Dragonflies	13	15	5	4	Anisoptera
Damselflies	20	178	7	5	Zygoptera
Stoneflies					Plecoptera
True Bugs	2	1	1	2	Hemiptera
Fishflies & Alderflies		2	14	4	Megaloptera
Caddisflies	15	10	10	11	Trichoptera
Aquatic Moths	1				Lepidoptera
Beetles	24	33	35	17	Coleoptera
Snails & Limpets	32	8	2	22	Gastropoda
Midges	205	97	124	111	Chironomidae
Horse & Deer Flies	4	3		4	Tabanidae
Mosquitos			2		Culicidae
No-see-ums	4	37	2	12	Ceratopogonidae
Craneflies					Tipulidae
Blackflies					Simuliidae
Misc. True Flies		25			Misc. Diptera
Total Count	387	707	325	328	
Number of Taxa	17	18	18	18	
					Muskoka Average *
Richness	17	18	18	18	**13**
% EOT	18	33	13	9	**17**
% Chironomids	53	14	38	34	**8**
% Predators	20	44	24	27	**24**
% Shredders	4	1	3	3	**2**
% Collectors/Gatherers	67	53	68	55	**68**
Hilsenhoff Index	6.04	6.72	6.39	6.43	**6.27**

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THE DISTRICT MUNICIPALITY OF MUSKOKA

Aquatic Invertebrate Data Sheet

Hoc Roc River

Town of Gravenhurst

Common Name	Site 4[R]				Scientific Name
	2012	2013	2014	2023	
Hydras					Coelenterata
Flatworms					Turbellaria
Roundworms		42	5		Nematoda
Aquatic Earthworms	111	1	5	4	Oligochaeta
Leeches					Hirudinaea
Sow Bugs	206	78	243	13	Isopoda
Clams & Mussels					Bivalvia
Scuds	54	79	40	35	Amphipoda
Crayfish					Decapoda
Mites	12	61	11	10	Hydracarina
Mayflies	46	25	24	7	Ephemeroptera
Dragonflies	3	3	1	4	Anisoptera
Damselflies	15		8	2	Zygoptera
Stoneflies					Plecoptera
True Bugs	3	1	14		Hemiptera
Fishflies & Alderflies	13	13	17	19	Megaloptera
Caddisflies	23	21		31	Trichoptera
Aquatic Moths			6		Lepidoptera
Beetles	31	9	1	2	Coleoptera
Snails & Limpets	12		34	9	Gastropoda
Midges	444	124	3	48	Chironomidae
Horse & Deer Flies	3	5			Tabanidae
Mosquitos		5	9		Culicidae
No-see-ums	5	8		2	Ceratopogonidae
Craneflies					Tipulidae
Blackflies					Simuliidae
Misc. True Flies				1	Misc. Diptera
Total Count	981	475	421	187	
Number of Taxa	15	15	15	14	
					Muskoka Average *
Richness	15	15	15	14	**13**
% EOT	9	10	8	24	**17**
% Chironomids	45	26	1	26	**8**
% Predators	9	21	12	21	**24**
% Shredders	2	4	1	17	**2**
% Collectors/Gatherers	88	66	77	58	**68**
Hilsenhoff Index	6.94	6.31	7.05	5.88	**6.27**

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