THE DISTRICT MUNICIPALITY OF MUSKOKA

Aquatic Invertebrate Data Sheet

Pine Lake

Town of Gravenhurst

Common Name	Site 1[R]				Scientific Name
	2008	2010	2023	2024	
Hydras					Coelenterata
Flatworms				4	Turbellaria
Roundworms	2		3	11	Nematoda
Aquatic Earthworms	7	13	2		Oligochaeta
Leeches		2			Hirudinaea
Sow Bugs					Isopoda
Clams & Mussels		6	8	6	Bivalvia
Scuds	51	105	18	10	Amphipoda
Crayfish					Decapoda
Mites	38	24	44	19	Hydracarina
Mayflies	4	24	9	4	Ephemeroptera
Dragonflies	21	59	9	12	Anisoptera
Damselflies	174	7		5	Zygoptera
Stoneflies					Plecoptera
True Bugs	1	1		1	Hemiptera
Fishflies & Alderflies					Megaloptera
Caddisflies	14	1		3	Trichoptera
Aquatic Moths					Lepidoptera
Beetles	1	11	1	1	Coleoptera
Snails & Limpets		8	16	1	Gastropoda
Midges	18	51	4	22	Chironomidae
Horse & Deer Flies					Tabanidae
Mosquitos					Culicidae
No-see-ums	3	5		5	Ceratopogonidae
Craneflies					Tipulidae
Blackflies					Simuliidae
Misc. True Flies	2				Misc. Diptera
Total Count	336	317	114	104	
Number of Taxa	13	14	10	14	
					Muskoka Average *
Richness	13	14	10	14	**13**
% EOT	63	29	16	20	**17**
% Chironomids	5	16	4	21	**8**
% Predators	71	34	47	45	**24**
% Shredders	4	0	0	3	**2**
% Collectors/Gatherers	24	61	21	31	**68**
Hilsenhoff Index	6.43	6.00	6.15	5.96	**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)

THE DISTRICT MUNICIPALITY OF MUSKOKA

Aquatic Invertebrate Data Sheet

Pine Lake

Town of Gravenhurst

Common Name	Site 2[R]				Scientific Name
	2011	2012	2023	2024	
Hydras					Coelenterata
Flatworms		2			Turbellaria
Roundworms			11	11	Nematoda
Aquatic Earthworms	11	40	7	1	Oligochaeta
Leeches	3	1			Hirudinaea
Sow Bugs			22	1	Isopoda
Clams & Mussels			1	3	Bivalvia
Scuds	87	140	14	26	Amphipoda
Crayfish		2			Decapoda
Mites	74	53	27	19	Hydracarina
Mayflies	35	30		4	Ephemeroptera
Dragonflies	31	25	7	7	Anisoptera
Damselflies	6	22	1	3	Zygoptera
Stoneflies					Plecoptera
True Bugs					Hemiptera
Fishflies & Alderflies		1			Megaloptera
Caddisflies	4	13	1	1	Trichoptera
Aquatic Moths					Lepidoptera
Beetles	13	6	2	2	Coleoptera
Snails & Limpets	7	2	2	2	Gastropoda
Midges	90	51	7	21	Chironomidae
Horse & Deer Flies					Tabanidae
Mosquitos	2				Culicidae
No-see-ums	4	8	1	2	Ceratopogonidae
Craneflies					Tipulidae
Blackflies					Simuliidae
Misc. True Flies					Misc. Diptera
Total Count	367	396	103	103	
Number of Taxa	13	15	13	14	
					Muskoka Average *
Richness	13	15	13	14	**13**
% EOT	21	23	9	15	**17**
% Chironomids	25	13	7	20	**8**
% Predators	36	30	37	32	**24**
% Shredders	1	3	1	1	**2**
% Collectors/Gatherers	61	66	49	51	**68**
Hilsenhoff Index	6.10	6.15	6.45	6.08	**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

Pine Lake

Town of Gravenhurst

Common Name	Site 3[R]							Scientific Name
	2013	2014	2015	2016	2018	2023	2024	
Hydras								Coelenterata
Flatworms								Turbellaria
Roundworms	8	2		1		4	8	Nematoda
Aquatic Earthworms			15	22	18	2	2	Oligochaeta
Leeches	1		1	1	2			Hirudinaea
Sow Bugs	66	115	192	101	95	10	1	Isopoda
Clams & Mussels	2			1	1	2	4	Bivalvia
Scuds	59	81	105	107	71	16	9	Amphipoda
Crayfish		1			2			Decapoda
Mites	11	27	16	23	53	29	18	Hydracarina
Mayflies	9	9	5	31	13	2	17	Ephemeroptera
Dragonflies	16	14	19	28	14	13	4	Anisoptera
Damselflies	13	14	1	10	6	2	1	Zygoptera
Stoneflies	8	7			1			Plecoptera
True Bugs	1						2	Hemiptera
Fishflies & Alderflies		2						Megaloptera
Caddisflies	16	18	8	15	4	2	5	Trichoptera
Aquatic Moths		1	1					Lepidoptera
Beetles		2	6	11	3			Coleoptera
Snails & Limpets	17	10	2	1	8	11	3	Gastropoda
Midges	94	60	27	36	40	10	22	Chironomidae
Horse & Deer Flies								Tabanidae
Mosquitos	2							Culicidae
No-see-ums	8	8	5	1	11		3	Ceratopogonidae
Craneflies								Tipulidae
Blackflies							4	Simuliidae
Misc. True Flies	16	6						Misc. Diptera
Total Count	347	377	403	389	342	103	103	
Number of Taxa	17	17	14	15	16	12	15	
								Muskoka Average *
Richness	17	16	13	15	16	12	15	**13**
% EOT	17	17	8	22	11	17	21	**17**
% Chironomids	26	16	7	9	12	10	21	**8**
% Predators	17	20	12	19	26	45	44	**24**
% Shredders	5.7	5	2	4	2	2	5	**2**
% Collectors/Gatherers	70	73	85	76	70	39	50	**68**
Hilsenhoff Index	6.39	6.50	6.96	6.48	6.70	6.27	5.99	**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.