THE DISTRICT MUNICIPALITY OF MUSKOKA

Managing Our Legacy Together

Aquatic Invertebrate Data Sheet

Bay Lake

Township of Perry

Common Name	Site 1 [R]											Scientific Name
	2008	2009	2014			2015			2018			
			1	2	3	1	2	3	1	2	3	
Hydras												Coelenterata
Flatworms											1	Turbellaria
Roundworms	49					2						Nematoda
Aquatic Earthworms	12	6	4	1		20	26	26	23	17	11	Oligochaeta
Leeches	4				1	1	4	4			2	Hirudinaea
Sow Bugs											5	Isopoda
Clams	9		4			3	1	4	2		2	Pelecypoda
Fairy Shrimp	46	158	24	28	3	25	6	1	31	7	27	Amphipoda
Crayfish											1	Decapoda
Mites	65	81	8	10	14	16	19	19	50	50	53	Hydracarina
Mayflies	37	38	14	6	9	1	5	7	7	6	19	Ephemeroptera
Dragonflies	16	35	2	3	2		8	1	5	2	5	Anisoptera
Damselflies	11	9	1	1	1		2	1				Zygoptera
Stoneflies											1	Plecoptera
True Bugs		1										Hemiptera
Fishflies & Alderflies	2	40	2	1	2							Megaloptera
Caddisflies	25	31	1	2		1	2	1				Trichoptera
Aquatic Moths												Lepidoptera
Beetles	1	23		6	5			2				Coleoptera
Snails & Limpets	2	3		1		1					3	Gastropoda
Midges	113	85	34	30	60	30	30	27	16	20	7	Chironomidae
Horse & Deer Flies												Tabanidae
Mosquitos	4											Culicidae
No-see-ums	3	2	3	9	8	2	4	1	8	6	2	Ceratopogonidae
Craneflies												Tipulidae
Blackflies												Simuliidae
Misc. True Flies			9	5	3			2				Misc. Diptera
Total Count	399	512	106	103	108	102	107	96	142	109	139	
Number of Taxa	13	8	12	13	11	11	11	13	8	7	14	
												Muskoka Average *
Richness	16	13	15			15			14			**14**
% EOT	22	14	13			10			11			**17**
% Chironimids	28	23	40			29			11			**12**
% Predators	26	24	25			28			48			**19**
% Shredders	6	4	1			1			0			**3**
% Collectors/Gatherers	53	72	73			68			51			**73**
Hilsenhoff Index	6.07	5.93	6.18			6.76			6.32			**6.25**

R = Reference Site

* The Muskoka Average is based on 200 samples collected at 82 reference sites between 2007 and 2016. Reference sites from 11 mesotrophic, 1 eutrophic and 29 oligotrophic lakes throughout Muskoka were used.

THE DISTRICT MUNICIPALITY OF MUSKOKA

Managing Our Legacy Together

Aquatic Invertebrate Data Sheet

Bay Lake

Township of Perry

Common Name	Site 2 [R]						Scientific Name
	2010			2011			
	1	2	3	1	2	3	
Hydras							Coelenterata
Flatworms							Turbellaria
Roundworms							Nematoda
Aquatic Earthworms			1	7	7	3	Oligochaeta
Leeches							Hirudinaea
Sow Bugs							Isopoda
Clams		10	6	2	6	1	Pelecypoda
Fairy Shrimp	81	117	166	65	27	34	Amphipoda
Crayfish			1				Decapoda
Mites	11	35	19	4	8	5	Hydracarina
Mayflies		22	16	6	2	2	Ephemeroptera
Dragonflies	2	23	6	3	14	18	Anisoptera
Damselflies		6	5	6	3	11	Zygoptera
Stoneflies							Plecoptera
True Bugs	5	1					Hemiptera
Fishflies & Alderflies		1					Megaloptera
Caddisflies		11	3	4	3	2	Trichoptera
Aquatic Moths							Lepidoptera
Beetles			1				Coleoptera
Snails & Limpets		3	3			12	Gastropoda
Midges	3	76	26	24	32	11	Chironomidae
Horse & Deer Flies							Tabanidae
Mosquitos							Culicidae
No-see-ums		6	6	1	1	1	Ceratopogonidae
Craneflies							Tipulidae
Blackflies							Simuliidae
Misc. True Flies			1				Misc. Diptera
Total Count	102	311	260	122	103	100	
Number of Taxa	4	11	14	10	10	11	
							Muskoka Average *
Richness	16			11			**14**
% EOT	14			23			**17**
% Chironimids	16			21			**12**
% Predators	19			23			**19**
% Shredders	2			3			**3**
% Collectors/Gatherers	76			68			**73**
Hilsenhoff Index	6.07			6.27			**6.25**

R = Reference Site

* The Muskoka Average is based on 200 samples collected at 82 reference sites between 2007 and 2016. Reference sites from 11 mesotrophic, 1 eutrophic and 29 oligotrophic lakes throughout Muskoka were used.

THE DISTRICT MUNICIPALITY OF MUSKOKA

Managing Our Legacy Together

Aquatic Invertebrate Data Sheet

Bay Lake

Township of Perry

Common Name	Site 3 [R]									Scientific Name
	2012			2013			2017			
	1	2	3	1	2	3	1	2	3	
Hydras										Coelenterata
Flatworms		1								Turbellaria
Roundworms						1			1	Nematoda
Aquatic Earthworms	41	38	15	2	1		6	13	52	Oligochaeta
Leeches	1	1				3			1	Hirudinaea
Sow Bugs										Isopoda
Clams		6	4	1		3			1	Pelecypoda
Fairy Shrimp	111	222	84	40	63	44	84	92	28	Amphipoda
Crayfish										Decapoda
Mites	5	14	28	28	13	11	20	28	10	Hydracarina
Mayflies	1	3	1		1	4	3	16		Ephemeroptera
Dragonflies	1	1	1			2		1	3	Anisoptera
Damselflies			1	1		2				Zygoptera
Stoneflies				2						Plecoptera
True Bugs	1									Hemiptera
Fishflies & Alderflies		1	5	1		2	1			Megaloptera
Caddisflies	2	2		1		1	2			Trichoptera
Aquatic Moths			1							Lepidoptera
Beetles		2	2	4	15	6	1	1	1	Coleoptera
Snails & Limpets	4	5	2	2		3	4	1		Gastropoda
Midges	60	30	30	20	14	11	12	10	18	Chironomidae
Horse & Deer Flies										Tabanidae
Mosquitos						2			2	Culicidae
No-see-ums		6	3			2	1	1		Ceratopogonidae
Craneflies										Tipulidae
Blackflies										Simuliidae
Misc. True Flies				2	1	8				Misc. Diptera
Total Count	227	332	177	104	108	105	134	163	117	
Number of Taxa	10	14	13	12	7	16	10	9	10	
										Muskoka Average *
Richness	17			18			15			**14**
% EOT	2			4			6			**17**
% Chironimids	16			14			10			**12**
% Predators	10			29			17			**19**
% Shredders	1			1			0.5			**3**
% Collectors/Gatherers	86			67			81			**73**
Hilsenhoff Index	6.41			5.96			6.38			**6.25**

R = Reference Site

* The Muskoka Average is based on 200 samples collected at 82 reference sites between 2007 and 2016. Reference sites from 11 mesotrophic, 1 eutrophic and 29 oligotrophic lakes throughout Muskoka were used.

THE DISTRICT MUNICIPALITY OF MUSKOKA

Managing Our Legacy Together

Aquatic Invertebrate Data Sheet

Bay Lake

Township of Perry

Common Name	Site 4 2019			Scientific Name
	1	2	3	
Hydras				Coelenterata
Flatworms				Turbellaria
Roundworms	8	3		Nematoda
Aquatic Earthworms	3	9	9	Oligochaeta
Leeches		3	1	Hirudinaea
Sow Bugs				Isopoda
Clams	1		3	Pelecypoda
Fairy Shrimp	65	80	69	Amphipoda
Crayfish	2			Decapoda
Mites	17	4	7	Hydracarina
Mayflies	5	11	4	Ephemeroptera
Dragonflies	3	3	5	Anisoptera
Damselflies		1		Zygoptera
Stoneflies	1			Plecoptera
True Bugs				Hemiptera
Fishflies & Alderflies			1	Megaloptera
Caddisflies	8	4	9	Trichoptera
Aquatic Moths				Lepidoptera
Beetles	1			Coleoptera
Snails & Limpets	6	2	2	Gastropoda
Midges	4	9	3	Chironomidae
Horse & Deer Flies	1			Tabanidae
Mosquitos				Culicidae
No-see-ums	1	1		Ceratopogonidae
Craneflies				Tipulidae
Blackflies				Simuliidae
Misc. True Flies		1	2	Misc. Diptera
Total Count	126	131	115	
Number of Taxa	15	13	12	

		Muskoka Average *
Richness	19	**14**
% EOT	14	**17**
% Chironimids	4	**12**
% Predators	13	**19**
% Shredders	6	**3**
% Collectors/Gatherers	74	**73**
Hilsenhoff Index	5.97	**6.25**

* The Muskoka Average is based on 200 samples collected at 82 reference sites between 2007 and 2016. Reference sites from 11 mesotrophic, 1 eutrophic and 29 oligotrophic lakes throughout Muskoka were used.