

Aquatic Invertebrate Data Sheet

Ril Lake Township of Lake of Bays

| Common Name | Site 1 ^R | | | | | | Site 2 | | | | | | Scientific Name |
|-------------------------------|---------------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------------|-----------|-----------|--------------------------|
| | 2007 | | | 2008 | | | 2008 | | | 2009 ¹ | | | |
| | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | |
| Hydras | | | | | | | | | | | | | Coelenterata |
| Flatworms | | | | | | | | | | | | | Turbellaria |
| Roundworms | | | | 13 | 4 | 8 | | | | | | | Nematoda |
| Aquatic Earthworms | 1 | 1 | | 1 | 1 | 3 | | 1 | | | | | Oligochaeta |
| Leeches | | | 1 | | | | | | | | | | Hirudinaea |
| Sow Bugs | | | | | | | | | | | | | Isopoda |
| Clams | | | | | | | 1 | 4 | 3 | | | | Pelecypoda |
| Fairy Shrimp | 59 | 16 | 23 | 20 | 30 | 23 | 32 | 34 | 6 | 29 | 6 | 25 | Amphipoda |
| Crayfish | | | | | | | | | | | | | Decapoda |
| Mites | 14 | 9 | 3 | 18 | 24 | 19 | 11 | 30 | 16 | 4 | | 1 | Hydracarina |
| Mayflies | | 7 | 24 | 11 | 12 | 6 | 20 | 14 | 14 | 4 | 5 | 20 | Ephemeroptera |
| Dragonflies | 5 | 72 | 36 | 2 | 3 | 2 | 9 | 11 | 2 | 5 | 6 | 4 | Anisoptera |
| Damselflies | 6 | | 9 | 13 | 22 | 19 | 8 | 5 | 12 | 2 | 7 | 7 | Zygoptera |
| Stoneflies | | | | | | | | | | | | | Plecoptera |
| True Bugs | | | | | | | | | | | | | Hemiptera |
| Fishflies & Alderflies | | | | 1 | | | 1 | 1 | | | | | Megaloptera |
| Caddisflies | 2 | | | 4 | 5 | 3 | 1 | | 16 | 3 | | | Trichoptera |
| Aquatic Moths | | | | | | | | | 1 | | | | Lepidoptera |
| Beetles | | | | | | | 1 | | 1 | | | | Coleoptera |
| Snails & Limpets | | 1 | 2 | | | | 5 | 10 | 13 | | | 1 | Gastropoda |
| Midges | 21 | 7 | 5 | 14 | 12 | 11 | 45 | 27 | 19 | 35 | 5 | 24 | Chironomidae |
| Horse & Deer Flies | | | | 4 | | | | | | 1 | | | Tabanidae |
| Mosquitos | | | | 1 | 2 | 3 | | | | | | | Culicidae |
| No-see-ums | | | 3 | 4 | 2 | 6 | 4 | | | | | | Ceratopogonidae |
| Craneflies | | | | 4 | 1 | 3 | | | | | | | Tipulidae |
| Blackflies | | | | | | | | | | | | | Simuliidae |
| Misc. True Flies | | | | 1 | | 1 | | 1 | | | | | Misc. Diptera |
| Total Count | 108 | 113 | 106 | 111 | 118 | 107 | 138 | 138 | 103 | 83 | 29 | 82 | |
| Number of Taxa | 7 | 8 | 9 | 15 | 12 | 13 | 12 | 11 | 11 | 8 | 5 | 7 | |
| | | | | | | | | | | | | | Muskoka Average * |
| Richness | | 11 | | 15 | | | 15 | | | 9 | | | 13 |
| % EOT | | 49 | | 30 | | | 30 | | | 33 | | | 26 |
| % Chironimids | | 10 | | 11 | | | 24 | | | 33 | | | 12 |
| % Predators | | 48 | | 41 | | | 30 | | | 19 | | | 24 |
| % Shredders | | 1 | | 6 | | | 4.7 | | | 2 | | | 2 |
| % Collectors/Gatherers | | 50 | | 45 | | | 56 | | | 79 | | | 69 |
| Hilsenhoff Index | | 5.72 | | 6.02 | | | 6.13 | | | 6.17 | | | 5.99 |

R = Reference Site

* The Muskoka Average is based on 73 samples collected at 44 reference sites between 2004 to 2008. Reference sites from five mesotrophic and nineteen oligotrophic lakes throughout Muskoka were used.

¹ Did not achieve the minimum 100-organism count per replicate.

Aquatic Invertebrate Data Sheet

Ril Lake Township of Muskoka Lakes

| Common Name | Site 3 ^R | | | Scientific Name |
|-------------------------------|---------------------|------|-----|--------------------------|
| | 2009 | | | |
| | 1 | 2 | 3 | |
| Hydras | | | | Coelenterata |
| Flatworms | | | | Turbellaria |
| Roundworms | | | | Nematoda |
| Aquatic Earthworms | | 1 | | Oligochaeta |
| Leeches | | 2 | | Hirudinaea |
| Sow Bugs | | | | Isopoda |
| Clams | | | | Pelecypoda |
| Fairy Shrimp | 106 | 163 | 95 | Amphipoda |
| Crayfish | | | | Decapoda |
| Mites | 19 | 65 | 19 | Hydracarina |
| Mayflies | 7 | 20 | 10 | Ephemeroptera |
| Dragonflies | 9 | 3 | 3 | Anisoptera |
| Damselflies | 4 | 5 | 1 | Zygoptera |
| Stoneflies | | | | Plecoptera |
| True Bugs | | | | Hemiptera |
| Fishflies & Alderflies | | 1 | | Megaloptera |
| Caddisflies | 10 | 12 | 3 | Trichoptera |
| Aquatic Moths | | | | Lepidoptera |
| Beetles | 3 | 3 | | Coleoptera |
| Snails & Limpets | | 1 | 1 | Gastropoda |
| Midges | 17 | 25 | 28 | Chironomidae |
| Horse & Deer Flies | | | | Tabanidae |
| Mosquitos | | | | Culicidae |
| No-see-ums | | 2 | | Ceratopogonidae |
| Craneflies | | | | Tipulidae |
| Blackflies | | | | Simuliidae |
| Misc. True Flies | | | | Misc. Diptera |
| Total Count | 175 | 303 | 160 | |
| Number of Taxa | 8 | 13 | 8 | |
| | | | | Muskoka Average * |
| Richness | | 13 | | 13 |
| % EOT | | 14 | | 26 |
| % Chironimids | | 11 | | 12 |
| % Predators | | 22 | | 24 |
| % Shredders | | 4 | | 2 |
| % Collectors/Gatherers | | 74 | | 69 |
| Hilsenhoff Index | | 5.96 | | 5.99 |

R = Reference Site

* The Muskoka Average is based on 73 samples collected at 44 reference sites between 2004 to 2008. Reference sites from five mesotrophic and nineteen oligotrophic lakes throughout Muskoka were used.