THE DISTRICT MUNICIPALITY OF MUSKOKA

*Managing Our Legacy Together*

## *Aquatic Invertebrate Data Sheet*

# Lake Rosseau - Brackenrig Bay

### Township of Muskoka Lakes

| Common Name | Site 1 R | | | Site 2 R | | | Scientific Name |
|---|---|---|---|---|---|---|---|
| | 2007 | | | 2011 | | | |
| | 1 | 2 | 3 | 1 | 2 | 3 | |
| Hydras | | | | | | | Coelenterata |
| Flatworms | | | 1 | 1 | | | Turbellaria |
| Roundworms | | | 9 | | | 2 | Nematoda |
| Aquatic Earthworms | | 3 | | | 1 | | Oligochaeta |
| Leeches | | 1 | | 1 | | | Hirudinaea |
| Sow Bugs | 46 | 55 | 80 | 110 | 44 | 90 | Isopoda |
| Clams | | | | | 4 | 2 | Pelecypoda |
| Fairy Shrimp | 45 | 42 | 42 | 8 | 7 | 4 | Amphipoda |
| Crayfish | | | | | | | Decapoda |
| Mites | 9 | | 6 | 2 | 29 | 3 | Hydracarina |
| Mayflies | 5 | 3 | 9 | 5 | 3 | 9 | Ephemeroptera |
| Dragonflies | 9 | 5 | 1 | | 2 | 4 | Anisoptera |
| Damselflies | 1 | | | | 2 | | Zygoptera |
| Stoneflies | | | | | | | Plecoptera |
| True Bugs | | | | | | | Hemiptera |
| Fishflies & Alderflies | 11 | 1 | 3 | | | 1 | Megaloptera |
| Caddisflies | 3 | 3 | 3 | 1 | 2 | | Trichoptera |
| Aquatic Moths | | | | 2 | | 1 | Lepidoptera |
| Beetles | | 1 | 3 | | | | Coleoptera |
| Snails & Limpets | | 1 | 3 | 4 | 8 | 7 | Gastropoda |
| Midges | 7 | 8 | 12 | 1 | 5 | 10 | Chironomidae |
| Horse & Deer Flies | | | | | | | Tabanidae |
| Mosquitos | | | | | | | Culicidae |
| No-see-ums | | | | | 2 | 1 | Ceratopogonidae |
| Craneflies | | | | | | | Tipulidae |
| Blackflies | | | | | | | Simuliidae |
| Misc. True Flies | | | | | | | Misc. Diptera |
| **Total Count** | 136 | 123 | 172 | 135 | 109 | 134 | |
| **Number of Taxa** | 9 | 11 | 12 | 10 | 12 | 12 | |
| | | | | | | | **Muskoka Average *** |
| **Richness** | 15 | | | 17 | | | **14** |
| **% EOT** | 10 | | | 7 | | | **22** |
| **% Chironimids** | 6 | | | 4 | | | **12** |
| **% Predators** | 13 | | | 13 | | | **23** |
| **% Shredders** | 2 | | | 2 | | | **3** |
| **% Collectors/Gatherers** | 83 | | | 77 | | | **70** |
| **Hilsenhoff Index** | 6.73 | | | 7.34 | | | **6.10** |

R = Reference Site

*The Muskoka Average is based on 147 samples collected at 76 reference sites between 2004 and 2011. Reference sites from 9 mesotrophic and 26 oligotrophic lakes throughout Muskoka were used.

THE DISTRICT MUNICIPALITY OF MUSKOKA

Managing Our Legacy Together

*Aquatic Invertebrate Data Sheet*

# Lake Rosseau - East Portage Bay

## Township of Muskoka Lakes

| Common Name | Site 1 [R] | | | | | | Scientific Name |
|---|---|---|---|---|---|---|---|
| | 2010 | | | 2011 | | | |
| | 1 | 2 | 3 | 1 | 2 | 3 | |
| Hydras | | | | | | | Coelenterata |
| Flatworms | | | | | | | Turbellaria |
| Roundworms | | | | | | | Nematoda |
| Aquatic Earthworms | 2 | 1 | | 4 | | | Oligochaeta |
| Leeches | | | | | | | Hirudinaea |
| Sow Bugs | | | | | | | Isopoda |
| Clams | | | | | 2 | | Pelecypoda |
| Fairy Shrimp | 117 | 165 | 181 | 87 | 116 | 117 | Amphipoda |
| Crayfish | | | | | | | Decapoda |
| Mites | 4 | 2 | 3 | 9 | 7 | 21 | Hydracarina |
| Mayflies | 16 | 20 | 10 | 3 | 13 | 8 | Ephemeroptera |
| Dragonflies | 7 | 9 | 9 | 7 | 4 | 4 | Anisoptera |
| Damselflies | 1 | 4 | 4 | 1 | 3 | 2 | Zygoptera |
| Stoneflies | | | | | | | Plecoptera |
| True Bugs | | | | | 3 | | Hemiptera |
| Fishflies & Alderflies | | | | | | | Megaloptera |
| Caddisflies | 1 | 3 | 6 | 5 | 5 | 3 | Trichoptera |
| Aquatic Moths | | | | | | | Lepidoptera |
| Beetles | 2 | 2 | 6 | | 1 | | Coleoptera |
| Snails & Limpets | | 2 | 1 | 1 | 1 | 1 | Gastropoda |
| Midges | 12 | 5 | 6 | 23 | 35 | 6 | Chironomidae |
| Horse & Deer Flies | | | | | | | Tabanidae |
| Mosquitos | | | | 2 | 2 | 1 | Culicidae |
| No-see-ums | | | 1 | | 1 | | Ceratopogonidae |
| Craneflies | | | | | | | Tipulidae |
| Blackflies | | | | | | | Simuliidae |
| Misc. True Flies | | | | | | | Misc. Diptera |
| **Total Count** | 162 | 213 | 227 | 142 | 193 | 163 | |
| **Number of Taxa** | 9 | 10 | 10 | 10 | 13 | 9 | |
| | | | | | | | **Muskoka Average *** |
| **Richness** | 11 | | | 14 | | | **14** |
| **% EOT** | 15 | | | 12 | | | **22** |
| **% Chironimids** | 4 | | | 13 | | | **12** |
| **% Predators** | 9 | | | 13 | | | **23** |
| **% Shredders** | 2 | | | 3 | | | **3** |
| **% Collectors/Gatherers** | 89 | | | 84 | | | **70** |
| **Hilsenhoff Index** | 5.88 | | | 6.05 | | | **6.10** |

R = Reference Site

* The Muskoka Average is based on 147 samples collected at 76 reference sites between 2004 and 2011. Reference sites from 9 mesotrophic and 26 oligotrophic lakes throughout Muskoka were used.

THE DISTRICT MUNICIPALITY OF MUSKOKA

*Managing Our Legacy Together*

## *Aquatic Invertebrate Data Sheet*

# Lake Rosseau - East Portage Bay

### Township of Muskoka Lakes

| Common Name | Site 2 | | | | | | Scientific Name |
|---|---|---|---|---|---|---|---|
| | 2012 | | | 2013 | | | |
| | 1 | 2 | 3 | 1 | 2 | 3 | |
| Hydras | | | | | | | Coelenterata |
| Flatworms | 4 | | | 1 | | | Turbellaria |
| Roundworms | | 3 | | | | | Nematoda |
| Aquatic Earthworms | 18 | 14 | | 5 | 3 | 4 | Oligochaeta |
| Leeches | | | | | | | Hirudinaea |
| Sow Bugs | 1 | | 4 | | | | Isopoda |
| Clams | | 1 | | | | | Pelecypoda |
| Fairy Shrimp | 104 | 171 | 73 | 36 | 57 | 53 | Amphipoda |
| Crayfish | | | | | | | Decapoda |
| Mites | 99 | 58 | 12 | 62 | 45 | 28 | Hydracarina |
| Mayflies | 1 | 4 | 3 | 3 | | 3 | Ephemeroptera |
| Dragonflies | 2 | 2 | | 1 | 1 | 3 | Anisoptera |
| Damselflies | | 1 | | 1 | 1 | 5 | Zygoptera |
| Stoneflies | | | | | | | Plecoptera |
| True Bugs | | | | | | | Hemiptera |
| Fishflies & Alderflies | | | 1 | | | 1 | Megaloptera |
| Caddisflies | 9 | 28 | 11 | 1 | 5 | 1 | Trichoptera |
| Aquatic Moths | | | | | | | Lepidoptera |
| Beetles | 14 | | 4 | 4 | 2 | 3 | Coleoptera |
| Snails & Limpets | 4 | 5 | 1 | 1 | | 2 | Gastropoda |
| Midges | 28 | 50 | 9 | 16 | 4 | 5 | Chironomidae |
| Horse & Deer Flies | | | | | | | Tabanidae |
| Mosquitos | | | | | | | Culicidae |
| No-see-ums | 8 | 4 | 1 | | 1 | 1 | Ceratopogonidae |
| Craneflies | | | | | | | Tipulidae |
| Blackflies | | | | | | | Simuliidae |
| Misc. True Flies | | | 1 | | 1 | 1 | Misc. Diptera |
| **Total Count** | 292 | 341 | 120 | 131 | 120 | 110 | |
| **Number of Taxa** | 12 | 12 | 11 | 11 | 10 | 13 | |
| | | | | | | | **Muskoka Average *** |
| **Richness** | 17 | | | 14 | | | **14** |
| **% EOT** | 8 | | | 7 | | | **22** |
| **% Chironimids** | 12 | | | 8 | | | **12** |
| **% Predators** | 28 | | | 44 | | | **23** |
| **% Shredders** | 6 | | | 2 | | | **3** |
| **% Collectors/Gatherers** | 63 | | | 53 | | | **70** |
| **Hilsenhoff Index** | 6.02 | | | 6.03 | | | **6.10** |

* The Muskoka Average is based on 147 samples collected at 76 reference sites between 2004 and 2011. Reference sites from 9 mesotrophic and 26 oligotrophic lakes throughout Muskoka were used.

THE DISTRICT MUNICIPALITY OF MUSKOKA

*Managing Our Legacy Together*

## *Aquatic Invertebrate Data Sheet*

# Lake Rosseau - East Portage Bay

### Township of Muskoka Lakes

| Common Name | Site 3 | | | | | | Scientific Name |
|---|---|---|---|---|---|---|---|
| | 2015 | | | 2016 | | | |
| | 1 | 2 | 3 | 1 | 2 | 3 | |
| Hydras | | | | | | | Coelenterata |
| Flatworms | 2 | | | 4 | 2 | 1 | Turbellaria |
| Roundworms | | | | | | | Nematoda |
| Aquatic Earthworms | 23 | 17 | 15 | 15 | 11 | 6 | Oligochaeta |
| Leeches | | 1 | | 1 | | 2 | Hirudinaea |
| Sow Bugs | 34 | 96 | 84 | 88 | 167 | 95 | Isopoda |
| Clams | 2 | | | | | | Pelecypoda |
| Fairy Shrimp | 29 | 8 | 28 | 23 | 25 | 20 | Amphipoda |
| Crayfish | 1 | | | | | | Decapoda |
| Mites | 14 | 4 | 2 | 2 | 4 | 5 | Hydracarina |
| Mayflies | 4 | 2 | 1 | 2 | 1 | 1 | Ephemeroptera |
| Dragonflies | | | 1 | 1 | | | Anisoptera |
| Damselflies | 1 | | | | | | Zygoptera |
| Stoneflies | | | | | | | Plecoptera |
| True Bugs | | | | | | | Hemiptera |
| Fishflies & Alderflies | | | | | | | Megaloptera |
| Caddisflies | 3 | | | 3 | 5 | 4 | Trichoptera |
| Aquatic Moths | | | | | | | Lepidoptera |
| Beetles | 1 | | | 1 | | | Coleoptera |
| Snails & Limpets | 1 | 2 | 2 | 2 | | | Gastropoda |
| Midges | 16 | 15 | 12 | 9 | 6 | 2 | Chironomidae |
| Horse & Deer Flies | | | | | | | Tabanidae |
| Mosquitos | | | | | | | Culicidae |
| No-see-ums | 1 | 1 | | | | | Ceratopogonidae |
| Craneflies | | | | | | | Tipulidae |
| Blackflies | | | | | | | Simuliidae |
| Misc. True Flies | | | | | | | Misc. Diptera |
| **Total Count** | 132 | 146 | 145 | 151 | 221 | 136 | |
| **Number of Taxa** | 14 | 9 | 8 | 12 | 8 | 9 | |
| | | | | | | | **Muskoka Average *** |
| **Richness** | 16 | | | 12 | | | **14** |
| **% EOT** | 3 | | | 3 | | | **22** |
| **% Chironimids** | 10 | | | 3 | | | **12** |
| **% Predators** | 7 | | | 5 | | | **23** |
| **% Shredders** | 1 | | | 2 | | | **3** |
| **% Collectors/Gatherers** | 91 | | | 93 | | | **70** |
| **Hilsenhoff Index** | 7.29 | | | 7.46 | | | **6.10** |

* The Muskoka Average is based on 147 samples collected at 76 reference sites between 2004 and 2011. Reference sites from 9 mesotrophic and 26 oligotrophic lakes throughout Muskoka were used.

THE DISTRICT MUNICIPALITY OF MUSKOKA

*Managing Our Legacy Together*

## *Aquatic Invertebrate Data Sheet*

# Lake Rosseau - Tobin Island

### Township of Muskoka Lakes

| Common Name | Site 1 R | | | | | | Scientific Name |
|---|---|---|---|---|---|---|---|
| | 2009 | | | 2010 | | | |
| | 1 | 2 | 3 | 1 | 2 | 3 | |
| Hydras | | | | 1 | | | Coelenterata |
| Flatworms | | | | | 2 | | Turbellaria |
| Roundworms | | | | | 4 | | Nematoda |
| Aquatic Earthworms | 3 | | | | | | Oligochaeta |
| Leeches | | | | | | | Hirudinaea |
| Sow Bugs | 125 | 21 | 42 | 41 | 6 | 14 | Isopoda |
| Clams | | | | 1 | | | Pelecypoda |
| Fairy Shrimp | 69 | 76 | 61 | 49 | 55 | 69 | Amphipoda |
| Crayfish | | 1 | | | | | Decapoda |
| Mites | 5 | 3 | | 4 | 14 | 4 | Hydracarina |
| Mayflies | 12 | 18 | 11 | 1 | 6 | | Ephemeroptera |
| Dragonflies | 3 | | 1 | 3 | 2 | 4 | Anisoptera |
| Damselflies | 1 | 6 | | | 2 | 2 | Zygoptera |
| Stoneflies | | | | | | | Plecoptera |
| True Bugs | | | | | | | Hemiptera |
| Fishflies & Alderflies | | | | | | | Megaloptera |
| Caddisflies | 5 | 2 | 17 | 2 | 13 | 6 | Trichoptera |
| Aquatic Moths | | | | | | | Lepidoptera |
| Beetles | 4 | | | 5 | 1 | 4 | Coleoptera |
| Snails & Limpets | | | | | 1 | | Gastropoda |
| Midges | 9 | 12 | 3 | 9 | 5 | 5 | Chironomidae |
| Horse & Deer Flies | | | | | | | Tabanidae |
| Mosquitos | | | | | 1 | | Culicidae |
| No-see-ums | 4 | 5 | | | | | Ceratopogonidae |
| Craneflies | | | | | | | Tipulidae |
| Blackflies | | | | | | | Simuliidae |
| Misc. True Flies | | | | | | | Misc. Diptera |
| **Total Count** | 240 | 144 | 135 | 116 | 112 | 108 | |
| **Number of Taxa** | 11 | 9 | 6 | 10 | 13 | 8 | |
| | | | | | | | **Muskoka Average *** |
| **Richness** | 12 | | | 15 | | | **14** |
| **% EOT** | 15 | | | 12 | | | **22** |
| **% Chironimids** | 5 | | | 6 | | | **12** |
| **% Predators** | 6 | | | 14 | | | **23** |
| **% Shredders** | 5 | | | 6 | | | **3** |
| **% Collectors/Gatherers** | 89 | | | 78 | | | **70** |
| **Hilsenhoff Index** | 6.60 | | | 6.19 | | | **6.10** |

R = Reference Site

*The Muskoka Average is based on 147 samples collected at 76 reference sites between 2004 and 2011. Reference sites from 9 mesotrophic and 26 oligotrophic lakes throughout Muskoka were used.