THE DISTRICT MUNICIPALITY OF MUSKOKA

*Aquatic Invertebrate Data Sheet*

# Chub Lake

**Town of Huntsville**

| Common Name | Site 1[R] | | | | | | | | | | | | Scientific Name |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2004 | 2005 | 2008 | 2009 | 2012 | 2014 | 2016 | 2017 | 2019 | 2023 | 2024 | 2025 | |
| Hydras | | | | | | | | | 7 | | | | Coelenterata |
| Flatworms | 1 | | | | 1 | | | | | | 1 | 1 | Turbellaria |
| Roundworms | 7 | | | | 1 | | 2 | | 30 | | | 3 | Nematoda |
| Aquatic Earthworms | 7 | | 8 | | 21 | | 51 | 91 | 61 | 23 | 2 | 8 | Oligochaeta |
| Leeches | 1 | | 2 | | | 2 | 2 | | 2 | | | 2 | Hirudinaea |
| Sow Bugs | | | 1 | | | | 2 | | | | | | Isopoda |
| Clams & Mussels | | | | 7 | 1 | | 1 | 2 | 2 | | 2 | | Bivalvia |
| Scuds | 53 | 53 | 32 | 80 | 99 | 94 | 14 | 14 | 31 | 13 | 15 | 10 | Amphipoda |
| Crayfish | | | | | | | | | | | | | Decapoda |
| Mites | 62 | 6 | 15 | 5 | 47 | 17 | 21 | 22 | 44 | | 3 | 30 | Hydracarina |
| Mayflies | 44 | 184 | 103 | 41 | 56 | 65 | 59 | 25 | 58 | 18 | 7 | 27 | Ephemeroptera |
| Dragonflies | 17 | 23 | 32 | 14 | 35 | 20 | 9 | | 6 | 4 | 5 | 2 | Anisoptera |
| Damselflies | 19 | 31 | 7 | 20 | 15 | 33 | 3 | 3 | 4 | | 6 | 7 | Zygoptera |
| Stoneflies | | | | | | | | | 22 | | | | Plecoptera |
| True Bugs | | 1 | 1 | | 1 | | 1 | | | | | | Hemiptera |
| Fishflies & Alderflies | | 3 | | | 2 | 4 | 1 | | 1 | | 2 | | Megaloptera |
| Caddisflies | 1 | 15 | 13 | 11 | 16 | 11 | 2 | 1 | 9 | 21 | | 3 | Trichoptera |
| Aquatic Moths | | | 1 | | | 1 | | | | | | | Lepidoptera |
| Beetles | | | 6 | 3 | | | 2 | 6 | | 1 | | | Coleoptera |
| Snails & Limpets | 5 | 2 | 2 | 7 | 3 | 3 | 3 | 6 | | 1 | 1 | | Gastropoda |
| Midges | 21 | 39 | 86 | 203 | 138 | 76 | 139 | 103 | 15 | 19 | 29 | | Chironomidae |
| Horse & Deer Flies | 1 | | | | | | 1 | | | | | | Tabanidae |
| Mosquitos | | 1 | 5 | | 2 | 1 | | 10 | 3 | | | 1 | Culicidae |
| No-see-ums | 12 | 6 | 19 | 14 | 23 | 3 | 32 | 29 | 30 | | 1 | 10 | Ceratopogonidae |
| Craneflies | | | 1 | | | | | | | | | | Tipulidae |
| Blackflies | 33 | | | | | | | | 7 | | | | Simuliidae |
| Misc. True Flies | | | | | | | | | | | | | Misc. Diptera |
| **Total Count** | 284 | 364 | 334 | 405 | 461 | 330 | 345 | 312 | 332 | 100 | 74 | 104 | |
| **Number of Taxa** | 15 | 12 | 17 | 11 | 16 | 13 | 18 | 12 | 17 | 8 | 12 | 12 | |
| | | | | | | | | | | | | | **Muskoka Average *** |
| **Richness** | 15 | 12 | 12 | 11 | 16 | 13 | 18 | 12 | 17 | 8 | 12 | 12 | **13** |
| **% EOT** | 29 | 66 | 46 | 21 | 27 | 39 | 21 | 9.3 | 23 | 43 | 24 | 38 | **17** |
| **% Chironomids** | 7 | 10 | 33 | 50 | 30 | 23 | 40 | 33 | 4.5 | 19 | 39 | 0 | **8** |
| **% Predators** | 35 | 16 | 26 | 14 | 27 | 24 | 21 | 19 | 35 | 5 | 24 | 50 | **24** |
| **% Shredders** | 18 | 13 | 3 | 3 | 4 | 4 | 0.6 | 0.3 | 2.7 | 21 | 0 | 2.9 | **2** |
| **% Collectors/Gatherers** | 30 | 63 | 72 | 80 | 69 | 72 | 77 | 78 | 51 | 73 | 72 | 44 | **68** |
| **Hilsenhoff Index** | 6.06 | 5.54 | 6.10 | 6.40 | 6.16 | 6.28 | 6.52 | 6.47 | 5.77 | 6.00 | 6.35 | 7.14 | **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*

## Chub Lake

### Town of Huntsville

| Common Name | Site 2[R] | | | | | | Scientific Name |
|---|---|---|---|---|---|---|---|
| | 2006 | 2007 | 2010 | 2011 | 2013 | 2015 | |
| Hydras | | | | | | | Coelenterata |
| Flatworms | | | | | | | Turbellaria |
| Roundworms | 1 | | 3 | | 1 | 7 | Nematoda |
| Aquatic Earthworms | 1 | 2 | 11 | 1 | 9 | 2 | Oligochaeta |
| Leeches | | | 50 | | | 1 | Hirudinaea |
| Sow Bugs | | | 1 | | | | Isopoda |
| Clams & Mussels | 2 | | 9 | 6 | 2 | 1 | Bivalvia |
| Scuds | 17 | | 55 | 50 | 54 | 14 | Amphipoda |
| Crayfish | | | | | | | Decapoda |
| Mites | 13 | 3 | 9 | 12 | 28 | 16 | Hydracarina |
| Mayflies | 89 | 8 | 38 | 69 | 56 | 45 | Ephemeroptera |
| Dragonflies | 32 | 6 | 13 | 16 | 11 | 3 | Anisoptera |
| Damselflies | 15 | 5 | 4 | 11 | 19 | 4 | Zygoptera |
| Stoneflies | | | 2 | | 13 | | Plecoptera |
| True Bugs | | | | | | 1 | Hemiptera |
| Fishflies & Alderflies | 2 | | 4 | 10 | 4 | 1 | Megaloptera |
| Caddisflies | 14 | 4 | 27 | 23 | 25 | 10 | Trichoptera |
| Aquatic Moths | 2 | | | 2 | | | Lepidoptera |
| Beetles | 2 | | 4 | 1 | 10 | 2 | Coleoptera |
| Snails & Limpets | 7 | 7 | 13 | 16 | 9 | 9 | Gastropoda |
| Midges | 92 | 74 | 105 | 62 | 76 | 118 | Chironomidae |
| Horse & Deer Flies | | | 2 | 1 | | 2 | Tabanidae |
| Mosquitos | | 5 | 5 | | 1 | 2 | Culicidae |
| No-see-ums | 6 | 3 | 4 | 1 | 8 | | Ceratopogonidae |
| Craneflies | | | 1 | | | | Tipulidae |
| Blackflies | | | | | | | Simuliidae |
| Misc. True Flies | | | 3 | | 3 | 1 | Misc. Diptera |
| **Total Count** | 295 | 117 | 363 | 281 | 329 | 239 | |
| **Number of Taxa** | 15 | 10 | 21 | 15 | 17 | 18 | |
| | | | | | | | **Muskoka Average *** |
| **Richness** | 15 | 10 | 21 | 15 | 17 | 18 | **13** |
| **% EOT** | 51 | 20 | 23 | 42 | 34 | 25.9 | **17** |
| **% Chironomids** | 31 | 23 | 29 | 22 | 23 | 49.4 | **8** |
| **% Predators** | 24 | 5 | 25 | 25 | 28 | 12.6 | **24** |
| **% Shredders** | 5 | 3 | 8 | 9 | 8 | 4.2 | **2** |
| **% Collectors/Gatherers** | 68 | 76 | 60 | 60 | 61 | 76.2 | **68** |
| **Hilsenhoff Index** | 5.87 | 6.67 | 6.38 | 5.83 | 5.70 | 6.27 | **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*

## Chub Lake

### Town of Huntsville

| Common Name | Site 3[R] | | | | Scientific Name |
|---|---|---|---|---|---|
| | 2016 | 2017 | 2019 | 2023 | |
| Hydras | | | 7 | | Coelenterata |
| Flatworms | | | | | Turbellaria |
| Roundworms | 2 | | 30 | | Nematoda |
| Aquatic Earthworms | 51 | 91 | 61 | 23 | Oligochaeta |
| Leeches | 2 | | 2 | | Hirudinaea |
| Sow Bugs | 2 | | | | Isopoda |
| Clams & Mussels | 1 | 2 | 2 | | Bivalvia |
| Scuds | 14 | 14 | 31 | 13 | Amphipoda |
| Crayfish | | | | | Decapoda |
| Mites | 21 | 22 | 44 | | Hydracarina |
| Mayflies | 59 | 25 | 58 | 18 | Ephemeroptera |
| Dragonflies | 9 | | 6 | 4 | Anisoptera |
| Damselflies | 3 | 3 | 4 | | Zygoptera |
| Stoneflies | | | 22 | | Plecoptera |
| True Bugs | 1 | | | | Hemiptera |
| Fishflies & Alderflies | 1 | | 1 | | Megaloptera |
| Caddisflies | 2 | 1 | 9 | 21 | Trichoptera |
| Aquatic Moths | | | | | Lepidoptera |
| Beetles | 2 | 6 | | 1 | Coleoptera |
| Snails & Limpets | 3 | 6 | | 1 | Gastropoda |
| Midges | 139 | 103 | 15 | 19 | Chironomidae |
| Horse & Deer Flies | 1 | | | | Tabanidae |
| Mosquitos | | 10 | 3 | | Culicidae |
| No-see-ums | 32 | 29 | 30 | | Ceratopogonidae |
| Craneflies | | | | | Tipulidae |
| Blackflies | | | 7 | | Simuliidae |
| Misc. True Flies | | | | | Misc. Diptera |
| **Total Count** | 345 | 312 | 332 | 100 | |
| **Number of Taxa** | 18 | 12 | 17 | 8 | |
| | | | | | **Muskoka Average *** |
| **Richness** | 18 | 12 | 17 | 8 | **13** |
| **% EOT** | 21 | 9 | 23 | 43 | **17** |
| **% Chironomids** | 40 | 33 | 5 | 19 | **8** |
| **% Predators** | 21 | 12 | 35 | 5 | **24** |
| **% Shredders** | 1 | 0.3 | 3 | 21 | **2** |
| **% Collectors/Gatherers** | 77 | 77 | 51 | 73 | **68** |
| **Hilsenhoff Index** | 6.52 | 6.47 | 5.77 | 6.00 | **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.