

## Aquatic Invertebrate Data Sheet

### Bay Lake Township of Perry

| Common Name                   | Site 1 <sup>R</sup> |            |            |            |            |            | Site 2 <sup>R</sup> |            |            |            |            |            | Scientific Name          |
|-------------------------------|---------------------|------------|------------|------------|------------|------------|---------------------|------------|------------|------------|------------|------------|--------------------------|
|                               | 2008                |            |            | 2009       |            |            | 2010                |            |            | 2011       |            |            |                          |
|                               | 1                   | 2          | 3          | 1          | 2          | 3          | 1                   | 2          | 3          | 1          | 2          | 3          |                          |
| Hydras                        |                     |            |            |            |            |            |                     |            |            |            |            |            | Coelenterata             |
| Flatworms                     |                     |            |            |            |            |            |                     |            |            |            |            |            | Turbellaria              |
| Roundworms                    | 19                  | 16         | 14         |            |            |            |                     |            |            |            |            |            | Nematoda                 |
| Aquatic Earthworms            | 3                   | 5          | 4          |            |            | 6          |                     |            | 1          | 7          | 7          | 3          | Oligochaeta              |
| Leeches                       | 1                   | 3          |            |            |            |            |                     |            |            |            |            |            | Hirudinaea               |
| Sow Bugs                      |                     |            |            |            |            |            |                     |            |            |            |            |            | Isopoda                  |
| Clams                         |                     | 8          | 1          |            |            |            |                     | 10         | 6          | 2          | 6          | 1          | Pelecypoda               |
| Fairy Shrimp                  | 15                  | 19         | 12         | 200        | 100        | 58         | 81                  | 117        | 166        | 65         | 27         | 34         | Amphipoda                |
| Crayfish                      |                     |            |            |            |            |            |                     |            | 1          |            |            |            | Decapoda                 |
| Mites                         | 21                  | 22         | 22         | 35         | 32         | 14         | 11                  | 35         | 19         | 4          | 8          | 5          | Hydracarina              |
| Mayflies                      | 11                  | 19         | 7          | 13         | 21         | 4          |                     | 22         | 16         | 6          | 2          | 2          | Ephemeroptera            |
| Dragonflies                   | 5                   | 8          | 3          | 6          | 14         | 15         | 2                   | 23         | 6          | 3          | 14         | 18         | Anisoptera               |
| Damselflies                   | 3                   | 4          | 4          | 4          | 1          | 4          |                     | 6          | 5          | 6          | 3          | 11         | Zygoptera                |
| Stoneflies                    |                     |            |            |            |            |            |                     |            |            |            |            |            | Plecoptera               |
| True Bugs                     |                     |            |            |            |            | 1          | 5                   | 1          |            |            |            |            | Hemiptera                |
| Fishflies & Alderflies        |                     | 2          |            |            | 28         | 12         |                     | 1          |            |            |            |            | Megaloptera              |
| Caddisflies                   | 4                   | 13         | 8          | 9          | 9          | 13         |                     | 11         | 3          | 4          | 3          | 2          | Trichoptera              |
| Aquatic Moths                 |                     |            |            |            |            |            |                     |            |            |            |            |            | Lepidoptera              |
| Beetles                       |                     | 1          |            | 5          | 8          | 10         |                     |            | 1          |            |            |            | Coleoptera               |
| Snails & Limpets              | 1                   | 1          |            |            | 1          | 2          |                     | 3          | 3          |            |            | 12         | Gastropoda               |
| Midges                        | 43                  | 40         | 30         | 52         | 100        | 33         | 3                   | 76         | 26         | 24         | 32         | 11         | Chironomidae             |
| Horse & Deer Flies            |                     |            |            |            |            |            |                     |            |            |            |            |            | Tabanidae                |
| Mosquitos                     | 1                   | 2          | 1          |            |            |            |                     |            |            |            |            |            | Culicidae                |
| No-see-ums                    | 3                   |            |            |            |            | 2          |                     | 6          | 6          | 1          | 1          | 1          | Ceratopogonidae          |
| Craneflies                    |                     |            |            |            |            |            |                     |            |            |            |            |            | Tipulidae                |
| Blackflies                    |                     |            |            |            |            |            |                     |            |            |            |            |            | Simuliidae               |
| Misc. True Flies              |                     |            |            |            |            |            |                     |            | 1          |            |            |            | Misc. Diptera            |
| <b>Total Count</b>            | <b>130</b>          | <b>163</b> | <b>106</b> | <b>324</b> | <b>314</b> | <b>174</b> | <b>102</b>          | <b>311</b> | <b>260</b> | <b>122</b> | <b>103</b> | <b>100</b> |                          |
| <b>Number of Taxa</b>         | <b>13</b>           | <b>15</b>  | <b>11</b>  | <b>8</b>   | <b>10</b>  | <b>13</b>  | <b>4</b>            | <b>11</b>  | <b>14</b>  | <b>10</b>  | <b>10</b>  | <b>11</b>  |                          |
|                               |                     |            |            |            |            |            |                     |            |            |            |            |            | <b>Muskoka Average *</b> |
| <b>Richness</b>               |                     | 16         |            | 13         |            |            |                     | 16         |            | 11         |            |            | <b>13</b>                |
| <b>% EOT</b>                  |                     | 22         |            | 14         |            |            |                     | 14         |            | 23         |            |            | <b>26</b>                |
| <b>% Chironimids</b>          |                     | 28         |            | 23         |            |            |                     | 16         |            | 21         |            |            | <b>12</b>                |
| <b>% Predators</b>            |                     | 26         |            | 24         |            |            |                     | 19         |            | 23         |            |            | <b>24</b>                |
| <b>% Shredders</b>            |                     | 6          |            | 4          |            |            |                     | 2          |            | 3          |            |            | <b>2</b>                 |
| <b>% Collectors/Gatherers</b> |                     | 53         |            | 72         |            |            |                     | 76         |            | 68         |            |            | <b>69</b>                |
| <b>Hilsenhoff Index</b>       |                     | 6.07       |            | 5.93       |            |            |                     | 6.07       |            | 6.27       |            |            | <b>5.99</b>              |

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.