Supplementary material

**Table S1.** Zooplankton community for each investigated lake [15–18,41,42].

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **TAXA** | **Mergozzo** | **Moro** | **Endine** | **Comabbio** | **Pusiano** |
| *Daphnia longispina* (O.F. Müller, 1776) | X | X | X |  | X |
| *Daphnia cucullata* (Sars, 1862) |  |  |  | X |  |
| *Bosmina longirostris* (O.F. Müller, 1776) |  |  | X |  | X |
| *Eubosmina coregoni* (Baird, 1850) | X | X |  |  |  |
| *Eubosmina longispina* (Leydig, 1860) |  |  |  | X |  |
| *Ceriodaphnia pulchella* (Sars, 1862) |  |  |  | X |  |
| *Ceriodaphnia quadrangula* (O.F. Müller, 1785) |  |  | X |  | X |
| *Diaphanosoma brachyurum* (Liévin, 1848) | X |  |  | X | X |
| *Cyclops abyssorum cfr. divergens* (Lindberg, 1836) | X | X |  | X | X |
| *Cyclops strenuus* (Fisher, 1851) |  |  | X |  |  |
| *Mesocyclops leuckarti* (Claus, 1857) | X | X | X | X | X |
| *Thermocyclops crassus* (Fisher, 1853) |  |  | X | X |  |
| *Thermocyclops hyalinus* (Rehberg, 1880) | X |  |  |  | X |
| *Eudiaptomus gracilis* (Sars, 1863) |  |  |  |  | X |
| *Eudiaptomus padanus* (Burckhardt, 1900) | X | X |  | X |  |
| *Leptodora kindtii* (Focke, 1844) | X |  |  |  | X |
| *Bythotrephes longimanus* (Leydig, 1860) | X |  |  |  |  |

**Table S2.** Carbon and nitrogen isotopic mean values and relative standard deviations.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | **13C‰** | **SD** | **15N‰** | **SD** |
| Mergozzo | CyclopoidsDiaptomids*Daphnia**Bosmina**Diaphanosoma**Bythotrephes**Leptodora* | -30.5-28.0-27.0-20.5-23.6-24.6-21.9 | ±3.2±6.0±4.8---- | 8.24.51.20.10.13.62.0 | ±1.3±4.4±1.0---- |
|  |  |  |  |  |  |
| Moro | CyclopoidsDiaptomids*Daphnia* | -35.6-33.5-33.0 | ±1.7±3.5±4.4 | 16.613.98.9 | ±0.9±1.7±4.1 |
|  |  |  |  |  |  |
| Endine | CyclopoidsDiaptomids*Daphnia**Bosmina**Diaphanosoma* | -32.5-34.1-33.6-34.1-33.8 | ±0.6±0.8±1.3±0.2- | 8.59.54.13.84.9 | ±1.2±0.9±1.7±1.6- |
|  |  |  |  |  |  |
| Comabbio | Diaptomids*Daphnia* | -21.0-23.7 | ±3.7±5.1 | 9.06.1 | ±3.8±0.8 |
|  |  |  |  |  |  |
| Pusiano | CyclopoidsDiaptomids*Daphnia* | -32.1-36.1-31.4 | ±5.6-±5.9 | 14.117.512.6 | ±5.1-±6.0 |