Seasonal dynamics of rotifer (*Rotifera*) and crustacean *Cladocera* and *Copepoda*) zooplankton of meteorite crater ponds in the nature reserve "Meteoryt Morasko" nature reserve in Poznań, Poland.

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Meteorite craters, located at the northern boundary of the city of Poznań, are situated within an area of oak-hornbeam forest (*Galio silvatici-Carpinetum*) and are protected as a nature reserve. They create one of the greatest sets of craters on earth, formed by an fall of iron meteorites. Out of seven ditches, three are permanently filled with water. These are shallow, out-flow ponds supplied by rain water. They are characterised by low pH values and frequent oxygen depletions. Due to such specific conditions, there are no fish observed in these water bodies, which results in a great variation of zooplankton communities of zooplankters, including species adapted to acidic water reaction.

The examination took place over four seasons of 2008. Significant differences in the zopplankton densities were recorded between particular water bodies and between particular seasons within the year. Zooplankton abundance and the taxonomical composition was related to the occurrence of invertebrate predators (larva of *Culex* sp. and *Chaoborus* sp.), as well as to the densities of competitive filter-feeding representatives of *Ostracoda*.

The most varied species composition was observed during the spring months. A number of species that occurred at that time were characteristic of waters of low trophy, low pH and characteristic of temporary water bodies. Moreover, many representatives of the genus *Daphnia* possessed hemoglobin, possibly due to the reaction to oxygen depletion. Another phenomenon which was observed in the investigated ponds was the frequent occurrence of males in the populations of most cladoceran species, which also reflected specific environmental conditions, unfavourable to many organisms.