Title: The body size distribution of chosen species of Rotifera in different types of small water bodies in the Wielkopolska region

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Abstract: Small water bodies are often characterised by specific macrophytes species composition and different level of predation and this may also have an effect on the body length and shape of rotifer specimens. The main aim of the study was to determine the relation of rotifers representing different body size, towards specific kinds of pond (mid-forest, pastoral and man-made) and to three kinds of hydromacrophytes (nymphaeids, elodeids and helophytes) as well as comparatively to the open water zone. Five species of a wide range of distribution in various ecological habitats were analysed: *Anuraeopsis fissa*, *Brachionus angularis*, *Filinia longiseta*, *Keratella cochlearis* and *K. quadrata*. The examined water bodies differed in respect to fish presence. Morphometrical analysis of specimens of particular rotifer species showed that both the type of water body relating to different land use in the catchment area as well as microhabitat type significantly influenced their size and shape. E.g. *Anuraeopsis fissa*, whose specimens were significantly smaller in ponds with a strong anthropogenic impact, were found to be largest among stands of helophytes and smallest within the open water zone.

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