

Impact of secondary salinisation on the structure and diversity of oligochaete communities



Secondary salinisation has become one of the most important factors responsible for changes in the aquatic biota. Earlier research has focused on macroinvertebrates including oligochaetes in anthropogenically saline rivers and streams, but studies on oligochaetes in anthropogenically saline stagnant waters remain scarce. Therefore, this study was conducted to assess changes in the species composition as well as the abundance and biomass of oligochaete communities along a large salinity gradient in the anthropogenic inland water bodies located in the Upper Silesian Coal Basin (Southern Poland), which is one of the largest coal basins in Europe. Herein, a total of 27 oligochaete species including five alien species were assessed, namely, *Potamothenis bavaricus*, *Potamothenis hammoniensis*, *Potamothenis moldaviensis*, *Psammoryctides albicola*, and *Psammoryctides barbatus*. The results confirmed that the freshwater oligochaetes could tolerate elevated water salinity and showed highest densities and taxa richness in intermediate salinity. Moreover, the waters with the highest salinity had an extremely low number of oligochaete species. A salinity level above 2800 mg L⁻¹ led to significant loss of diversity of the oligochaetes, and consequently, these habitats were colonized by halotolerant species, especially *Paranais litoralis*, whose abundance increased with increasing salinity gradient.

Auteurs du document : Agnieszka Sowa, Mariola Krodziewska

Obtenir le document : EDP Sciences

Mots clés : Oligochaeta, salinity gradient, anthropogenic water bodies, biodiversity, Oligochète, gradient de salinité, plans d'eau anthropiques, biodiversité

Thème (issu du Text Mining) : MILIEU NATUREL, ENVIRONNEMENT

Date : 2020-01-24

Format : text/xml

Source : <https://doi.org/10.1051/kmae/2019049>

Langue : Anglais

Télécharger les documents : <https://www.kmae-journal.org/10.1051/kmae/2019049/pdf>

Permalien : <https://www.documentation.eauetbiodiversite.fr/notice/impact-of-secondary-salinisation-on-the-structure-and-diversity-of-oligochaete-communities0>

Evaluer cette notice: