

Summary

The aim of the study was to analyze the vegetation changes of the Czchowski and Rożnowski reservoirs after 50 years, compared to the results of research conducted in the 1970s by Loster (1976). In the years 2017-2020, vegetation studies were carried out within the reservoirs using the Braun-Blanquet method. On the basis of 126 phytosociological relevés and 13 cards of the flora list, 194 species of vascular plants and 27 plant communities were found. The analysis of changes showed a slight decrease in the number of plant species and a two-fold increase in the number of plant communities. The species diversity of plant communities decreased. Changes in the type of plant communities indicate an increase in the eutrophication of reservoirs, which over time leads to their shallowing. This is evidenced by the development of plant communities typical of eutrophic reservoirs, such as *Caricetum gracilis*, *Ceratophylletum demersi*, *Glycerietum maximae*, *Myriophylletum spicati*, *Phalaridetum arundinaceae*, *Phragmitetum australis*, *Typhetum latifoliae*. The aging of water reservoirs is associated with the progressing process of plant succession. Within the studied reservoirs, the similarity of flora and vegetation compared to the data from the 1970s is small. Changes in the vegetation cover mainly consist of the disappearance or reduction of the share of pioneer species or plant communities and the increase in the share of communities of the *Potametea* and *Phragmitetea* classes. The number of alien invasive species has increased from 11 to 18. The greatest expansiveness is shown by *Elodea canadensis* and *Echinocystis lobata*. The presence of two protected species not recorded before was found: *Aruncus sylvestris* and *Daphne mezereum*. The presence of new sites of endangered plant species was also found: vulnerable *Potamogeton nodosus* and the near-threatened *Najas marina*. Studies of aquatic and shore vegetation are valuable materials that can be used to assess the status of waters. Knowing the pace and direction of changes in the vegetation cover allows for such management in the area of reservoirs to combine the possibility of reservoirs functioning in accordance with the purpose of their creation while maintaining the proper condition and protection of flora and vegetation.

Key words: Rożnowski reservoir, Czchowski reservoir, vegetation changes, plant succession.

Akceptuję streszczenie rozprawy doktorskiej

p. mgr Sabina Klich

Alicja Stachurska-Swelbi

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