

Water pH and organisms

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Abstract

Water pH, as an important factor of water quality, directly affects the occurrence of various types of organisms. Some organisms are tolerant to a wider range of pH (euryvalent), and on the contrary, others are stenovalent to the pH of the environment and there are function only at a specific pH. Then they can also use as environmental indicators to some extent. For example, bogs are a typical example of a biotope inhabited by acidophilic (acid-loving) species of plants and animals. Thus, "pH specialists" can inhabit extreme habitats where most organisms are unable to survive.

The study shows the effect of environmental pH on organisms using the example of the development of the Velký Bolevecký rybník (pond) over the last ten years. A unique project (Biomaniipulation of the Velký Bolevecký rybník) is underway here, dealing with improving the quality of water in the pond, increasing its transparency, leading to the possibility of better recreational use. A number of steps were sensitively used here, which positively influenced the water quality in the pond, such as reduction and qualitative change in the species composition of the fish population, changing the vegetation of the pond from cyanobacteria to a macrophyte state, etc. The state of water quality in the pond is regularly monitored and measures leading to maintain it.

Keywords

pH of water, plants, animals, pond, monitoring, biomanipulation