

BOOK REVIEW

BOOK REVIEW: WATER ECOLOGY, BY MIRCEA NICOARĂ AND DOREL URECHE, ISBN 606-520-015-8, Ed. PIM, Iași, 2008

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INTRODUCTION

In 2008, PIM Publishing House issued the second edition of *Water Ecology* by Mircea Nicoară and Dorel Ureche.

The elaboration of this work and the necessity of re-evaluating it is based on the existence of some major international problems related to the water environment and to their becoming critical within the last decades.

The most important problems of this environment which determined the intensification of their studies and researches are: the necessity of maintaining water quality and quantity, the reduction of biological diversity, the impact of climate change (especially temperature and UV-B radiations) on water ecosystems and human health.

The concept of „ecological homeostasis” referring to population (Botnariuc 1967) is more topical than ever, in the context of significant changes in the water environment and can be extended to biocenosis, too.

Book content

The nine chapters of the book successively introduce general information on the hydrological cycle, on water properties, but also information on present bioindicators and systems used in estimating the water environment quality and water ecosystems reconstruction.

A special chapter refers to water as a natural resource, laying emphasis on water crisis and consumption as well as on aspects referring to the reconsideration of the strategies for water resource management.

Chapter 7 dedicated to the bioindicators of water environment quality presents different groups of aquatic organisms used as indicators for water

quality correlated with the type of habitat and the pollution factor.

This chapter also describes present systems for water quality estimation: saprob system, diversity indices-based system, biotic indices-based system.

Chapter 8 exposes problems concerning water pollution in a global perspective and emphasizes different pollution categories and their effects on water organisms. Water pollution is considered at planetary as well as national scale (particularly water pollution in Romania).

The last chapter is concerned with problems of ecological reconstruction of aquatic ecosystems, in general, and means of reconstruction of rivers, lakes and humid areas, in particular.

Due to the way in which water environment information is being presented, this paper outlines the role of water ecology studies has for the formation of researchers, advisers and administrators of these ecosystems and underlines the role of appropriate management and use of water resources, in agreement with international environmental policies.

The present book as a whole aims at promoting the most recent knowledge in the water ecology field, in order to facilitate the understanding of water ecosystems and their scientific management.

It also represents a guide for students and specialists in this domain and helps shaping a unitary conception of the water environment and developing necessary competencies for a durable management of the most precious natural resource – water.

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