



**The Life in Hydrosphere.  
Essays on general hydrobiology**

**А. А. Протасов. 2011.** Жизнь в гидросфере. Очерки по общей гидробиологии – Киев, Академперіодика, 704 с.  
In Russian. ISBN 978-966-360-185-4.

A new book on the aquatic life of the planet named Earth appeared last year. This book (issued in Russian) seemed to be a collection of readings interesting mostly for specialists in aquatic science but, while entering in dept, the reader will find many new conceptual points. One may call them hypothetical, another one - theoretical, but there are also so many very practical issues that no doubt - this is a contemporary review on the whole range of the modern hydrobiology as a complex branch of the biological science.

The book reviewed key concepts of general hydrobiology, and its relationship with other biological disciplines. The similarity of ecology and hydrobiology is in the studying of super-organismal levels (populations, communities, ecosystems, bioms) but the difference is in their general approach and subject. The science «ecology» represents mostly the Linnaean approach starting from species populations while the «hydrobiology» takes the Humboldt's approach starting from living forms and convergent ecomorphes inhabiting similar aquatic environments.

The evolution of the water life together with the basic hydrosphere habitats is well considered in the book which provides also a comprehensive review of the variety of living adaptations to the changeable aquatic environments and of ecotopic groupings: neuston/pleuston, benthos, periphyton, plankton, nekton. One may find also an interesting texts on structure and functioning of the water communities and their successions and life strategies. The author introduced an original concept on «hydrobiomes» and discussed characteristics of main hydrospheric hydrobiomes, including those ones of artificial water bodies (reservoirs, ponds, canals) of hydrotechnical infrastructures and relevant aquatic communities of the newly defined aquatic habitat of «techno-ecosystems».

The last chapter represents a chronology of the historical development of the general hydrobiology as science form ancient times up today. Listing many fundamental persons, events and books the author noted also the first catalogue of the Bulgarian Black-Sea fauna, prepared by Prof. Al. Valkanov, and the first issue of the academic journal «Хидробиология» (shown by mistaken in 1955 instead in 1975).

Prof. Dr.Sc. Aleksander Protasov is well known author of many books and papers in the field mostly of so called «technical hydrobiology». His main subject is ecology of artificial water bodies – special and technical ones, cooling pools and canals of thermal and nuclear power stations. He was amongst experts in assessment the damages and forcasting the mid- and longterm consequences on the aquatic environments after the Chernobil disaster in 1986. For years he's the head of the Laboratory of Technical Hydrobiology at the Hydrobiological Institute in Kiev, Ukraina. More than 300 scientific articles and 8 books/monographies are published, amongst them studies on invasive zebra-mussel *Dreissena*, and ecology of Kamptozoa, Bryozoa, Hydrozoa – substantial component of the periphytic communities on technical water infrastructures.

Cooperation of Bulgarian hydrobiologists with prof. Aleksander Protasov and his Lab continues for many years, initailly on the Danube river and its wetlands, and further on invasive moluscs like *Dreissena* within cooperation of both Academies of Sciences of Bulgaria and Ukraine. He gusted several times the former Instritute of Zoology and the present Institute of Biodiversity & Ecosystem Research, and his lectures were accepted with great interest by the audience.