Buchbesprechung

 Lenz, P. H., Hartline, D. K., Purcell J. E., Macmillan D. L. (eds) Hardback 1996, eBook 2021. Zooplankton: sensory ecology and physiology. – CRC Press, Taylor & Francis Group, Boca Raton, London, New York, 590 pp. ISBN 9789056990220, eBook ISBN 9780203733615

The microcosm of zooplankton found in the open water column of the ocean and freshwater habitats is one of the most intriguing sectors of aquatic life due to its huge diversity, magnificent survival tricks, wealth of adaptations to the environment, and complex synecology. The sensory biology and neuroethology of plankton organisms has, therefore, fascinated zoologists for a long time. The present book is a classic on its own. Since it's now available as an e-book, it's time for a reappraisal. Young researchers are often forced to ignore the merits of the past to propagate their own research as brand new. But in every branch of science, the roots should not be recklessly ignored but used as a solid base for the development of new lines of research. The here-discussed multiple author book is perfectly suited for this.

Are you interested in the sensory world of plankton, chemosensory as well as mechanosensory and visual? In the relationships between sensory systems and and fluid dynamics of the water? In benthic-pelagic coupling? You want to know how plankton organism avoid to be seen? How bioluminescent countershading works? Something about the influence of UV irradiation and polarized light? This book will give you answers on all this, and much more. Taxon by taxon, specific features of cephalopods, decapods, copepods, cladocerans, cnidarians, tunicates and other gelatinous zooplankton organisms are reviewed and related to their behaviour, e.g., larval development, drifting, food recognition and feeding, sexual interaction, swarming, escape behaviour, inducible defence mechanisms, optimisation of swimming, and predator-prey interactions.

The editors of the book (actually the proceedings of a conference on "Sensory ecology and physiology of zooplankton" held in Honolulu, Hawaii, in 1995) brought together a superb selection of excellent researchers in their fields, all of which reviewed their best pieces of work, all of them well-founded in the state of the art of their time. Thus, the book is a perfect introduction into the classical topics of sensory adaptation of zooplankton that is warmly recommended to everybody who wants to gain basic knowledge on zooplankton prior to specialisation in one of the many topics presented in the book. Also, it shows that modern molecular approaches lose a lot of their potential if the real life in the aquatic environment is not adequately considered. For all researchers who are interested in the combination of both sides of the medal, as for example done in ecological developmental biology, this book is a great introduction. One aspect that is hard to understand, however, is the price of the book. There is no reasonable reason for asking 208 £ for the e-book version of a book already existing in print version for quite some time.

Roland R. Melzer