

BOOK REVIEW

J.S. Nelson. *Fishes of the World*, 4th Edition. John Wiley & Sons Inc., New Jersey, 2006. xiv + 601 p. ISBN 0-471-25031-7.

The fourth edition of Nelson's *Fishes of the World* is published 30 years after the first edition. Nothing but agree with Lynne Parenti (Curator of Fishes and Research Scientist, National Museum of Natural History, Washington) who said that "Only classics are known by the single name of their author, and certainly Nelson's book has been such a book for all those who seek an accessible, readable reference on fish classification". The author sets the same objective in this edition as he did in the first three (1976, 1984, 1994): "... to present a modern introductory systematic treatment of all major fish groups, both fossil and living". The previous editions have become a classic guide to fish classification and identification for ichthyologists, general zoologists, teachers of courses in ichthyology or fish biology, collection managers, and aquarists. In Russia, they have been specifically welcome because of the lack of any high-rank textbooks on fish classification and interrelationships since Berg's *Classification of fishes, both recent and fossil* (1940, 1956) and Lindberg's *Fishes of the world: a key to families and a checklist* (1971).

Fishes, here, mean "...aquatic vertebrates that have gills throughout life and limbs, if any, in the shape of fins". It is a paraphyletic grouping, including all aquatic gilled vertebrates, from Agnatha to Gnathostomata. Extinct groups are included as well, so that the book is addressed to both palaeontologists and neontologists. With ca. 28 000 species, fishes are the largest grouping of vertebrate animals, comprising about two thirds of their species. This grouping exhibits enormous diversity in their morphology, in the habitats they occupy, and in their biology. This diversity is, in part, what makes understanding their evolutionary history and establishing a classification so difficult. For the latest edition, the author again uses a cladistically-based classification now revised to reflect recent research, and has given references to recent systematic works. A further 33 families (now in total 515 families of living fishes) and some 3359 species have been added. The work done by J. Nelson in the background is enormous. Each node of the hierarchy is discussed and referenced to the concurrent alternatives recently published, and the choice made between them is explained. The taxonomy of fishes presented includes the anatomical characteristics, distribution, common and scientific names, and phylogenetic relationships for all. What is done with wonderful clarity is diagnoses of taxa, listing proposed synapomorphies and other characters that distinguish the group. The Nelson's kind of account is absolutely understandable to a broad array of biologists who may need to know what groups systematic ichthyologists postulate as monophyletic and by what diagnostic characters. The outlines (not images) of fishes are extremely useful to memorise the general appearance of families and subfamilies.

For those who may expect that this book is a kind of encyclopaedia about fish, I would like to make it clear that it is not an overview of biological diversity and ecology of fishes. It only provides a useful classification that is close enough of the last validated advances of research. It is not absolutely up-to-date, in particular, it does not ratify the last "most true" phylogeny. It seems that even if the author proclaims an entirely cladistic approach, he realizes that a phylogeny is not a classification, and tries to point out the most evidenced classification, however presents the alternatives.

I look forward to a Russian edition of Nelson's *Fishes of the World*, which I hope may appear. It would be a great gift for Russian-speaking zoologists, ichthyologists, students and fishery managers who will find it a unique and essential source of information on fish classification to be used in research and teaching.

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