

BOOK NOTICES

Arratia, G., Kapoor, B.G., Chardon, M., Diogo, R. *Catfishes*. 2 volumes. New Hampshire, USA: Science Publishers, 2003. Price \$142.00.

This 2 volume book contains information on fossil and modern siluriform fish. Volume 1 includes chapters on anatomy, function, functional morphology, phylogenetics, systematics of certain catfish groups. Volume 2 includes chapters on the fossil record and palaeodistribution, ecology and ethology, development and sensory biology.

Boxshall, G.A., Halsey, S.H. *An introduction to copepod diversity*. 2 volumes. London: The Ray Society, 2004. (The Ray Society Series, no. 166.) Price £125.00.

Published in two parts, this book provides a systematic overview of the entire group. It provides a family by family account of all copepods, and for each family level group the book contains: an illustrated diagnosis of the family, supported by 289 pages of line drawings, a list of included genera with approximate number of species, a taxonomic notes' section highlighting some of the remaining taxonomic problems, a key to genera for every family (with three exceptions), and an introduction to the biology of the family—serving as an entry point to the literature (key references or reviews, details of hosts, etc.). The book is designed to facilitate the identification of copepods, enable identification to genus-level in the overwhelming majority of cases, and provides an entry point into the biological literature.

Carpenter, S.R. *Regime shifts in lake ecosystems: pattern and variation*. xxviii, 199 p. Oldendorf/Luhe, Germany: International Ecology Institute, 2003. (*Excellence in Ecology*, no. 15.) Price €40.00.

Volume 15 of the *Excellence in Ecology* series concentrates on ecological dynamics in fresh waters. Much of the book focuses on studies of lakes and regime shifts.

Fingerman, M., Nagabhushanam, R., editors. *Recent Advances in Marine Biotechnology*. Volume 9. *Biomaterials and bioprocessing*. x, 385 p. Enfield, New Hampshire, USA: Science Publishers, Inc., 2003. Price \$97.00.

This volume is the ninth in the *Recent Advances in Marine Biotechnology* and covers the subjects of biomaterials and bioprocessing. The chapters provide information about biomaterials and bioprocessing and also identify some gaps in current knowledge. Among the chapters in this volume are ones that deal with anti-HIV compounds, applications of carrageenans, and anticoagulants, all from algae.

Fingerman, M., Nagabhushanam, R., editors. *Recent Advances in Marine Biotechnology*. Volume 10. *Molecular genetics*

of marine organisms. xiv, 427 p. Enfield, New Hampshire, USA: Science Publishers, Inc., 2003. Price \$118.00.

This volume is the tenth in the *Recent Advances in Marine Biotechnology* series and focuses on the molecular genetics of marine organisms. Among the chapters in this volume are ones that deal with gene transfer technology for salmon, genome analysis of alkaliphilic bacteria, the genetic basis of microbial degradation of polychlorinated biphenyls and the molecular genetics of marine bivalves.

Gliwicz, Z.M. *Between hazards of starvation and risk of predation: the ecology of offshore animals*. xxii, 379 p. Oldendorf/Luhe, Germany: International Ecology Institute, 2003. (*Excellence in Ecology*, no. 12.) Price €54.00.

This book, the twelfth in the *Excellence in Ecology* series, focuses on the conflicts between starvation and predation, between strategies of survival and of energy procurement. Using the author's personal experience and years of offshore studies, the book explores facts, concepts and theories touching upon topics of current ecological research.

Lawrence, A., Hemingway, K., editors. *Effects of pollution on fish. Molecular effects and population responses*. xvii, 342 p. Oxford: Blackwell Science Ltd, 2003. Price £79.50.

The impact of pollution on fisheries and the potential health implications of eating contaminated fish are areas of considerable concern for the fishing and aquaculture communities, government bodies and the general public. Pollution, as well as over fishing, may well be contributory to recent serious declines in global fish stocks. *Effects of pollution on fish* brings together the work of many international experts each of whom have examined the literature on marine and freshwater fish and, where appropriate, invertebrates, to produce comprehensive chapters covering all major aspects of the impacts of pollution on fish and fisheries. The book describes these impacts in detail, from the molecular and sub-cellular level, through organism to population and community levels, and subsequently to socio-economic implications. This book draws together contributions encompassing molecular genetics, biochemistry, physiology, population and community biology, and fishery economics.

Legendre, L. *Scientific research and discovery: process, consequences and practice*. xxix, 235 p. Oldendorf/Luhe, Germany: International Ecology Institute, 2004. (*Excellence in Ecology*, no. 16.) Price €40.00.

Excellence in Ecology volume 16 focuses on the author's perception of the achievements and shortcomings of modern marine ecology. The author examines human capability to conduct research and also considers the

relationship between science and culture, underlining the significance of ethics in particular.

Nixon, M., Young, J.Z. *The brains and lives of cephalopods*. 392 p. Oxford: Oxford University Press, 2003. Price £175.00.

This book describes the brains and sense organs of 57 genera of the class Cephalopoda as well as a variety of morphological features. The text is illustrated with fully labelled line drawings and photomicrographs.

Pugh, D. *Changing sea levels. Effects of tides, weather and climate*. viii, 265 p. Cambridge: Cambridge University Press, 2004. Price £70.00 (Hardback), £30.00 (Paperback).

Changing sea levels presents an introduction to measurement techniques including satellite altimetry, storm surges, tidal analysis and flooding risks and how they are estimated. The author explains the concepts included in understanding and forecasting future sea level changes and impacts using examples and illustrations drawn from around the world.

Skelton, P., Smith, A. *Cladistics a practical primer on CD-ROM*. 80p0. CDROM. Cambridge: Cambridge University Press, 2002. Price £30.00 (Hardback).

This CD and supporting textbook provides a self-study introductory course in phylogenetic reconstruction using cladistic analysis. The CD is interactive and includes animated sequences, questions and practical exercises. Its aim is to give students a basic understanding of cladistics and enable them to reconstruct phylogenetic relationships from morphological and molecular data.

Stenseth, N.C., Ottersen, G., Hurrell, J.W., Belgrano, A., editors. *Marine ecosystems and climate variation*. xii, 252 p. Oxford: Oxford University Press, 2004. Price £65.00 (Hardback).

This text focuses on the influence of climate variability on the marine ecosystems of the North Atlantic. The book is divided into five sections: background, plankton, fish and seabird populations, community ecology and a final section consisting of commentaries from scientists

working in areas outside the North Atlantic marine sector.

Tesch, F.-W. *The eel*. 3rd edition. vii, 408 p. Oxford: Blackwell Publishing Company, 2003. (Translated by R.J. White; edited by J.E. Thorpe.) Price £89.50 (Hardback).

This edition is the English version of the third German edition and contains new information from many publications not covered by the previous English language edition. *The eel* contains chapters covering body structure and functions, developmental stages and distribution of the eel species, post-larval ecology and behaviour, harvest and environmental relationships, fishing methods, eel culture, diseases, parasites and bodily damage, the world trade in eels and eel processing. Contributions are included from several world authorities including new information concerning genetic diversity in eel populations and the consequences for their management. The book will be of use to all those working with the species, including fish biologists, physiologists and ecologists, aquatic and environmental scientists, fisheries managers and fish farm personnel.

Thomas, J.A., Moss, C.F., Vater, M. *Echolocation in bats and dolphins*. xxvii, 604 p. Chicago: University of Chicago Press, 2004. Price \$45.00, £31.50.

Echolocation in bats and dolphins consists of six sections: mechanisms of echolocation signal production; the anatomy and physiology of signal reception and interpretation; performance and cognition; ecological and evolutionary aspects of echolocating mammals; theoretical and methodological topics; and possible echolocation capabilities in other aquatic mammals.

Val, A.L., Kapoor, B.G., editors. *Fish adaptations*. xiii, 418 p. New Hampshire, USA: Science Publishers, 2003. Price \$140.00.

This book presents various views on the interactions of fish and their environments at different levels of biological organization. From chromosomes to molecular adjustments to environmental conditions, from physiological adaptations to nutrient requirements, the book explores the adaptations to their environments that fish have made.