2007–2008

Fisheries

www.scipub.net

Science Publishers
Enfield, New Hampshire, USA

Translated from French
No Rights Europe

MANAGEMENT OF FRESHWATER FISHERIES

Jacques Arrignon

978-1-57808-051-9; 1999; 598 pages, hc;
$ 106.40

The book is organised under the following three major headings: Ecological bases; Fish farming; and Managing aquatic mediums. The tested data is presented in a clear and well-balanced manner, often with the help of tables and illustrated with many sketches and photographs. Includes glossary and an index.

This book will be useful to professionals involved in the biology, management and protection of the aquatic medium: hydrobiologists, aquaculturists, fish farmers, technicians and fishing wardens.

Mammals of Russia and Adjacent Regions
BALEEN WHALES

V.E. Sokolov and *V.A. Arsen'ev*

978-1-57808-185-1; 2006; 332 pages, hc;
$ 109.80

This English translation is a contribution to the systematics of the baleen suborder (as vs. the toothed whales) of Cetaceans. Detailed descriptions of baleen suborders including gray whales, humpbacks, and right whales, are given. Entries on genera that are found in Russian waters include identification keys, general descriptions, biological characteristics, geographical distribution, practical significance, status (often endangered), and illustrations.

Mammals of Russia and Adjacent Regions
LAGOMORPHS

NEW

V.E. Sokolov et al.
Scientific Editors:
Robert S. Hoffmann & Andrew T. Smith

978-1-57808-522-4; June 2008

SERIES: RECENT ADVANCES IN MARINE BIOTECHNOLOGY

Milton Fingerman and *R. Nagabhushnam (eds.):*
Dept. of Ecology, Evolution, and Organismal Biology, Tulane University, USA

Volume 1:
Endocrinology and Reproduction

978-1-886106-53-6; 1997; 536 pages, hc;
$ 140.00

This volume is a compilation of information that covers a wide range of animal groups. This book will be of interest not only to biotechnologist, but also to aquaculturists, comparative animal physiologists, comparative endocrinologists, and developmental biologists.

Volume 2:
Environmental Marine Biotechnology

978-1-57808-012-0; 1998; 323 pages, hc;
$ 95.20

CONTENTS: Protein Biomarkers for Paralytic Shellfish Toxins: *Donna S. Smith and David D. Kitts*; Characteristics of Deep-sea Microorganisms Adapted to Extreme Environments: *Chiaki Kato, AkiraInoue, and Koki Horikoshi;* Application of Chitosan in Separation and Purification of Metals: *Katsutoshi Inoue;* Glues from the Sea—Lessons at the Foot of a Bioadhesive Master, the Marine Mussel: *Leszek M. Rzepecki*; Bioremoval of Heavy Metals by Microalgae: *Edward W. Wilde, Joann C. Radway, and John R. Benemann*; Microbial Surfactants—Potential Applications in the Treatment of Hydrocarbon Marine Pollution: *Jean-Claude Bertrand, Michle Gilewicz, Patricia Bonin, and Michel Denis*; Enzymatic Membrane Bioreactors—Current State of the Art and Future Prospects: *Duarte M.F. Prazeres and Joaquim M.S. Cabral*; Heavy Metal Pollution—Use of Marine Crustaceans as Biological Indicators: *Rachakonda Nagabhushanam, Palla S. Reddy, and Milton Fingerman*; Enzyme Sensors for the Detection of Pesticides: *Jean-Louis Marty, Beatrice Leca, and Thierry Noguer*; Microbial Diversity as a Source of Potentially Useful Biopolymers: *Eugene Rosenberg*; Bioreactor Technology for Mass Cultivation of Photoautotrophic-microalgae: *Yuan K. Lee and Amos Richmond*

Volume 3:
Biofilms, Bioadhesion, Corrosion, and Biofouling

978-1-57808-013-7; 1999; 320 pages, hc;
$ 98.60

Provides reviews of the advances being made in our understanding of the formation and role of biofilms and how bioadhesion occurs, with the idea in mind that these presentations will provide insight into ways to reduce the impact of corrosion and biofouling on the marine environment.

Volume 4:
Aquaculture

Operation of an economically successful aquaculture venture depends upon the complete life cycle of a species occurring in captivity. Comprises two volumes – *Part A: Seaweeds* and *Invertebrates*, and *Part B: Fishes*. These volumes present information that can be useful to facilitate the aquaculture of a wide variety of food species. Possible solutions to how such complete control of life cycles of important food organisms might be accomplished, are presented in each chapter.

Part A: Seaweeds and Invertebrates

978-1-57808-082-3; 2000; 292 pages, hc;
$ 98.60

Part B: Fishes

978-1-57808-083-0; 2000; 260 pages, hc;
$ 89.60

Volume 5:
Immunobiology and Pathology

978-1-57808-091-5; 2000; 392 pages, hc;
$ 109.20

It describes of how the immune systems of fishes function, particularly now that molecular biology techniques are being applied in these studies. With respect to invertebrates, their immune processes have not evolved to the level of those of the vertebrates, and consequently invertebrate immune mechanisms present unique challenges to the investigators, with few vertebrate models that might serve as roadmaps. Worldwide, viral infections of shrimp present very serious impediments to successful culture of these crustaceans. Overcoming this problem would be a major step forward.

Volume 6:
Bio-organic Compounds: Chemistry and Biomedical Applications

978-1-57808-135-6; 2002; 272 pages, hc;
$ 95.20

The marine environment is a fruitful source of novel chemical compounds that are not found in terrestrial and freshwater organisms. Many of these substances have biomedical applications which could lead to development of new pharmaceutical products. Through new driving technologies, exploration at greater depths is now possible, thus aiding greater scope for research on the utilization of natural products. Studies of these marine natural products include investigations of neuronal membrane-active toxins, ion channel blockers, antitumor and antiviral agents, and anti-inflammatory molecules.

Volume 7:
Seafood Safety and Human Health

978-1-57808-204-9; 2002; 328 pages, hc;
$ 98.60

Finfish and Shellfish constitute a significant percentage of human diet. As population grows, there is greater urgency to increase the yield of seafood from the oceans. There is also need to guard against naturally occurring toxins and pathogenic organisms that are capable of contaminating this food supply. It is imperative to detect the presence of these toxins and environmental conditions which favor the microorganisms that are the sources of these toxins in order to ensure food safety. Marine biotechnology has a major role at the forefront in assuring that our seafood is safe, and has begun to provide impressive successes in assuring that it will be so.

Volume 8:
Bioremediation

978-1-57808-245-2; 2003; 352 pages, hc;
$ 107.50 ††

Bioremediation is a technology that utilizes the metabolic potential of microorganisms to clean up contaminated environments. In this volume, international scientists present the results of recent research in marine bioremediation. A sampling of topics includes the bioremediation of petroleum spills, the control of heavy metal contamination, and the use of molecular technologies for monitoring bacteria.

Volume 9:
Biomaterials and Bioprocessing

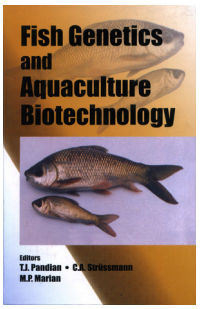
978-1-57808-284-1; 2003; 300 pages, hc;
$ 108.60 ††

Marine organisms have been found to be sources of numerous compounds that have applications in industry, agriculture, and medicine. This volume explores ongoing efforts to develop these natural products into commercially viable materials. The book deals with a range of topics, such as photobioreactors, industrial applications of chitosanases, carrageenans from red algae, anticoagulants from marine algae, anti-HIV compounds from red algae, and biomass production as a source of energy by pyrolysis.

Volume 10:
Molecular Genetics of Marine Organisms

978-1-57808-297-1; 2003; 436 pages, hc;
$ 132.20 ††

Biologists, geneticists, and scientists in related fields, explore how the basic aspects of molecular genetics can be applied to practical problems of increasing commercial production from the oceans. Their topics include antibacterial vaccine discovery in the genomic era, osmotic adaptation in immobilized recombinant cyanobacteria for biotechnology, using microsatellite probes for the DNA fingerprinting of cultivated red algae, crustacean growth and genes, reporter gene activities in fish embryos, gene transfer technology for salmon, and genetically improving fish by transgenic techniques.



FISH GENETICS AND AQUACULTURE BIOTECHNOLOGY

Editors:
T.J. Pandian, C.A. Strüssmann and *M.P. Marian*

978-1-57808-372-5; 2005; 170 pages, hc;
$ 66.60 ††

Half of the 12 papers are research reports selected from the presentations to an international conference. The others are reviews of literature on the same theme of advanced technologies in fisheries and marine sciences. Among the topics are gene transfer to germline and somatic tissues of zebrafish, methods of sex control in fishes, and the isolation of antibody-like substances from marine algae.

MICROBIAL BIOTECHNOLOGY IN AGRICULTURE AND AQUACULTURE

R.C. Ray (ed.)

. . . see Agriculture

PROCEEDINGS OF THE WORLD FISHERIES CONGRESS, ATHENS, GREECE

Assessment Methodologies and Management
Gary T. Sakagawa (ed.)

978-1-886106-10-9; 1995; 210 pages, hc;
$ 88.50

MORPHOLOGICAL EVOLUTION, APTATIONS, HOMOPLASIES, CONSTRAINTS AND EVOLUTIONARY TRENDS

Catfishes as a Case Study on General Phylogeny and Macroevolution

Rui Diogo: University of Liège, Belgium

978-1-57808-291-9; 2004; 502 pages, hc; $ 136.60

The major aim of this work is, to help understand the interrelationships of catfishes, with major implications on the study of the general evolution of these fishes. A great part of this work therefore, deals with a cladistic analysis of catfish higher-level phylogeny based on extensive morphological data, in which are included some terminal taxa not included in previous analyses, but principally a large number of characters traditionally excluded from those analyses, with particular attention being given to catfish mycology. This analysis gives particular importance to complex, integrated structures. It will be of interest to students, ichthyologists and biologists working in evolution, taxonomy and phylogeny.

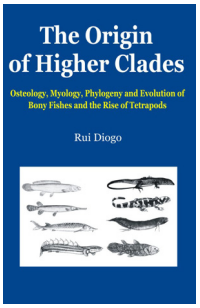
OCEAN ENVIRONMENT AND FISHERIES

NEW

M.P.M. Reddy: Formerly, College of Fisheries, Mangalore, India

978-1-57808-519-4; November 2007; 560 pages, hc; $ 115.00

Contains detailed information on the physical, chemical and biological oceanographic features at various depths for all the fifteen regions of the Atlantic, Pacific, Indian and Southern Oceans as categorized by the FAO, and on the commercially important marine fishes, and details of fish catches in all the major oceans since 1950. Aspects relating to fisheries forecasts are discussed. Several aspects relating to various Oceans environmental factors which influence fisheries in different regions of the major oceans are given as well. It is intended for scientists, teachers and students specializing in Fishery Oceanography, Physical Oceanography, Chemical Oceanography and Biological Oceanography.



NEW

THE ORIGIN OF HIGHER CLADES

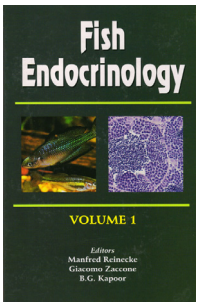
Osteology, Myology, Phylogeny and Evolution of Bony Fishes and the rise of Tetrapods

Rui Diogo: Department of Anthropology, George Washington University, Washington, DC, USA

978-1-57808-437-1; December 2007; 388 pages, incl. 7 color plates, hc*; $ 95.00

The Osteichthyes, including bony fishes and tetrapods, is a highly speciose group of animal comprising more than 42,000 living species. The extraordinary taxonomic diversity of osteichthyans is associated with a remarkable variety of morphological features and adaptations to very different habitats, from the deep sea to high mountains. This book provides a new insight on the osteology, myology, phylogeny and evolution of this fascinating group. The data presented in this book will stimulate, and pave the way for, future studies on the comparative anatomy, functional morphology, phylogeny and evolution of osteichthyans and of vertebrates in general.

* *Paperback edition will be published at a later date.*

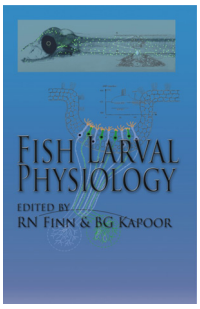


FISH ENDOCRINOLOGY

Editors:
Manfred Reinecke: University of Zürich, Switzerland
Giacomo Zaccone: Messina University, Italy
B.G. Kapoor: Formerly, Jodhpur University, India

978-1-57808-318-3, (2 vols.); 2006; 912 pages; 12 color figures, hc; $ 151.20

With the recent advances in molecular biology, cell biology, physiology and behavior, the contributors of these 24 papers are making significant progress in understanding the endocrine functions of a number of species of fish. Topics include insulin and insulin-like growth factors, with papers on insulin metabolic effects in fish tissues, non-radioisotropic immunoassay for fish insulin, insulin-like growth factor I and II, insulin and IGF receptors and insulin-like growth facto binding proteins; in the gastro-entero-pancreatic (GEP) system researchers describe new techniques to examine the endocrine pancreas of the African lungfish, glucagon and related compounds and the development of the GEP system of teleosts; in pituitary development, hormones and functions they are studying teleost adenhypophysis, melancortin, endorphin and melanin-concentrating hormones, the osmoregulatory action of hypophyseal hormones in teleosts, a fish model for a fundamental sensory modality in osmoreception, natriuretic peptides, cardiac nitric oxide signaling, myotropic hormones; the pineal organ; and stress response, reproduction and endocrine disruptors.



NEW

FISH LARVAL PHYSIOLOGY

Editors:
Roderick Nigel Finn: Department of Biology, University of Bergen, Norway
B.G. Kapoor: Formerly Professor of Zoology, The University of Jodhpur, India

978-1-57808-388-6; April 2008; ca.420 pages, hc; US $ 139.00

To study physiology is to examine how organisms have evolved solutions to the business of living in an inanimate world. Our world is and has always been dominated by physical and chemical forces. A physicist might tell us that all things are physical, while a chemist is more concerned with the elementary nature of reactions. A physical chemist sees the bonds between these views, and a biochemist draws out the organic symphony of the vital pathways. A structural biologist adds shape to the chemical building blocks of life, while a molecular biologist tinkers with these structures.

This book is intended as a resource for students and researchers interested in developmental biology and physiology and specifically addresses the larval stages of fish. Fish larvae (and fish embryos) are not small juveniles or adults. Rather they are transitionary organisms that bridge the critical gap between the singlecelled egg and sexually immature juvenile. Fish larvae represent the stage of the life cycle that is used for differentiation, feeding and distribution.

This book aims at providing a single-volume treatise that explains how fish larvae develop and differentiate, how they regulate salt, water and acid-base balance, how they transport and exchange gases, acquire and utilise energy, how they sense their environment, and move in their aquatic medium, how they control and defend themselves, and finally how they grow up.

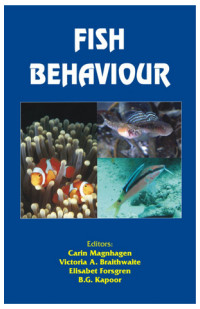
REPRODUCTIVE STRATEGY OF MARINE BIVALVES AND ECHINODERMS

V.L. Kasyanov: Institute of Marine Biology, Vladivostok, Russia

978-1-57808-136-3; 2001; 240 pages, hc; $ 100.20

This work analyzes the data on reproduction and growth that might be useful in practical aquaculture, and the industry. The scope of investigations on echinoderms has been confined to economically important species — sea cucumbers, sea urchins, and sea stars.

The book has been updated and revised by the author for the English edition in 2000.



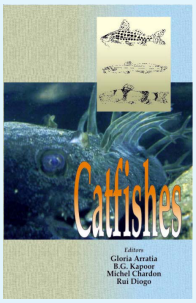
NEW

FISH BEHAVIOUR

Editors:
Carin Magnhagen: Department of Aquaculture, Swedish University of Agriculture Sciences, Umea, Sweden
Victoria A. Braithwaite: University of Evolutionary Biology, University of Edinburgh, UK
Elisabet Forsgren: Dept. of Biology, Norwegian University of Science & Technology, Trondheim, Norway
B.G. Kapoor: Formerly Professor of Zoology, The University of Jodhpur, India

978-1-57808-435-7; June 2008; ca.660 pages, hc; US $ 137.50

The diversity of fish species is striking, and the behavioural specialisations that have been documented are truly amazing. In many cases, researchers have used different fish species as model systems with which to address fundamental questions about evolution and fitness, and often these studies have found that behaviour and differences in behaviour are what underpins these processes. The book tackles issues from the perspective of the mechanisms underlying different behaviours, to how the nervous system and associated physiology enable fish to make decisions, the manner in which these systems establish different types of behavioural patterns and life histories, and how these combine to produce complex behaviours. It is structured to guide the reader from consideration of behavioural mechanisms that generate different categories of behaviour, to how their functional effects influence fish in their day-to-day lives.



CATFISHES

Gloria Arratia: Humboldt University, Berlin, Germany
B.G. Kapoor: Formerly, Jodhpur University, India
R. Diogo and *M. Chardon:* Université de Liège, Liège, Belgium

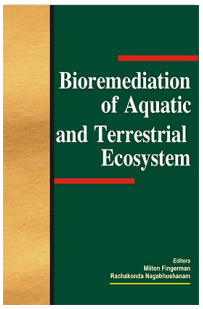
978-1-57808-261-2; 2003; 844 pages (2 vols.), hc; $ 159.00

This two-volume set comprises 26 contributions written by international scholars in the fields of vertebrate morphology, animal biology, marine ecology, ethology and animal psychology, neurobiology and behavior, ichthyology, soil sciences, and many other fields. The first volume addresses catfish anatomy; function and functional morphology; and phylogeny, systematics, and some problematic groups. The catfish fossil record, ecology and ethology, development, and sensory biology are covered in the second volume.

"....this book is an important one for all catfish researchers. It certainly deserves a place in reference libraries, and probably also on the shelf of the serious specialist."

— African Journal of Aquatic Sc. 2005, 30(1)

Order through our convenient and secure online shopping cart
www.scipub.net



BIOREMEDIATION OF AQUATIC AND TERRESTRIAL ECOSYSTEMS

Editors:
Milton Fingerman and *R. Nagabhushanam:* Tulane University, New Orleans, LA USA

978-1-57808-364-0; 2005; 622 pages, hc; $ 109.80

Bioremediation, the practice of degrading, sequestering or removing environmental contaminants through the use of microorganisms, has significant potential for beneficial applications but also significant potential for disaster. In this collection of 11 articles, contributors describe their research in finding the most effective means of removing contaminants while maintaining control of the microorganisms intended to counter them. Topics include molecular techniques of xenobiotic-degrading bacteria and their catabolic genes, genetic engineering of bacteria, commercial use of genetically modified organisms in bioremediation and phytoremediation, microbial surfactants and soil remediation, and remediation of heavy metals, oils and petroleum products, BTEX hydrocarbons, RDX and HMX, and a review of engineering processes.

SENSORY BIOLOGY OF JAWED FISHES

New Insights

B.G. Kapoor and *T.J. Hara (eds.)*

978-1-57808-099-1; 2001; 404 pages, hc; $ 133.80

Ichthyologists specializing in morphology, ultrastructure, physiology, developmental biology, neurology, ecology, and behavior present 15 commissioned papers on the senses of the gnathostomes, or jawed fish, among which are the teleosts, which account for almost all living fish.

PALAEMONID PRAWNS

Biodiversity, Taxonomy, Biology and Management

K.V. Jayachandran

978-1-57808-182-0; 2001; 640 pages, hc; $ 155.70

The author views prawns as having great potential as an environmentally sustainable food source that can counter act the socioeconomic effects of the decline in traditional fishing. The introduction provides aquaculture trend data on the commercially important Palaemonidae family, which thrives in habitats ranging from coastal marine waters to high altitude streams. This volume consolidates the extensive literature on prawn taxonomy, biogeography by world regions, biology, hatchery management, farming, diseases and their control. Includes several color plates and numerous diagrams. Indexed by species and subject.

BIOTECHNOLOGY OF AQUATIC ANIMALS

Editors:
R. Nagabhushanam, *A.D. Diwan*, *B.J. Zahurnec* and *R. Sarojini*

978-1-57808-321-3; 2004; 190 pages, hc; $ 77.80 ††

The book presents current developments in selected areas of the biotechnology of aquatic animals. The uses and applications of biotechnology in general are described, with emphasis on aquatic animals, and recent advances in aquaculture and marine biotechnology are outlined. The book describes techniques for reproductive manipulation of fin and shell fishes, and discusses vaccines for aquatic animals, environmental biotechnology, antifouling technology, and ethics.

NEW

FISH RESPIRATION AND ENVIRONMENT

Editors:
Marisa N. Fernandes and *Francisco T. Rantin:* Universidade Federal de São Carlos, São Carlos, Brazil
Mogens L. Glass: Universidade de São Paulo, Ribeirão Prêto, Brazil
B.G. Kapoor: Formerly Jodhpur University, India

978-1-57808-357-2; August 2007; 408 pages, hc; $ 109.50

Gills of healthy fishes are their lifeline to meet the challenges arising from their changing environment: oxygen gradient, alkalinity, temperature fluctuations and the added pollutants. The diverse and ever changing aquatic environment has a major impact on the organization of various organ-systems of fishes. This book contains seventeen chapters covering bony fishes. The chapters primarily cover fish respiration but also include osmoregulation, these being the two main functions of gills. Concurrently, cardiorespiratory synchronization has been well addressed.

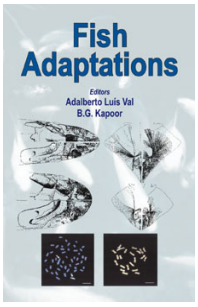
This book has broad coverage, and is well-supported with illustrations.

NUTRITION, PHYSIOLOGY, AND METABOLISM IN CRUSTACEANS

Elena Mente: University of Aberdeen, Scotland, UK

978-1-57808-220-9; 2003; 170 pages, hc; $ 66.60

It examines protein metabolism and growth in decapod crustaceans.

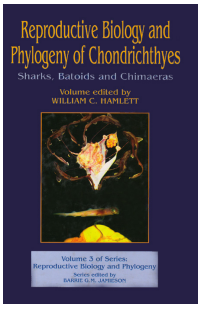


FISH ADAPTATIONS

Adalberto Luís Val: INPA, Laboratório de Ecofisiologia e Evolução Molecular, Manaus, Brazil
B.G. Kapoor: Formerly, Jodhpur University, India

978-1-57808-249-0; 2003; 432 pages, hc; $ 156.80

When water characteristics change, fishes have to adjust physiologically to these alternations in their habitat in order to survive as a biological identity. Physiological adaptation is a dynamic and never-ending process that has resulted in myriad fish groups adapting to the vast environmental diversity existing on the Earth. Moreover, adaptively modified organisms acquire greater ability to exploit the full range of natural environment, by adopting new modes of life in many situations. This book is a 'voyage' through Fish Adaptations, including new and not readily available information.



REPRODUCTIVE BIOLOGY AND PHYLOGENY OF CHONDRICHTHYES

Sharks, Batoids, and Chimaeras

William C. Hamlett (ed.): Indiana University, Notre Dame, Indiana, USA

978-1-57808-314-5; 2005; 576 pages, hc; $ 133.80

Comprises recent work reflecting the latest understanding of the development, reproductive morphology, function, and phylogeny of chondrichthyan fishes. Some specific areas examined include phylogenetic relationships among the major lineages of modern Elasmobranchs, reproductive evolution of chondrichthyans, reproduction in fisheries science, the Elasmobranch ovary, the testis and spermatogenesis, and alkaline glands and Clasper glands of batoids.

"This volume will be an indispensable reference to both general biologists and specialists."

— The Quarterly Review of Biology, Vol. 82, No. 1, March 2007

FISH CHEMOSENSES

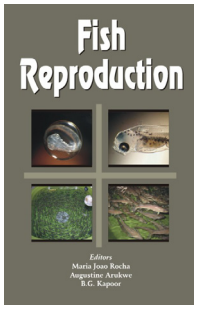
Editors:
Klaus Reutter: Anatomisches Institut Universität, Tübingen, Germany
B.G. Kapoor: Formerly Professor of Zoology, Jodhpur University, India

978-1-57808-319-0; 2005; 356 pages, hc; $ 106.40 ††

Deals with the fishes chemosensory systems — the well known olfactory and the gustatory senses and the less popular solitary chemosensory cells. Chemosenses play an essential role in the survival of fishes. They help the fish to search for food, to consume it and to process it further, they help to find their conspecifics and to avoid enemies or predators. Fishes living in unusual extreme ecological niches, like caves and the deep sea, have highly developed and evolved chemosensory organs then the chemosenses of sight-hunting fish.

New Book Proposals

Please send the details of your work at editor@scipub.net
Or
You can visit the Book Proposal form at www.scipub.net/publication-proposals.html



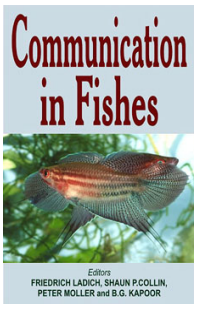
NEW

FISH REPRODUCTION

Editors:
Maria J. Rocha: Centre of Marine & Environmental Research, Porto, Portugal
Augustine Arukwe: Norwegian University of Science & Technology, Trondhein, Norway
B.G. Kapoor: Formerly, Jodhpur University, India

978-1-57808-331-2; January 2008; 632 pages, hc; $ 128.00

The first chapters highlight important issues affecting fish normal ways of reproductive development; details would focus on species living in opposite environments, such as tropical and polar fishes; far related, as teleosts and cartilaginous fishes; and finally, fish having different reproductive strategies. Thereafter, since many fishes live in detrimental environments, mainly induced by the continuous input of xenobiotic substances into waterways, the authors found it highly pertinent to include this topic. Herein, the authors fix their attention on the factors and mechanisms that may well affect reproduction-related hormonal systems as also on known consequences for fish living in polluted environments. Finally, the interplay of modern concepts of fish reproduction in aquaculture is reviewed.

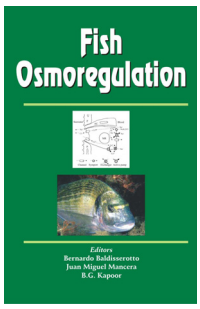


COMMUNICATION IN FISHES

Editors:
Friedrich Ladich: University of Vienna, Austria
Shaun Collin: The University of Queensland, Brisbane, Australia
Peter Moller: The City University of New York, NY, USA

978-1-57808-328-2; 2006; 870 pages (2 vols.), hc; $ 162.40

This book describes how fish communicate with acoustic, chemical, visual, and electric signals. Topics include the diverse sound-generating mechanisms in fishes, evolutionary trends in swim bladder sound mechanisms, propagation of fish sounds, agonistic behavior and acoustic communication, reproductive behavior and acoustic interactions, detection, hydromechanical communication, olfactory systems, and public chemical information in anti-predator behavior. Visual topics include a model of the propagation of visual signals, color discrimination, visual communication in Elasmobranchs, perceptions of like fish, UV communication, pigments in deep water, spectral sensitivity, and photoreception without images while those on electric communication include measuring and visualizing fields, plasticity of the electric organ discharge waveform, evolution of signals, social signals during courtship, integration with other senses and the neuroethology of senders and receivers.



NEW

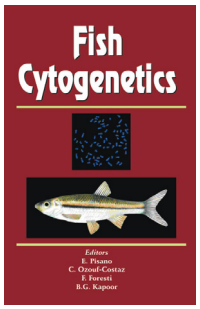
FISH OSMOREGULATION

Editors:
Bernardo Baldisserotto: Universidade Federal de Santa Maria, Santa Maria-RS, Brazil
J.M. Mancera Romero: Universidad de Cadiz, Spain
B.G. Kapoor: Formerly, Jodhpur University, India

978-1-57808-447-0; September 2007; 540 pages, hc; $ 128.00

Fish lives in environments with a wide variety of chemical characteristics (fresh, brackish and seawater, acidic, alkaline, soft and hard waters). From an osmoregulatory point of view, fish have developed several mechanisms to live in these different environments. Fish osmoregulation has always attracted considerable attention and in the last years several studies have increased our knowledge of this physiological process.

In this book several specialists have analyzed and reviewed the new data published regarding fish osmoregulation. The chapters present an integrative synthesis of the different aspects of this field focusing on osmoregulation in specific environments or situations, function of osmoregulatory organs, general mechanisms and endocrine control. In addition, interactions of osmoregulatory mechanisms with the immune system, diet and metabolism were also reviewed. New emerging techniques to study osmoregulation has also been analysed.



NEW

FISH CYTOGENETICS

Editors:
E. Pisano: Universita di Genova, Genova, Italy
C. Ozouf-Costaz: Museum national d'histoire naturelle, Paris, Cedex, France
F. Foresti: Instituto de Biosciencias, UNESP, Brazil
B.G. Kapoor: Formerly, Jodhpur University, India

978-1-57808-330-5; March 2007; 518 pages, hc; $ 128.80

This book is organized in four sections (systematics and evolution; biodiversity conservation; stock assessment and aquaculture; and genomics) covering the major fields of present fish cytogenetic research. The book provides a comprehensive picture of the ongoing research around the world. Due to the diversified arrays of themes approached, including speciation and evolution, biodiversity and conservation and genomics, the book is addressed not only to specialists in cytogenetics but to all scientists interested in fish biology.

FISH DISEASES

NEW

Editors:
Jorge Eiras: Universidade do Porto, Porto, Portugal
Helmut Segner and *Thomas Wahli:* Institute of Animal Pathology, University of Bern, Switzerland

978-1-57808-438-8; March 2008; 1319 pages, (2 vols.), hc; $149.00

CONTENTS: General Fish Histology: *R. Reimshuessel*; Diseases Caused by Virus: Viral Diseases in Salmonids: *D. Fichtner and S. Bergmann*; Virus Diseases of Cyprinids: *P.F. Dixon*; Virus Diseases of Cultured Marine Fish: *Bovo G. and D. Florio*; Diseases Caused by Bacteria: *Oivind Bergh*; Fungal Diseases of Fish: *D.J. Alderman*; Microsporida: *J. Lom*; Amoeboid Protists as Parasites of Fish: *Iva Dykovaá*; Diseases Caused by Flagellates: P. *Alvarez-Pellitero*; Diseases Caused by Apicomplexans: *D. Steinhagen;* Diseases Caused by Ciliophora: *A. Coloni*; Myxozoan Diseases: *Stephen W. Feist*; Diseases Caused by Monogenea: *I.D. Whittington and L.A. Chisholm*; Digeneans as Enemies of Fishes: *Stephen A. Bullard and Robin M. Overstreet*; Diseases Caused by Cestodes: *J. Joanna Borucinska*; Acanthocephala: *H. Taraschewski*; Nematodes: *A. Choudhury and R. Cole*; Crustacea: *W. Piasecki*; Non-infectious Diseases: Nutritional Factors: *D.M. Gatlin III*; Environmental Diseases of Intensively Reared Fish: *D.J. Speare*; A brief guide for Aquaculture Veterinarians attending (Continental Water) and Producing Facility: *H.J. Schlotfeldt*

FEEDING AND DIGESTIVE FUNCTIONS IN FISHES

NEW

Editors:
J.E.P. Cyrino: USP-ESALQ, Department of Animal Science (Zootecnia), Piracicaba, SP, Brazil
D. Bureau: University of Guelph, Canada
B.G. Kapoor: Formerly, Jodhpur University, India

978-1-57808-375-6; March 2008

CONTENTS: Feeding Ecology of Fishes in the Brazilian Amazon — A Naturalistic Approach: *Jansen Zuanon and Efrem Ferreira*; Environmental Changes, Habitat Modifications and Feeding Ecology of Freshwater Fish: *Norma Segatti Hahn and Rosemara Fugi*; Feeding Activity in Teleost Fish: Influence of Biotic and Abiotic Factors: *Ann Gannan*; Classical and Modern Concepts in Fish Digestion: *Victoria V. Kuz'mina*; Temperature Adaptation of Digestive Enzymes in Fish: *Alexander Gelman* et al.; Diets, Physiology, Biochemistry and Digestive Tract Development of Freshwater Fish Larvae: *Maria Célia Portella and Konrad Dabrowski*; Ontogeny and Physiology of the Digestive System of Marine Fish Larvea: *José Luiz Zambonino Infante* et al.; Tracer Studies in Fish Larvae: *Luís E.C. Conceição* et al.; Recent Advances in Digestion, Absorption and Transport of Dietary Lipids in Fish: *M.S. Izquierdo* et al.; An Overview of the Feeding Ecology and Physiology of Elasmobranch Fishes: *Enric Cortés* et al.; Alternative Protein Sources and Digestive Function Alternations in Teleost Fishes: *Anne Marie Bakke-McKellep and Ståle Refstie*; Nutrition and Disease Resistance in Fish: *Chhorn Lim* et al.; Efficiency of Conversion of Feed Inputs into Animal Biomass: The Usefulness of Bioenergetics Models and need for a Transition to Nutrient-Flow Models: *Dominique P. Bureau* et al.

FISH LIFE IN SPECIAL ENVIRONMENTS

NEW

Philippe Sébert: Unité Haute Pression et Métabolisme, Cedex, France
D.W. Onyango: University of Nairobi, Kenya
B.G. Kapoor: Formerly, Jodhpur University, India

978-1-57808-387-9; November 2007; 362 pages, hc; $ 98.00

Living organisms are endowed with ingenious adaptive mechanisms to cope with the adversities of special environments. Due to the vast diversity of their habitats, fish make an excellent model to depict the interplay of morphological, physiological and biochemical aspects, and are often used to study adaptive processes to a new environment. The book covers fish in diverse environmental conditions such as alkaline environments, caves, Antarctic, ice cold lakes, tropical coral reefs, and deep waters. The chapters also discuss mitochondrial functions in the cold, circadian rhythms, endocrinology of migratory fish life cycle and fish muscle function.

The topics have been selected in order to present a window to an array of adaptations of aquatic inhabitants which enable them to subsist and survive in the uncommon, and often hostile, external environment.

The book serves as both a general and a specific source of information for fish biologists as well as ecophysiologists.

New Book Proposals

Please send the details of your work at editor@scipub.net
Or
You can visit the Book Proposal form at www.scipub.net/publication-proposals.html

Order through our convenient and secure online shopping cart
www.scipub.net


SP