[PDF] Flatfishes Biology And Exploitation Fish And Aquatic Resources

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Flatfishes - Robin N. Gibson - 2015-01-20
Fascinating and instantly recognizable, flatfishes are unique in their asymmetric postlarval body form. With over 800 extant species recognized and a distribution stretching around the globe, these fishes are of considerable research interest and provide a major contribution to commercial and recreational fisheries worldwide. This second edition of Flatfishes: Biology and Exploitation has been completely revised, updated and enlarged to respond to the ever-growing body of research. It provides: • Overviews of systematics, distribution, life history strategies, reproduction, recruitment, ecology and behaviour • Descriptions of the major fisheries and their management • An assessment of the synergies between ecological and aquaculture research of flatfishes. Carefully compiled and edited by four internationally-known scientists and with chapters written by many world leaders in the field, this excellent new edition of a very popular and successful book is essential reading for fish biologists, fisheries scientists, marine biologists, aquaculture personnel, ecologists, environmental scientists, and government workers in fisheries and fish and wildlife departments. Flatfishes: Biology and Exploitation, Second Edition, should be found in all libraries of research establishments and universities where life sciences, fish biology, fisheries, aquaculture, marine sciences, oceanography, ecology and environmental sciences are studied and taught. Reviews of the First Edition • A solid, up-to-date book that advanced students and research scientists with interests in fish biology will find interesting and useful. Aquaculture International • A data-rich book that outlines much of what you might ever want to know about flatfishes. Fish & Fisheries • Well presented with clear illustrations and a valuable source of information for those with a general interest in fish ecology or for the more specialist reader. You should make sure that your library has a copy. J Fish Biology • An excellent and very practical overview of the whole, global flatfish scene. Anyone interested in flatfish at whichever stage of the economic food chain should invest in a copy immediately. Ausmarine • Because of the high quality of each chapter, written by international experts, it is a valuable reference. Reviews in Fish Biology and Fisheries

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"The economic importance of fishes and their societal and culturalrelevance provide powerful incentives for large-scale, sustainedstudies of their dynamics" —the Editors The overall goal of this book is to give a picture of thepresent use of information on fish reproductive biology inassessment and management and its potential for improvingmanagement of these resources. Compiled by an international team of authors, each an expert intheir field, this exceptional volume is divided into three majorsections: Biology, population dynamics, and recruitment Information critical to successful assessment andmanagement Incorporation of reproductive biology and recruitmentconsiderations into management advice and strategies Including over 100 diagrams, this book is essential reading forall fisheries scientists. Libraries in universities and researchestablishments where this subject is studied and taught should havecopies on their shelves. "As one author put it: the goal is to facilitate a 'dialoguebetween assessment scientists and biologists.' Readers of anyspecialty should accept this challenge, and this book is anexcellent resource to aid them." —Fisheries, March 2010

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Fishes of the World - Joseph S. Nelson - 2016-03-16
Take your knowledge of fishes to the next level Fishes of the World, Fifth Edition is the only modern, phylogenetically based classification of the world's fishes. The updated text offers new phylogenetic diagrams that clarify the relationships among fish groups, as well as cutting-edge global knowledge that brings this classic reference up to date. With this resource, you can classify orders, families, and genera of fishes, understand the connections among fish groups, organize fishes in their evolutionary context, and imagine new areas of research. To further assist your work, this text provides representative drawings, many of them new, for most families of fishes, allowing you to make visual connections to the information as you read. It also contains many references to the classical as well as the most up-to-date literature on fish relationships, based on both morphology and molecular biology. The study of fishes is one that certainly requires dedication—and access to reliable, accurate information. With more than 30,000 known species of sharks, rays, and bony fishes, both lobe-finned and ray-finned, you will need to master your area of study with the assistance of the best reference materials available. This text will help you bring your knowledge of fishes to the next level. Explore the anatomical characteristics, distribution, common and scientific names, and phylogenetic relationships of fishes Access biological and anatomical information on more than 515 families of living fishes Better appreciate the complexities and controversies behind the modern view of fish relationships Refer to an extensive bibliography, which points you in the direction of additional, valuable, and up-to-date information, much of it published within the last few years Fishes of the World, Fifth Edition is an invaluable resource for professional ichthyologists, aquatic ecologists, marine biologists, fish breeders, aquaculturists, and conservationists.

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Practical Flatfish Culture and Stock Enhancement - Harry V. Daniels - 2011-06-09
Practical Flatfish Culture and Stock Enhancement is a key reference on culture methods, offering both practical applications and essential biological information. Throughout the text, the culture and stock enhancement issues are treated simultaneously, integrating these two perspectives. By looking to the outcomes of hatchery culture methods, including the economics and fish behavior, Practical Flatfish Culture and Stock Enhancement is a valuable tool in making management decisions. With chapters on disease diagnosis and treatment, culture methods for a number of specific species, and the use of flatfish as model organisms in laboratory settings, Practical Flatfish Culture and Stock Enhancement comprehensively covers the subject of culture and stock enhancement. The book is especially useful for aquaculture professionals, industry personnel, researchers, biologists, and aquaculture and fisheries management students.

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Fish atlas of the Celtic Sea, North Sea, and Baltic Sea - Henk J.L. Heessen - 2015-09-01
The atlas presents a unique set of abundance data to describe the spatial, depth, size, and temporal distribution of demersal and pelagic fish species over an extensive marine area, together with accounts of their biology. A large number of pictures, graphs and distribution maps illustrate the text. By largely avoiding - or at least explaining - scientific terms and providing extensive references, the book should be useful for both laymen and scientists. The quantitative information on some 200 fish taxa is derived from 72,000 stations fished by research vessels during the period 1977-2013. The area covers the northwest European shelf from west of Ireland to the central Baltic Sea and from Brittany to the Shetlands. Although the surveys extend beyond the shelf edge, only taxa reported at least once in waters less than 200 m are included. Typical deep-water species and typical fresh-water species are excluded. We hope this publication will contribute to gaining a better understanding of the ocean ecosystems.

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Zooplankton of the Atlantic and Gulf Coasts - William S. Johnson - 2012-11-15
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Migration Ecology of Marine Fishes - David Hallock Secor - 2015-05-04
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Fishes: A Guide to Their Diversity - Philip A. Hastings - 2015-01-10
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Finfish Aquaculture Diversification - Nathalie R. Le François - 2010
There is considerable global interest in the culture of finfish species both for cold and warm water aquaculture development and growth. Essential information on the biology, domestication and aquacultural characteristics of a wide selection of novel and established species is provided in the form of technical sheets, species descriptions and information on current rearing practices, making this a must-have reference in the field of aquacultural science. The book also offers a basic framework in order to support investment strategies for research and development efforts aimed at the emergence of a profitable finfish aquaculture industry and presents a rationale for species diversification, different approaches to species selection and basic economic and market considerations governing the launch of strategic development and commercialization efforts.

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Canadian Journal of Fisheries and Aquatic Sciences - - 2014

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Improving the Collection, Management, and Use of Marine Fisheries Data - National Research Council - 2000-12-10
Congress has promoted fisheries science for over a century and its involvement in fisheries management took a great leap forward with passage of the Fisheries Conservation and Management Act of 1976. In the past decade, Congress has requested advice from the National Research Council (NRC) on both national issues (e.g., individual fishing quotas and community development quotas) and the assessments related to specific fisheries (Northeast groundfish). This report was produced, in part, in response to another congressional request, this time related to the assessments of the summer flounder stocks along the East Coast of the United States. Following the initial request, the NRC, National Marine Fisheries Service (NMFS), and congressional staff agreed to broaden the study into a more comprehensive review of marine fisheries data collection, management, and use.

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Hakes - Hugo Arancibia - 2015-12-21
The species of hake, making up the genus Merluccius, are commercially important and currently largely over exploited, with many stocks badly depleted and showing only limited signs of recovery. From the end of the 1990s, concepts such as sustainability, ecosystem-based approaches to fisheries management, a code for the responsible conduct for fisheries, governance and others have emerged or have been considered by politicians, stakeholders and society. Moreover, new tools for stock assessment have been developed. But many hake stocks of the genus Merluccius show no sign of restoration. Hakes: Biology and Exploitation brings together a wealth of important information on the biology and exploitation of hake and hoki stocks around the world. Each chapter provides an overview of the fisheries of each species in an ecological and environmental context, looking at stock distribution, characteristics of the environment, life history, reproduction, diet, growth, mortality, pricing and markets of each geographical region and the hake species found there. With chapters written by regional experts on hake species and included within Wiley-Blackwell's prestigious Fish and Aquatic Resources Series, Hakes: Biology and Exploitation provides up-to-date and comparative information, including new approaches to fisheries management, for all those involved in fisheries management, aquatic ecology and biological sciences.

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Biology and Exploitation of the Minke Whale - Joseph W. Horwood - 1989-12-21
This comprehensive review includes much recent research material and is the only book exclusively devoted to the minke whale species.The scope of this book focuses on three main topics. The first emphasis is on the population biology of the minke whale. Then, it documents the historical and current exploitation by man. Finally, it evaluates the current size, status, and management of the many worldwide stocks of minke whales. It also includes a description of the birth and death processes that determine how and why the minke whale population varies from time to time. This is an excellent source for specialists in the fields of cetacean biology, population biology, and management of natural resources. Presented in an interesting manner, this work is also appreciated by students and technically interested lay-readers.

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Marine Fisheries Review - - 1998

Marine Fisheries Review - - 1998

Puerto Rico: a Quick Overview of the Island and its People - -

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The Future of Fisheries Science in North America - Richard J. Beamish - 2009-02-07
Fisheries science in North America is changing in response to a changing climate, new technologies, an ecosystem approach to management and new thinking about the processes affecting stock and recruitment. Authors of the 34 chapters review the science in their particular fields and use their experience to develop informed opinions about the future. Everyone associated with fish, fisheries and fisheries management will find material that will stimulate their thinking about the future. Readers will be impressed with the potential for new discoveries, but disturbed by how much needs to be done in fisheries science if we are to sustain North American fisheries in our changing climate. Officials that manage or fund fisheries science will appreciate the urgency for the new information needed for the stewardship of fish populations and their ecosystems. Research organizations may want to keep some extra copies for a future look back into the thoughts of a wide range of fisheries professionals. Fisheries science has been full of surprises with some of the surprises having major economic impacts. It is important to minimize these impacts as the demand for seafood increases and the complexities of fisheries management increase.

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Fisheries Management - Geoffrey Waugh - 2019-03-04

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Dynamic Changes in Marine Ecosystems - National Research Council - 2006-07-26
Recent scientific literature has raised many concerns about whether fisheries have caused more extensive changes to marine populations and ecosystems than previously realized or predicted. In many cases, stocks have been exploited far beyond management targets, and new analyses indicate that fishing has harmed other species—including marine mammals, seabirds, sea turtles, and sea grasses—either directly through catch or habitat damage, or indirectly through changes in food-web interactions. At the request of the National Oceanic and Atmospheric Administration, the National Research Council conducted an independent study to weigh the collective evidence for fishery-induced changes to marine ecosystems and the implications of the findings for U.S. fisheries management. Dynamic Changes in Marine Ecosystems provides comprehensive information in regard to these findings.

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Pacific Coast Groundfish Fishery Management Plan, Bycatch Mitigation Program - - 2004

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Handbook of Fish Biology and Fisheries - Paul J. B. Hart - 2008-04-15
Recent decades have witnessed strong declines in fish stocks around the globe, amid growing concerns about the impact of fisheries on marine and freshwater biodiversity. Fisheries biologists and managers are therefore increasingly asking about aspects of ecology, behaviour, evolution and biodiversity that were traditionally studied by people working in very separate fields. This has highlighted the need to work more closely together, in order to help ensure future success both in management and conservation. The Handbook of Fish Biology and Fisheries has been written by an international team of scientists and practitioners, to provide an overview of the biology of freshwater and marine fish species together with the science that supports fisheries management and conservation. This volume, subtitled Fisheries, focuses on a wide range of topics, including the history of fisheries science, methods of capture, marketing, economics, major models used in stock assessments and forecasting, ecosystem impacts, marine protected areas and conservation. It builds on material in Volume 1, Fish Biology, which ranges from phylogenetics and biogeography to physiology, recruitment, life histories, genetics, foraging, reproductive behaviour and community ecology. Together, these books present the state of the art in our understanding of fish biology and fisheries and will serve as valuable references for undergraduates and graduates looking for a comprehensive source on a wide variety of topics in fisheries science. They will also be useful to researchers who need up-to-date reviews of topics that impinge on their fields, and decision makers who need to appreciate the scientific background for management and conservation of aquatic ecosystems. To order volume II, go to the box in the top right hand corner. Alternatively to order volume I, go to: http://www.blackwellpublishing.com/book.asp?ref=0632054123 or to order the 2 volume set, go to: http://www.blackwellpublishing.com/book.asp?ref=0632064838. Provides a unique overview of the study of fish biology and ecology, and the assessment and management of fish populations and ecosystems. The first volume concentrates on aspects of fish biology and ecology, both at the individual and population levels, whilst the second volume addresses the assessment and management of fish populations and ecosystems. Written by an international team of expert scientists and practitioners. An invaluable reference tool for both students, researchers and practitioners working in the fields of fish biology and fisheries.

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Biology of Fishes - Quentin Bone - 2008-02-01
The Third Edition of Biology of Fishes is chiefly about fish as remarkably efficient machines for coping with the many problems that life in water entails, and looks at many such special cases. Fishes form the largest group of vertebrates, with around 20,000 known species, and they display a remarkable diversity of size, shape, internal structure and ecology to cope with environments ranging from transient puddles to the abyssal depths of the sea. Biology of Fishes does not try to cover all aspects of fish biology, but focuses on the ingenious ways in which fish have resolved the particular problems that come from living in water, especially body fluid regulation, locomotion, feeding mechanisms, and sensory systems. Enough detail is provided for the reader to be able to go on and use primary research papers. Each chapter has been thoroughly updated and a new chapter on the immune system has been added. This is an ideal textbook for students of fish biology and any of the branches of aquatic biology. Given its skilful combination of breadth and detail, the book also provides a manageable review of fish biology for experienced biologists.

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Sustaining Marine Fisheries - National Research Council - 1999-02-19
Fluctuations and declines in marine fish populations have caused growing concern among marine scientists, fisheries managers, commercial and recreational fishers, and the public. Sustaining Marine Fisheries explores the nature of marine ecosystems and the complex interacting factors that shape their productivity. The book documents the condition of marine fisheries today, highlighting species and geographic areas that are under particular stress. Challenges to achieving sustainability are discussed, and shortcomings of existing fisheries management and regulation are examined. The volume calls for fisheries management to adopt a broader ecosystem perspective that encompasses all relevant environmental and human influences. Sustaining Marine Fisheries offers new approaches to building workable fisheries management institutions, improving scientific data, and developing management tools. The book recommends ways to change current practices that encourage overexploitation of fish resources. It will be of special interest to marine policymakers and ecologists, fisheries regulators and managers, fisheries scientists and marine ecologists, fishers, and concerned individuals.

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Fish Reproductive Biology - Michael J. Fogarty - 2016-03-21
"This fully up-to-date, expanded and revised new edition has been written and compiled by some of the world's leading experts on fish reproduction and fisheries science. Following an introductory chapter, the book is broadly divided into three sections. The first section, Biology, Population Dynamics and Recruitment, covers recruitment in marine fish populations, reproductive dynamics, recruitment variability and the effects of fishing on fish populations. The book's second section concentrates on information critical to successful assessment and management, and includes in-depth information on egg, larval and juvenile surveys, stock identification and assessment models, predictions of catch and biomass, and the contribution of individual reproductive potential to recruitment and fisheries management. The book's final section covers the incorporation of reproductive biology and recruitment considerations into management advice and strategies, and includes chapters dealing with current paradigms and forms of advice, new approaches to management, and the implementation of information on stock reproductive potential in fisheries management. This excellent new edition provides vital information for fish biologists, fisheries scientist and managers, and should be found on the shelves of all libraries in universities and research establishments where biological sciences and fisheries management are studied and taught"--

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Fish Population Dynamics in Tropical Waters - Daniel Pauly - 1984-01-01

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Fishery Management - J.L. McHugh - 2012-12-06
Several textbooks and useful compendia on fisheries have been published recently, and others are in preparation. The question then arises: why publish another book on fisheries at this time? My answer is 1) that fishery research and management are such broad subjects that it is difficult, if not impossible, to cover them adequately in one volume; 2) that consequently each author has stressed those aspects of greatest immediate interest to him; and 3) that to the best of my knowl edge no adequate broad treatment of the sociopolitical aspects of fishery management has yet ·appeared, although some good discussions have been published for particular fisheries. This volume grew out of a course that I have taught for the last 12 years at the State University of New Yo·rk at Stony Brook. Originally, the title of the course was Fishery Ecology, which was a matter of surprise to some students when they attended the fi rst few 1 ectures. Despite the sudden recent emergence of ecology as a household word, most people do not understand what the term means. I have found that even some graduate students forget that man is a potent force in the dynamic state of aquatic life. This is not only because he does things that change the environment and so affects living things in it, but also because he has such strange ways of thinking and of managing his affairs.

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2018 The State of World Fisheries and Aquaculture - Food and Agriculture Organization of the United Nations - 2018-07-10
The 2018 edition of The State of World Fisheries and Aquaculture emphasizes the sector's role in achieving the 2030 Agenda for Sustainable Development and the Sustainable Development Goals, and measurement of progress towards these goals. It notes the particular contributions of inland and small-scale fisheries, and highlights the importance of rights-based governance for equitable and inclusive development. As in past editions, the publication begins with a global analysis of trends in fisheries and aquaculture production, stocks, processing and use, trade and consumption, based on the latest official statistics, along with a review of the status of the world's fishing fleets and human engagement and governance in the sector. Topics explored in Parts 2 to 4 include aquatic biodiversity; the ecosystem approach to fisheries and to aquaculture; climate change impacts and responses; the sector's contribution to food security and human nutrition; and issues related to international trade, consumer protection and sustainable value chains. Global developments in combating illegal, unreported and unregulated fishing, selected ocean pollution concerns and FAO's efforts to improve capture fishery data are also discussed. The issue concludes with the outlook for the sector, including projections to 2030. As always, The State of World Fisheries and Aquaculture aims to provide objective, reliable and up-to- date information to a wide audience, including policy-makers, managers, scientists, stakeholders and indeed all those interested in the fisheries and aquaculture sector.

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Environmental Assessment of the Alaskan Continental Shelf - - 1978-06

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Essential Fish Biology - Derek Burton - 2017-10-05
An introductory overview of the functional biology of fish and how that may be affected by the contrasting habitat conditions within the aquatic environment. It describes the recent advances in comparative animal physiology which have greatly influenced our understanding of fish function as well as generating questions that have yet to be resolved. Fish taxa represent the largest number of vertebrates, with over 25,000 extant species. However, much of our knowledge, apart from taxonomy and habitat descriptions, has been based on relatively few of these species, usually those which live in fresh water and/or are of commercial interest. Unfortunately there has also been a tendency to base interpretation of fish physiology on that of mammalian systems, as well as to rely on a few type species of fish. This accessible textbook will redress the balance by using examples of fish from a wide range of species and habitats, emphasizing diversity as well as recognizing shared attributes with other vertebrates.

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Fish Larval Physiology - Roderick Nigel Finn - 2008-01-07
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. The 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.

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The Biology of the Yellowtail Flounder (Limanda Fervuginea - Storer). - David Maxwell Scott - 1947
"The commercial importance of the Yellowtail Flounder (Limanda ferruginea Storer) in recent years has greatly increased, partly because of the greater use of otter trawlers in North American waters, and also as a response to the unprecedented demand for fish products during the war. This is particularly true in the case of Canada where, until recently, the traditional method of fishing was line trawling, a method which prevented the capture of yellowtails since its mouth is so small that one is rarely caught on the large hooks used for cod, haddock, and pollock. These factors have led to an extensive exploitation of the yellowtail fisheries, especially in New England waters where, in 1942, more than 65,000,000 pounds of yellowtails were landed. Since then yellowtail landings in New England have steadily decreased, although the fishing intensity has increased, and there are indications that this decrease may be the result of over-fishing. The position of the yellowtail upon the Canadian market, although much less important, is becoming increasingly significant. []" --

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On the Dynamics of Exploited Fish Populations - Raymond J.H. Beverton - 2012-12-06
Among the fishes, a remarkably wide range of biological adaptations to diverse habitats has evolved. As well as living in the conventional habitats of lakes, ponds, rivers, rock pools and the open sea, fish have solved the problems of life in deserts, in the deep sea, in the cold antarctic, and in warm waters of high alkalinity or of low oxygen. Along with these adaptations, we find the most impressive specializations of morphology, physiology and behaviour. For example we can marvel at the high-speed swimming of the marlins, sailfish and warm-blooded tunas, air-breathing in catfish and lungfish, parental care in the mouth-brooding cichlids, and viviparity in many sharks and toothcarps. Moreover, fish are of considerable importance to the survival of the human species in the form of nutritious, delicious and diverse food. Rational exploitation and management of our global stocks of fishes must rely upon a detailed and precise insight of their biology. The Chapman & Hall Fish and Fisheries Series aims to present timely volumes reviewing important aspects of fish biology. Most volumes will be of interest to research workers in biology, zoology, ecology and physiology but an additional aim is for the books to be accessible to a wide spectrum of non-specialist readers ranging from undergraduates and postgraduates to those with an interest in industrial and commercial aspects of fish and fisheries.

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The Exploitation of Evolving Resources - T.Kevin Stokes - 2013-03-08
The impact of man on the biosphere is profound. Quite apart from our capacity to destroy natural ecosystems and to drive species to extinction, we mould the evolution of the survivors by the selection pressures we apply to them. This has implications for the continued health of our natural biological resources and for the way in which we seek to optimise yield from those resources. Of these biological resources, fish stocks are particularly important to mankind as a source of protein. On a global basis, fish stocks provide the major source of protein for human consumption from natural ecosystems, amounting to some seventy million tonnes in 1970. Although fisheries management has been extensively developed over the last century, it has not hitherto considered the evolutionary consequences of fishing activity. While this omission may not have been serious in the past, the ever increasing intensity of exploitation and the deteriorating health of fish stocks has generated an urgent need for a better understanding of evolution driven by harvesting and the implications of this for fish stock management. The foundations for this understanding for the most part come from recent developments in evolutionary biology and are not generally available to fisheries scientists. The purpose of this book is to provide this basis in a form that is both accessible and relevant to fisheries biology.

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