

Books on U.S. and Foreign Marine Recreational Fisheries

For 11 years an annual symposium has addressed various aspects of the U.S. marine recreational fisheries. They were cosponsored early on by the International Game Fish Association, National Coalition for Marine Conservation, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, and the Sport Fishing Institute. The proceedings of each has been published—papers and discussions—and they provide an important and sound record of the problems, progress, research, and management of marine recreational fisheries.

The most recent published, "**Marine Recreational Fisheries 11**," Proceedings of the 11th Annual Marine Recreational Fisheries Symposium, Tampa, Fla., May 1-2, 1986, edited by Richard Stroud, dealt with multi-jurisdictional management of marine sport fisheries, and associated problems and opportunities. The first volume of the series "**Marine Recreational Fisheries**," edited by Henry Clepper, was published in 1977 and explored the basic nature and value of marine recreational fisheries from economic sociological, biological, and managerial points of view, defining the various MRF problems and offering recommendations for further investigation. The second, "**Marine Recreational Fisheries 2**," identified major marine recreational fisheries problems—biological, economic, and social—and included recommended effective management practices based on scientific principles. Papers and discussions published in volume 3 analyzed marine recreational fishery research developments while those in volume 4 focused on the fisheries institutions and marine recreational fishery management, with a comprehensive and specific review of the proposals for saltwater angler licensing.

Volume 5 examined the biology, fisheries, research, and management of a single species, the striped bass, *Morone sax-*

atilis, while volume 6 concentrated on the sciaenid family (croakers, drums, weakfishes, etc.), an important recreational and commercial resource on all coasts. Volume 10 also treated a single species grouping, the Pacific salmon, *Oncorhynchus* spp., with 17 papers on a broad range of issues, covering the biology of important species, the Pacific salmon fisheries, the species' environmental needs, resource and habitat enhancement, as well as the local, regional, and international management policies.

In between, volume 7 discussed controversies and conflicts in marine recreational fisheries, while volume 8 assessed the status of fishery resources of primary recreational significance, and then profiled the related users, industry, and advocacy groups. Addressing and defining marine recreational fisheries development were the contributions to volume 9. Development goals were outlined and courses of action for public and private interests were suggested in order to move toward those objectives. Collectively, MRF series represents an important contribution to and record of the biology, economics, sociology, and the management of U.S. marine recreational fisheries. The cost is \$15.00 per volume, but the entire set of eleven books is sold by the International Game Fish Association, 3000 East Las Olas Blvd., Fort Lauderdale, FL 33316-1616 for a package price of \$50.00.

Yet another IGFA volume edited by Richard H. Stroud is "**World Angling Resources and Challenges**," which encapsulates the proceedings of the first world angling conference held in France in September 1984. The first hundred pages of the volume review a wide variety of national or regional angling reports—the species available, fishing organizations, fishing (angling) resources, types of angling available and methods employed, and much more. The second

part presents several excellent reports on fisheries habitat—types needed, problems causing fish habitat losses or degradation (i.e., various pollutants and their sources and effects), and a call to sportsmen to guard their angling heritage.

Another section presents several avenues through which angling resources can be enhanced, i.e., habitat restoration, use of cultured fishes, artificial reefs and fish aggregating devices, etc. In addition, the volume provides insights into the needs for and uses of research, data requirements for management, economic evaluation of sport fishing, differences among anglers, game fish tagging programs, status reports on billfishes and bluefin tuna, Pacific salmon management in Canada, MRF management, and MRF development. The 390-page volume is available from the IGFA for \$25 (\$30 outside the United States).

Trophy Game Fishing Articles and Records

Publication of the volume "**1987 World Record Game Fishes**" has been announced by the International Game Fish Association, 3000 East Las Olas Blvd., Fort Lauderdale, FL 33316-1616. Over the years this has become something of a standard annual reference for serious marine (and freshwater) anglers. Each year it provides new, authoritative articles of wide interest, this time including: A review of New Zealand trophy angling opportunities by Mark L. Feldman; a history of big game fishing in the Bahamas by Dade W. Thornton; a clear and factual discussion of water friction and its effects on fishing line by Milton Shedd; South African angling from boats launched through the surf by Denis Mercer; getting kids hooked on fishing by Owen Taylor; and an in-depth look at medical problems anglers face and how to treat them by Gary Sherman.

And then there are the records—1,267 newly recognized record holders, contest winners, and special club members. For this issue, 619 new world records were approved by IGFA in 1986, and 513 anglers (out of 939 entries) won first, second, or third place awards in the annual fishing contest. In addition, 29 anglers

joined the exclusive Thousand Pound Club, and 106 others earned the 20-1, 15-1, 10-1, and 5-1 clubs. The volume also updates the listings in all-tackle, line class, and tippet class categories for over 150 freshwater and saltwater species—yet many categories remain open for new world records. New saltwater species added to the line class and fly rod world record lists are kahawai, *Arripis trutta*; bluefin trevally, *Caranx melampygus*; and mutton snapper, *Lutjanus analis*.

Additional data include the Guide to Fishes, with illustrations of and extensive data on all fishes on IGFA's record lists, a glossary, lists of U.S. state angling record keeping agencies and organizations, other worldwide recordkeeping organizations, and an inventory of worldwide tag-and-release programs for marine fishes. Paperbound, this 320-page book is available from the IGFA for \$9.75 (\$11.75 foreign).

Other Publications

Marine Fishes of Europe and the Mediterranean

Volumes II and III of Unesco's "Fishes of the North-eastern Atlantic and the Mediterranean" have now been published, completing the impressive three-volume reference which describes the main taxonomic features and biology of all of the known marine finfishes of that region—a total of 1,256 species from 220 families. As with Volume I, they include diagnostic keys to families, genera, and species. Entries for each species then include data on nomenclature, external morphology, reproduction, foods, habitat, and geographical description. Editors for the series are P. J. P. Whitehead, M.-L. Bauchot, J.-C. Hureau, J. Nielsen, and E. Tortonese. More than 70 other specialists contributed to these authoritative and thorough volumes.

Volume I, of course, provided the key to all the FNAM families and included families 1-64 (Petromyzonidae to Anopteroptidae). Volume II, then, includes families 65-161 (Mirapinnidae to Xiphi-

idae), while Volume III includes families 162-220 (Gobiidae to Linophrynidae). In addition, the final volume also presents the lengthy bibliography and indexes of common and scientific names. The texts of all are in English, though the Preface, Foreword, and User's Guide (in Vol. I) are in both English and French.

Now complete, the set constitutes an important major guide to the marine finfishes of Europe's waters and is an important ichthyological reference. Broadly, the scope of coverage is from the Mediterranean Sea to Madiera, the Azores, then north to Greenland and eastward to Novaya Zemlya. The family key (Vol. I), valid only for the covered region, includes a representative drawing. All species are included from all habitats, including estuaries, lagoons, and brackish waters, and from the continental shelves to the abyssal depths. Excellent species drawings and distribution maps are included. This comprehensive work will be an excellent reference to the region's fishes. Hardbound, Volume II is paginated from 517 to 1007 and Volume III from 1015 to 1473. In the United States, each volume is priced at \$45 and they are available from the Unesco distributor, Bernan-Unipub, 4611-F, Assembly Drive, Lanham, MD 20706-4391. Those overseas may wish to contact the Librairie de l'Unesco, 7, place de Fontenoy, 75700 Paris, France (cost 250 FF per volume).

A Manual for the Commercial Fisherman

The second edition of the "Fishermen's Handbook", edited by Rear Admiral C. P. R. C. Branson for the British Marine Mutual Association, Ltd., has been published by Fishing News Books Ltd., 1 Long Garden Walk, Farnham, Surrey, England. Since first published as the "Fishermen's Handy Billy," each edition has been considerably revised, to keep up with new legislation and advancements in technology and the fishing industry.

Indeed, this edition has again been considerably revised, primarily to stress safety and enhance the fisherman's sur-

vival in case of an emergency. For instance, detailed descriptions of well-known fishing methods have been replaced with chapters on specific hazards relating to bottom trawling, purse seining, scallop dredging, gill netting and longlining. In addition, the book provides more guidance for those navigating outside U.K. waters. Also broadening its usefulness is its concentration on subjects of more universal interest instead of on British regulations or matters of local interest. While volumes have been written on each of the chapter topics, this handbook will give the fisherman clear, succinct guidance on the basic rules for safe and efficient operation of a fishing vessel.

The volume is divided into six parts. Part I, on management and maintenance of the vessel, presents a good discussion of vessel stability. Part II, navigation, discusses maritime buoyage systems (IALA), tides and tidal streams, useful charts and publications, navigation instruments and equipment, and discusses coastal navigation, electronic navigational aids, and ocean navigation.

Part III reviews watchkeeping and shiphandling, including material on meteorology, collision avoidance rules, the international code of signals, submarine telegraph cables and offshore installations and safety zones. Part IV, fishing operations, again, stresses the safety aspects of commercial fishing operations, with various gears. Part V then goes into more depth on safety and survival at sea, including transmission of danger messages, and distress calls, rescue procedures, visual signals, use of inflatable liferafts and personal survival at sea. Likewise, fire prevention and fire fighting techniques are reviewed, along with other emergencies such as explosives, man overboard, grounding and refloating vessels, beaching a damaged ship, and approaching and towing a disabled vessel. Finally, Part VI deals with anchors and cables and ropes, knots, bends, hitches, slings, and tackles. Several appendices tell how to find the distance of objects at sea, determine tide height between high and low water, finding a distance off with the sextant, recommended distress transmission procedures, tables of strengths of natural fiber ropes, and

more. In addition, 8 pages in color show the International Code of Signals, IALA buoy marks and maritime buoyage systems for Regions A and B, and lights and shapes to be shown for collision avoidance. Indexed, the 320-page paperbound volume is available from the publisher for £15 or, in North America from Bernan-Unipub, 4611-F Assembly Drive, Lanham, MD 20706-4391 for \$27.00 (order no. FN126).

Another Look at the "Silent Spring"

"**Silent Spring Revisited**," edited by Gino J. Marco, Robert M. Hollingworth, and William Durham, has been published by the American Chemical Society, 1155 Sixteenth Street, N.W., Washington, DC 20036. In part, it was written, mostly by knowledgeable scientists, to try to answer the questions "Was Rachel Carson right?" and "Where do we stand now?", with respect to the issues she raised of environmental pollution with various chemicals, and especially pesticides and herbicides. The results are both interesting and informative and, of course, there is no one simple answer.

Carson was, first, a fine marine biologist, and an excellent writer, and her first books, like "Under the Sea Wind" and "The Sea Around Us" reflected that expertise. But it will be "Silent Spring" for which she will be remembered and in which she warned of the problems for fish, wildlife, and humans of the misuse and overuse of dangerous chemicals. Now, this new ACI book takes a 25-year look backward, assesses the present and future. In short, the authors believe that most all the problems that Rachel Carson brought up in her 1962 book "Silent Spring" are at least in some stage of correction. The 12 chapters are divided into five sections, with the first relating how Carson came to write her book.

Other chapters describe the origins and evolution of government policies regulating pesticides. Then, separate chapters discuss specific environmental effects of pesticides on marine and freshwater species, wildlife, humans, and on the safety of groundwater. Also reviewed is

the evolution of analytical chemistry with regard to the ability to identify and quantify trace quantities of specific chemical pollutants. Other chapters discuss both sides of the debate on the dangers vs. the benefits of pesticides and on high agricultural productivity vs. environmental costs. A concluding chapter summarizes the sometimes conflicting issues. The volume is reasonably balanced in perspective and presents an interesting and useful and easily readable look at what have been at times a very controversial issues. Though most of the chapters have been written by scientists, it is written in a style that knowledgeable laymen can utilize. The book is based on a symposium organized by the Pesticide Subcommittee of the ACS Committee on Environmental Improvement "to address the issues that Rachel Carson raised and focus on their pertinence for the past, present, and future." Indexed, the 214-page volume is sold by the Society for \$29.95 (U.S. and Canada), \$35.95 (export) in the clothbound edition; the paperbound edition costs \$17.95, U.S. and Canada, and \$21.95, export.

Natural Resource Economics, Management, and Policies

Publication of "**Natural Resources Economics and Policy Applications**," edited by Edward Miles, Robert Pealy, and Robert Stokes, has been announced by the University of Washington Press, P.O. Box C-50096, Seattle, WA 98145-0096. The volume is subtitled "Essays in Honor of James A. Crutchfield," and contains original contributions by scholars who are Crutchfield's peers, colleagues, and former students. Crutchfield is well known for his scholarly contributions in natural resource economics, especially in the field of fisheries. The contributions are broad in scope, dealing with fisheries, water resources, and related policy decision making.

The book's central theme is a concern for the contributions of economics and economists to natural resource policy-making, and it is divided into four parts. Part I, on economics and policy, presents papers reflecting on the interaction of

economics and policy. Part II discusses substantive problems of policy and management with a focus on fisheries management and development and on water resources policy. Part III contains papers on analytical and methodological issues, most utilizing econometric models and dealing either with fisheries or environmental issues. And Part IV discusses general problems of bringing specialized knowledge to bear on policy making with respect to natural resources.

And, of course, many of the papers deal specifically with commercial and/or marine fisheries issues. Anthony Scott presents an essay on fisheries catch quotas and shares in fish stocks as property rights. Giulio Pontecorvo focuses on the interaction between changes in supply and demand and the common property conditions of fisheries resources by reviewing the historical dynamics of the U.S. Georges Bank fisheries.

Francis T. Christy, Jr., discusses the special characteristics and problems of small-scale fisheries management in developing nations, while Rowena Lawson deals with the general problem of appropriate strategies for fisheries development and elaborates the options that are available to coastal states for developing and managing their fisheries resources. The Federal fisheries law enforcement program is then described and evaluated by Jon Sutinen and Timothy Hennessey, who suggest strategies for improving compliance with regulations.

Another paper by Lee G. Anderson discusses economically optimal total allowable catches in the absence of stock-recruitment relationships, while Gardner Brown looks at static vs. dynamic models in fishery management. The final section presents three papers which discuss the general problems of bringing specialized knowledge to bear on policy making with respect to natural resources. An appendix presents selected biographical data on Crutchfield and a bibliography of his publications.

Compared with other fisheries economics volumes, the presentations are rather wide-ranging in scope, but should be of interest to noneconomists as well as to economists. Indexed, the 440-page hardbound volume costs \$30.00 and is available from the publisher.