

A Directory of Fisheries Agencies, Firms, Data, Sources, and Resources

The **American Fisheries Directory and Reference Book**, edited by Burton T. Coffey, seems aptly titled. The table of contents runs 9 pages alone and is divided into 7 sections with up to 15 chapters each.

Section I, "Geographic Fishery Regions," lists Federal and State offices dealing with fisheries, boating, and fishing-related matters for all coastal states, Great Lakes states, and selected landlocked states. Data is given on state fisheries and allied agencies, councils, and private groups, the state legislative bodies dealing with such matters, and commercial fisheries statistics. Selected fisheries publications are listed.

Section II, "Organizations," lists coastal commissions and associations of aquaculturists, boatbuilders, commercial fishermen and seafood processors, environmentalists, labor groups, marina operators, marine equipment manufacturers and professionals, marine law enforcers, oceanographers, researchers, sport fishermen, and trade groups.

Section III, the "International Directory," lists selected fishing nations, pertinent United Nations offices, and German and Japanese fish importers. Section IV, the "National Directory," lists Federal agencies and Congressional committees that deal with fisheries or maritime interests, and selected U.S. legislation bearing on fisheries, fishing or boating, etc. National and international fisheries commissions are also listed.

Section V tallies a wide variety of fisheries and marine equipment and services by product and by company; Section VI lists fisheries books and periodicals; and Section VII gives national and international fisheries statistics.

The 560-page soft-cover volume, in large (8½×11 inches) format, costs \$40.00 and is available from the publisher, *National Fisherman*, Camden, ME 04842.

RESEARCH METHODS FOR CORAL REEFS

Coral Reefs: Research Methods has been published by Unesco, Paris, France, as the fifth volume in its series of monographs on oceanographic methodology to encourage the acceleration of coral reef research. Basic techniques are given for scientific studies of the quantitative ecology of coral reefs and effective methods are recommended.

The 581-page volume has 43 contributions broken into three parts: Part I, "Morphology and Structure"; Part II, "Biotic Distribution"; and Part III, "Energy and Nutrient Flux." Chapters in Part I detail reef terminology, mapping techniques, aerial photography and other remote sensing techniques, mechanical analysis of reef sediments, shallow core drilling, radiometric dating of coral reefs, sea level measurement techniques, and more.

Part II includes chapters on data collection and recording; quantitative benthic ecology; plotless, transect, and phytosociologic methods of reef measurement; and the study of sponges, Nemertina, reef fishes, and soft bottom communities. Part III includes methods of measuring coral growth, productivity, photosynthesis and respiration, and methods for determining chemical elements.

The publication was edited by D. R. Stoddart, Cambridge University,

Cambridge, England, and R. E. Johannes, Hawaii Institute of Marine Biology, University of Hawaii, Kaneohe. It is available from Unipub, 345 Park Ave. South, New York, N.Y., for \$30.00.

FOREIGN FISHERIES LEAFLETS AVAILABLE

The NMFS Office of International Fisheries has a limited supply of a number of Foreign Fishery Leaflets that were published in 1977 and 1978. Anyone interested in receiving a copy of the leaflets listed below may order them from the Foreign Fisheries Analysis Division (F41), Office of International Fishery Affairs, NMFS, NOAA, Commerce Department, Washington, DC 20235. Requests will be honored as long as the supply lasts.

The Foreign Fishery Leaflets still available are: FFL 77/3, "Fishery Statistics of Japan, 1975"; FFL 77/4, "Southern Africa's Fishing Industry, 1975-77"; FFL 77/5, "The Lobster Fishery in the Republic of South Africa and Namibia, 1975-76"; FFL 77/6, "The Fisheries of Angola, 1974-76"; FFL 78/1, "The Fisheries of Tunisia, 1976"; FFL 78/2, "The Brazilian Lobster Fishery, 1976"; FFL 78/3, "The Fisheries of Senegal, 1975-76"; FFL 78/4, "The Fisheries of Kenya, 1975"; and FFL 78/6, "The Fisheries of Gambia, 1977". Please enclose a self-addressed label to facilitate mailing.

FISH DISEASES AND THEIR PREVENTION

Fish Pathology, edited by Ronald J. Roberts, and published by Balliere Tindall, London, England, is a new text on the study and prevention of fish diseases. It is intended to "provide the background information, from the other disciplines, for the veterinarian, aquaculturist, microbiologist, parasitologist, nutritionist, or hydrologist who is involved in fish diseases." Roberts is Reader in Animal Biology, Director of the Unit of Aquatic

Pathobiology, University of Stirling, Scotland, and editor of the *Journal of Fish Diseases*.

Roberts begins with a discussion of the aquatic environment and how it influences disease, then progresses to anatomy and physiology of teleosts, their pathophysiology and systematic pathology. Other chapters discuss immunology, neoplasia, virology, parasitology, bacteriology, mycology, and nutritional pathology. Miscellaneous noninfectious diseases (i.e., problems related to water temperature, nitrogen supersaturation, traumatic injuries, genetics, etc.) are briefly discussed. Laboratory methods used in fish pathology studies are reviewed as are treatments for fish diseases and the relationships of fish culture and management to diseases.

"Fish Pathology", with 250 figures, 318 pages, distributed in the United States by Lea & Febiger, 600 Washington Square, Philadelphia, PA 19106, costs \$64.00.

Brazil's Fish Catch Up 5 Percent in 1978

Brazilian fishermen caught an estimated 884,000 metric tons (t) of fish and shellfish in 1978, a 5 percent increase over the 843,000 t¹ landed in 1977. Government estimates indicate that Brazilian marine fishermen could catch between 1.4 and 1.6 million t of fish and freshwater fishermen and aquaculturists could produce between 0.8 and 4.0 million t. The country's Third National Fisheries Development Plan (PNDP) will be completed in 1979 and the fisheries agency, SUD-EPE, is now planning the Fourth PNDP.

J. Rodriguez and J. Silva of the U.S. Embassy in Brasilia have prepared a 34-page report on the Brazilian fishing industry. The report includes information on catch, vessels, fishermen, processing, marketing, development programs, tuna, shrimp, whales, lobster, catfish, sardines, exports, and

¹Does not include subsistence and recreational catches.

imports. A copy of the report can be obtained by purchasing report DIB-79-03-004 for \$4.00 from: National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Tokyo Wholesale Fish Market Data Released

The Tokyo Metropolitan Government has published a 10-page brochure entitled "The Tokyo Central Wholesale Market In Brief, 1978". The market, which has 11 regional and 7 branch markets in the Tokyo Metropolitan Area, handled over 830,000 t of fresh and processed marine products worth \$2.6 billion in 1977.

The brochure includes a brief history of the Market, its organization, a distribution flow chart, a floor plan, statistical data on transactions, and the main features of its regional and branch markets. Copies may be obtained by writing to the Information and Publication Section, Tokyo Central Wholesale Market, 2-1, Tsukigi 5-chome, Chuo-ku, Tokyo, Japan. Information on the publication's cost, if any, was unavailable.

Ecuador's Fishing Industry, 1977-78

Ecuadorian fishermen caught 475,000 metric tons (t) of fish and shellfish in 1977, more than a 50 percent increase over the 315,000 t caught in 1976. Most of the increase was due to the increased landings of Pacific thread herring ("pinchagua") and other species used principally for reduction to fish meal. The Government is now considering the imposition of catch quotas.

About 8,600 t of shrimp was landed in 1976. Tuna landings increased from 25,000 t in 1976 to 28,000 t in 1977. A number of foreign companies and governments (including the United States, Japan, Poland, France, the United Kingdom, and Spain) have contacted Ecuadorian officials concerning various fishery development projects. In addition, funding has

recently been obtained for a \$17.8 million fisheries project which will be administered by the state-owned company, EPNA.

The U.S. Consulate General in Guayaquil, Ecuador, has submitted a detailed 40-page report on Ecuadorian fisheries. The report includes sections on Ecuador's Fishing Development Program, major recent developments, foreign interests in Ecuadorian fisheries, plans to build new ports, the State-owned fishing company (EPNA), and a section on the major fisheries (shrimp, tuna, pelagic, and demersal species). The report can be purchased for \$4.50 by ordering document number DIB-79-03-006 from: National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

ROK, Australian Fishery Market Reports Printed

The U.S. Embassy in Seoul, Republic of Korea, and the U.S. Consulate General in Sydney, Australia, have prepared market reports on fishing gear and equipment for South Korea and Australia, respectively. The 13-page report on Korea states that the best potential for U.S. sales of fishing equipment and vessels is in South Korea's deep-sea fisheries sector which is slated to expand considerably by 1981.

The 52-page market report on Australia states that limited opportunities exist for U.S. suppliers of electronic fish finding equipment, communication devices, and fish processing machinery, and suggests that interested U.S. firms might want to participate and display equipment at the Fish Expo Exhibition to be held in Perth, 26-29 August 1979.

Both reports can be purchased from the National Technical Information Service (NTIS), Springfield, VA 22161 by ordering: DIB-78-11-012, "Market Brief-Fishing Equipment, Republic of Korea," (cost, \$4.00); DIB 78-11-014 "Market Research Concerning Fishing/Fish Processing Sector; Potential for Fish Expo Participation, Australia," (cost, \$5.25).