

NMFS Scientific Reports Published

NOAA Technical Report NMFS SSRF-715. Russell, G. Michael, Abraham J. Barrett, L. Steve Sarbeck, and John H. Wordlaw. "**Bottom obstructions in the southwestern North Atlantic, Gulf of Mexico, and Caribbean Sea.**" September 1977. 21 p. For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

ABSTRACT

Lists of bottom obstructions are provided to aid in avoiding potential hazards to fishing gear. Locations, depth, gear type, and damage received are included. Within the regions, the following numbers of obstructions are identified: 267 southeastern North America, 320 Gulf of Mexico, 23 West Indies, 119 Caribbean Sea, and 59 northeast coast of South America.

NOAA Technical Report NMFS Circular 404. Bortone, Stephen A. "**Revision of the sea basses of the genus *Diplectrum* (Pisces: Serranidae).**" September 1977. 49 p.

ABSTRACT

Twelve species of *Diplectrum* are recognized: three western Atlantic (*D. formosum*, *D. bivittatum*, and *D. radiale*) and nine eastern Pacific species (*D. pacificum*, *D. conceptione*, *D. maximum*, *D. rostrum*, *D.*

labarum, *D. eumelum*, *D. sciurus*, *D. macropoma*, and *D. euryplectrum*). All species are hermaphroditic and possess an ovarian sinus in the posteriormost gonadal area. *Diplectrum* osteological characters aid in defining the genus and in comparing its taxonomic status with *Serranus*. Definitions of the Serraninae and Serranidae are modified as a result of *Diplectrum* osteological characters. The genus is basically restricted to the warm tropical-subtropical coastal areas of the new world. *Diplectrum bivittatum*, however often occurs at insular localities, and *D. conceptione* occurs in colder, temperature Peruvian waters. *Diplectrum formosum* is considered to have a northern subspecies, *D. f. formosum*, and a southern form, *D. f. radians*; *D. bivittatum* is also composed of two subspecies: *D. b. bivittatum* from South American and Caribbean areas and *D. b. accurarium* from the Gulf of Mexico. An intermediate population occurs in the vicinity of southern Florida. *Diplectrum radiale* and *D. pacificum* are "geminant species" and similar morphologically. *Diplectrum mexicanum* is considered a junior synonym of *D. macropoma*.

NOAA Technical Report NMFS Circular 405. Pawson, David L. "**Marine flora and fauna of the northeastern United States. Echinodermata: Holothuroidea.**" September 1977, 15

p. For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

ABSTRACT

The holothurian fauna of the east coast of the United States from southern New Jersey to Nova Scotia, to depths of 200 m, comprises 21 species in 17 genera and 8 families. An introduction to the general biology and morphology of the holothurians, systematic characters and examination procedures, and a selected bibliography are included, together with an illustrated key to the species, an annotated systematic list, and an index. Affinities of this fauna are chiefly boreal; some species also occur south of Cape Hatteras, while others are essentially Arctic in distribution.

NOAA Technical Report NMFS SSRF-716. Wilk, Stuart J., Wallace W. Morse, Daniel E. Ralph, and Thomas R. Azarovitz. "**Fishes and associated environmental data collected in New York Bight, June 1974-June 1975.**" September 1977. 53 p. For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

ABSTRACT

Tabulations of fishes and associated environmental observations are given for 700 trawl stations made during 30 collecting intervals in the New York Bight from June 1974 to June 1975. Summary tables included give the following information: collecting interval data (vessel, dates, stations sampled, gear, and area); station data (date, location, time of day, total catch, and environmental observations); and catch data for 127 species, representing 67 families (location, number, and weight). The 10 most frequently collected species were: *Merluccius bilinearis* (456 stations), *Scophthalmus aquosus* (419), *Raja erinacea* (411), *Urophycis chuss* (409), *Pseudopleuronectes americanus* (363), *Hippoglossina oblonga* (325), *Lophius americanus* (305),

Peprilus triacanthus (284),
Paralichthys dentatus (272) and
Squalus acanthias (224).

Groundfish Trawlers of Three Nations Compared

A fisherman aboard a groundfish trawler makes more money aboard a southern New England vessel than he does aboard those in Norway and Iceland. For the vessel owner, though, return to his investment is higher in Norway than in the United States.

Those are two of the conclusions reported by University of Rhode Island resource economist Andreas A. Holmsen in "Economics of Small Groundfish Trawlers in Iceland, Norway, and Southern New England." The Sea Grant study compared data of the 1974 operations of 65- to 90-foot trawlers from those nations. Included were such aspects as vessel characteristics, fishing effort, landings, and price and cost breakdowns.

The publication also contains descriptions of the underlying reasons for many of the cost items, such as insurance and finance costs and the share systems on the vessels. The volume can be obtained by ordering P 549 from the URI Marine Advisory Service, Narragansett Bay Campus, Narragansett, RI 02882.

SHRIMP DISEASES HANDBOOK REVISED

The "Handbook of Shrimp Diseases" by S.K. Johnson (TAMU-SG-75-603), published by the Sea Grant College Program of Texas A&M University, has been revised and reissued. The handbook is designed as an information source and field guide for shrimp mariculturists, commercial fishermen, and others interested in parasites or abnormal conditions of shrimp.

Information is presented on life cycles and general biological characteristics of disease-producing organisms which spend all or part of their life cycles with shrimp. Detailed descriptions and illustrations of common para-

sites and commensals of penaeid shrimp are included. The 20-page booklet, with 12 illustrations, 28 black and white and 12 color photographs, is available free of charge, from: Sea Grant College Program, Texas A&M University, College Station, TX 77843.

Oyster Seed Hatchery Manual Is Published

A "Manual for Design and Operation of an Oyster Seed Hatchery" has been published by the Virginia Institute of Marine Science as Special Report No. 142. Authored by John L. Dupuy, Nancy T. Windsor, and Charles E. Sutton, the 104 page volume represents the completion of 7 years of research and cooperative work with the oyster industry in developing a totally integrated hatchery system. The book's 49 illustrations include both photographs and line drawings.

Major areas covered include: Environmental considerations; biology of the production of gametes and spawning of adult oysters; culture of oyster larvae; culture of algal food; culture facilities; and production and cost and income flow schedule.

The volume is available (\$10.00, hardbound; \$7.50, looseleaf; and \$5.00, softbound) from the Sea Grant Communications Office, Virginia Institute of Marine Science, Gloucester Point, VA 23062. Checks should be made payable to the "Virginia Institute of Marine Science."

"Creamy Fish Bites" Booklet Available

The New York Sea Grant Institute has published a 31-page booklet entitled "Development of Products From Minced Fish: Creamy Fish Bites." Copies of this item are available from: NTIS, U.S. Department of Commerce, 5285 Port Royal Road, Springfield, VA 22161. The cost for a paper copy is \$4.00. Order by number: PB-277 094/9GA; PC A03. Make check payable to: National Technical Information Service.

Articles, Records on Marine Angling

Publication of "World Record Marine Fishes," 1978 edition, has been announced by the International Game Fish Association. It is the official guide to world saltwater fishing records and international angling regulations.

This edition has been expanded to 240 pages for the first time it includes illustrations and text for species on which the IGFA maintains records. The design and format are also new—line class listings are given in both metric and customary U.S. designations.

The data and articles are presented in seven sections, plus appendices listing worldwide marine game fish tagging programs, an illustrated guide to fishing knots and splices, a glossary of sportfishing terminology, and conversion tables for weights and measures for anglers.

Section 1, on the IGFA, gives the organization's officers and representatives, its philosophy and goals, membership programs, and data on the library of fishes. Section 2 presents a variety of short articles on marine game fishing by recognized marine angling authorities. Drawings and details of the officially recognized marine game fish from albacore to yellowtail are presented in Section 3. Data for each species includes the scientific name plus common names used in various nations, distribution, body features, coloration, behavior patterns, fishing methods and other general information on food value, natural history, sporting qualities, etc.

International angling rules formulated by the IGFA to promote ethical and sporting angling are covered in Section 4 while Section 5 details the annual IGFA fishing contest. World record categories, rules and preparation of record claims are given in Section 6. Finally, Section 7 lists the world records all-tackle and line class world records granted as of 1 January 1978 for 67 categories of marine game fishes.

The paperback volume is available from the International Game Fish Association, 300 East Las Olas Blvd., Ft. Lauderdale, FL 33316 for \$5.95.