

New NMFS Scientific Reports Published

The publications listed below may be obtained from either the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402, or from D822, User Services Branch, Environmental Science Information Center, NOAA, Rockville, MD 20852. Writing to the agency prior to ordering is advisable to determine availability and price, where appropriate (prices may change and prepayment is required).

NOAA Technical Report NMFS SSRF-747. Krouse, Jay S. "**Movement, growth, and mortality of American lobsters, *Homarus americanus*, tagged along the coast of Maine.**" September 1981. 12 p.

ABSTRACT

During the spring of 1975, 2,882 American lobsters, *Homarus americanus*, were tagged at three locations off Maine. Four months after release 65 percent of the lobsters had been returned and by the completion of the study in September 1977, 2,188 (75.9 percent) lobsters had been recaptured. Most returns (88 percent) occurred within a 5 n.mi. (9.3 km) radius of the release site and only about 1 percent of the recaptured lobsters had moved more than 10 n.mi. (18.5 km). Movement and catchability did not vary significantly by sex nor size. The majority of lobsters traveled shoreward or along the coast on a west to southwesterly course with minimal easterly movement. All long distance migrants (>20 n.mi. or 37.0 km) followed a south to southwesterly course. Extremely high annual instantaneous fishing mortality rates (4.0-7.3) estimated for each release area confirm the overexploitation of the Maine inshore lobster fishery.

NOAA Technical Report NMFS SSRF-748. Darcy, George H. "**Annotated bibliography of the conch genus *Strombus* (Gastropoda, Strombidae) in the western Atlantic Ocean.**" September 1981. 16 p.

ABSTRACT

This bibliography consists of 126 annotated references on the anatomy, biology, behavior, distribution, ecology, economic uses, fisheries and fishing methods, mariculture, physiology, predators, symbionts, systematics, and toxicity of seven species of the conch genus *Strombus* in the western Atlantic Ocean. A subject index is provided.

NOAA Technical Report NMFS SSRF-749. Langton, Richard W., and Ray E. Bowman. "**Food of eight north-west Atlantic pleuronectiform fishes.**" September 1981. 16 p.

ABSTRACT

The food of eight species of pleuronectid fishes, occurring in the northwest Atlantic, from Cape Hatteras, N.C., to Nova Scotia have been investigated for the years 1969-72. Gulf Stream flounder, *Citharichthys arctifrons*, are annelid and arthropod predators. Summer and fourspot flounders, *Paralichthys dentatus* and *P. oblongus*, prey on fish, squid, and arthropods. The diet of the windowpane, *Scophthalmus aquosus*, consists of arthropods with mysids, pandalid shrimp, and sand shrimp being especially important prey. Witch flounder, *Glyptocephalus cynoglossus*, are predators of benthic invertebrates, preying heavily on annelids. The primary prey of American plaice, *Hippoglossoides platessoides*, is echinoderms. Yellowtail flounder, *Limanda ferruginea*, are annelid and amphipod predators. Winter flounder, *Pseudopleuronectes americanus*, prey on annelids, coelenterates, and bivalve molluscs.

Puget Sound Fisheries, History, and Development

"**The Water Link,**" by Daniel Jack Chasan, published by the Washington Sea Grant Program in Seattle, is the foundation for a series of 14 books commissioned to provide useful information about the physical properties and biological aspects of Puget Sound, man's use of it, and his relationships to this unique region of the Pacific Northwest.

This first volume is something of a history of the Puget Sound region and, as it must, deals in large part with the commercial and recreational fisheries of the Sound and the various facets of development that impinge upon them. In it, the author chronicles the rise of the salmon canning industry, water pollution problems, oyster farming, changes in salmon and steelhead fishing, and the Indian fishing rights controversies of recent years. The text concentrates on specific episodes that convey the character of each period from 1853 to the late 1970's. Other competing uses of the Sound woven into the text include logging, industrial development, paper production, railroads, labor disputes, and more.

The series has been supported by NOAA's Puget Sound Marine Ecosystems Analysis (MESA) Project, the Environmental Protection Agency, and the National Sea Grant Program. This volume is the first to describe the history of the Sound in terms of its historic development and environmental conflict. And if the rest of the series is as well written, the mission should be successful.

Indexed, the 192-page paperbound volume also contains a chronological table of historical data and bibliographic notes. It is well illustrated with historic photographs and maps, and is available from the University of Washington Press, Seattle, WA 98105 for \$8.95 per copy.

Foreign Investment in U.S. Seafood Industry

Foreign investment in the U.S. seafood industry has increased in recent years,

but its extent and impact are uncertain. Some industry and public officials are concerned that dependency on foreign sources of capital is causing U.S. processors to lose control of the industry. Complete data on the extent of these investments is lacking, making analysis difficult.

Last year the U.S. General Accounting Office prepared a 74-page report entitled "Foreign Investment in U.S. Seafood Processing Industry Difficult to Assess" (CED-81-65). A copy of the report can be obtained free of charge by writing to: U.S. General Accounting Office, Document Handling and Information Services Facility, P.O. Box 6015, Gaithersburg, MD 20760.

Marine Game Fish and Their Records

The 1981 edition of "**World Record Game Fishes**," published by the International Game Fish Association, continues to grow as a source of interesting and authoritative data for sportsmen and scientists interested in marine game fish and fishing.

Annually, it provides a list of the international angling rules, world record requirements, and IGFA fishing contest rules and winners. And each year it catalogs an ever increasing number of world record game fishes. This edition has added the freshwater line class and fly fishing world records for over 70 species for the first time, marking the establishment of the first comprehensive international program for freshwater recordkeeping. Altogether, over 140 fresh- and saltwater species are included. And, of course, the saltwater line class and all-tackle records have been updated. Some 17 freshwater species are new to the records listing, along with four new saltwater game species: tope, *Galeorhinus galeus*; European bass, *Dicentrarchus labrax*; cubera snapper, *Lutjanus cyanopterus*; and conger, *Conger conger*.

It also contains new articles by noted fisheries scientists: C. Richard Robins outlines the formulation and use of com-

mon and scientific names of fishes; Robert J. Behnke explains fish hybridization and discusses its uses (or problems) in fishery management and fish records programs; and Harold H. Harvey describes the threat that acid rain poses to fish and fishing.

Noted outdoor writers Mark Sosin and Ken Schultz provide sound tips on angling photography and proper techniques for releasing fish unharmed, respectively, while master rod-builder Dale P. Clemens tells how to build a custom fishing rod.

To the standard text on marine game species, is added a guide to the salmonids and a synopsis of the tuna tribe. Appendices now include new data on game fish records of other nations and continents (heaviest catches recorded by major sportfishing organizations), a listing of the 50 state agencies providing angling information, and the guide to gamefish tag and release programs has been updated.

Other items include a rundown on the IGFA itself—its origin, philosophy, goals, and the Library of Fishes—plus a glossary of scientific and descriptive words, illustrations of the parts of fishes (and of the major saltwater sport fishes), fishing knot and splice instructions, conversion tables for weights and measures, and more.

The paperbound, 308-page volume is available from the IGFA, 3000 East Las Olas Boulevard, Fort Lauderdale, FL 33316 for \$6.95 postpaid in North America and \$8.50 in all other countries.

Sea Turtles in the Central West Atlantic

The Interregional Fisheries Development and Management Program, a component of the Western Central Atlantic Fishery Commission (WECAFC) has prepared a report entitled "The Status of Sea Turtles Stocks Management in the Western Central Atlantic." The Intergovernmental Oceanographic Commission Association for the Caribbean and Adjacent Regions (IOCARIBE), in cooperation with the United Nations Development Program, FAO, and Inter-

regional Fisheries Development and Management program has initiated a regional research program on turtles. The program will culminate in a Symposium on Sea Turtle Research (Populations and Socioeconomics) in the Western Central Atlantic Region which will be held in Costa Rica this year.

This report was prepared as part of the presymposium activities to summarize existing information and to review limitations in current knowledge on sea turtles in the region. Arranged by country, the report includes data on the status, nesting and foraging areas, population estimates, sanctuaries, and legislation concerning Atlantic turtles. Copies can be obtained from D. A. Lintern, Acting Project Director, WECAFC, P.O. Box 6-4392, Estafeta, El Dorado, Panama.

Report on Swedish Fisheries in 1980

Both the quantity (220,000 metric tons) and the value (\$95 million) of the Swedish fisheries catch increased during 1980 by approximately 16 and 10 percent, respectively, compared to 1979 levels. Substantial increases in the herring and cod catch contributed to this overall increase. Operating costs, however, have increased in 1980 and depressed earnings of Swedish fishermen and fishing companies. Freshwater fishermen face the problems of acidification of lakes and rivers and of competition from recreational fishermen. The expansion of the seafood processing industry has been undertaken in hopes of achieving self-sufficiency in this sector. It is also expected that the demand for fish intended for human consumption will increase as a result of the anticipated Government move to reduce or abolish subsidies for meat which will increase its price.

The U.S. Embassy in Stockholm has prepared a 16-page report on Swedish fishery developments during 1980. A copy of this report can be ordered for \$5.00 by requesting report number PB-81-226-318 from the U.S. Department of Commerce, NTIS, Springfield, VA 22161.