

## **Texas Reports Eye Seafood Consumers, Recreational Facilities, Sport Shrimping, and Marina Management**

Consumer attitudes toward seafood and socio-economic aspects of seafood consumption are explored in "An Analysis of Seafood Consumption Patterns and Product Perceptions in Texas" (TAMU-SG-75-216) by Samuel M. Gillespie and Michael J. Houston.

Consumers, say the authors, view seafood as a nutritious and relatively economical meat item although they do not eat it in quantities comparable to red meats and poultry. Ease of preparation and family tastes reportedly helped determine attitudes affecting seafood consumption.

Persons who lived near (within 50 miles) of the coast while growing up were found more likely to eat seafood in the home later in life, and the frequency of seafood consumption increased as status (job, education, income) improved. The authors report finding no discernible market segment for finfish except "coastal proximity while growing up." They suggest recipe demonstrations and in-store sampling programs as an effective—though expensive—way to increase family seafood consumption.

"A Recreational Guide to the Central Texas Coast" (TAMU-SG-75-606) by Edwin Doran, Jr. and Bernard P. Brown, Jr. is an extensive compilation of some 528 facilities of interest to Texas marine recreationists. Described and mapped in its 132 pages are the facilities and coastal area between, but excluding, Galveston and Rockport. Neither were listings sought in such larger cities as Freeport, Palacios, and Port Lavaca.

Facilities listed are mostly within 10 miles of the coastline. The booklet identifies motels, launch ramps, and marinas with a location code number shown on a map at the first of each of the 11 sections. Listings also include restaurants, parks, campgrounds, refuges, boat repair shops, grocery/liquor stores, bars, filling stations, hotels, bait shops, and boat rentals.

"A Feasibility, Management and Economic Study of Marinas on the Texas Gulf Coast" (TAMU-SG-76-201)

by John L. Compton and Robert B. Ditton disputes several widely held beliefs about marinas on the Texas Gulf Coast. Of the 29 marinas studied all were individually owned or held by groups of 3-4 people. No major corporations operated any marinas and there was no evidence that the businesses changed hands quickly.

The study further suggests that marinas would make attractive financial investments and that the operators were not using them for tax write-offs. Said the authors, ". . . most of the marinas studied were operated by people working long and hard to earn a living from them." No new marinas were developed along the Texas Gulf Coast in the 9 years prior to the 1974 study, although boat sales had boomed nationally.

The study also provides data on marina profitability, real estate costs and interest charges, construction costs, boat storage and pricing strategies, marina site considerations, physical planning, environmental controls, labor and management constraints, and other economic details.

The above three booklets, \$2.00 each, can be ordered by name and publication number from the Department of Marine Resources Information, Center for Marine Resources, Texas A&M University, College Station, TX 77843.

How anglers can get fresh shrimp dinners, bait, and have fun in the process is covered in a new Texas A&M University bulletin. "Sport Shrimp Trawling" (TAMU-SG-76-503) by Gary Graham outlines the necessary equipment, state regulations, how to rig and set the trawl and otter door, and how to repair the net. Graham is associate marine fisheries specialist for the Texas Agricultural Extension Service at the University.

For many, this will be a new pursuit and a refreshing diversion for anglers who own boats, Graham says. Necessary equipment (trawl, otter doors, tow lines) will cost from \$100 to \$150, depending on the size of the trawl.

The bulletin is available free of

charge from the Center for Marine Resources, Texas A&M University, College Station, TX 77843. Requests should include title and publication number.

## **Lake Superior's Fish and Fisheries Reviewed**

Publication of "Fish of Lake Superior" (WIS-SG-76-124) has been announced by the University of Wisconsin Sea Grant Program. The 36-page, small format (6 × 9 inches) booklet outlines the history of the Lake Superior fisheries and gives thumbnail sketches of 23 species that inhabit the lake, including the coho, chinook, and pink salmon.

Data include approximate adult size, color, common names, some natural history notes, and the historical anecdotes. Each species is illustrated with a black and white drawing adapted from the NMFS full-color wall chart, "Fishes of the Great Lakes."

"Fish of Lake Superior" was written by Warren Downs, associate editor of the University of Wisconsin's Sea Grant Program. The booklet is available from the Sea Grant Communications Office, 1800 University Avenue, Madison, WI 53706. An earlier booklet, "Fish of Lake Michigan" (WIS-SG-74-121) is also available from the same office.

## **Gulf of Mexico Water Temperature Data Printed**

A compilation of Gulf of Mexico water temperature data gathered over the past 20 years has been published by the Sea Grant College Program at Texas A&M University. Authors of the marine advisory bulletin, "Water Temperature on the Texas-Louisiana Shelf," are Paul C. Etter, graduate student in oceanography at Texas A&M, and John D. Cochran, associate professor of oceanography at A&M.

"The publication summarizes a vast amount of temperature data. It will be useful in studies of marine life and in continuing offshore oil and mineral operations," said Etter. It is available from the Sea Grant College Program, Texas A&M University, College Station, TX 77843. Request publication TAMU-SG-75-604.

## Books Define Fish Quality, Preservation

High quality, appealing fish benefit everyone from the fisher to the consumer. And the consumer, writes J. J. Connell, Assistant Director of the United Kingdom's Torry Research Station, Aberdeen, Scotland, is the ultimate arbiter of fish quality. Connell has authored "**Control of Fish Quality**" which examines, in non-technical language, ways to gauge and protect fish quality.

The opening chapter defines fish quality as "all those attributes which consciously or unconsciously the fish eater or buyer considers should be present." Chapter two examines intrinsic factors that govern fresh fish quality and chapters three, four, and five discuss fish quality deterioration, fish product defects, factors that affect such changes, and how they can be controlled.

The author reviews sensory, microbiological, mechanical, instrumental, statistical, and laboratory methods of assessing fish quality in chapter six. Other chapters include industrial quality control and the organization of quality control and official inspection in such countries as Canada, European Economic Community, India, Japan, Norway, and the United States. Various codes of practice and standards for commercial fish products are also listed.

Well illustrated, the book is not limited to just British fisheries and would be useful to many. It has 179 pages, 44 illustrations, is of small (5½ × 8½ inches) format, and is indexed and contains numerous suggested references, by chapter, for further reading. It is published by Fishing News (Books) Limited, 23 Rosemount Avenue, West Byfleet, Surrey, England, and costs £6.50 plus five percent for postage and handling. The firm also offers its catalog of books on many

aspects of fisheries aquaculture and commercial fishing.

A revised edition of "**Ice in Fisheries**," by J. J. Waterman and J. Graham, has been published by FAO. The authors are with the Torry Research Station, Aberdeen, Scotland. Prepared for FAO's Fish Production and Marketing Service, the 57-page soft-bound booklet has been popular in both developed and developing countries.

The authors discuss the preservative effect of chilling, the nature and properties of ice, ice making equipment and ice plants, other chilling methods (i.e., refrigerated seawater and super-chilling), chilling fish at sea and on land, temperature measurements, properties of water and ice, and lists metric, British and SI Unit conversion factors. A well-illustrated, practical volume, "Ice in Fisheries" is available at \$3.50 per copy from Unipub, Box 433, Murray Hill Station, New York, NY 10016.

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## Foreign Fishery Note Back Issues Available

The NMFS Office of International Fisheries has a limited supply of several previously issued "Foreign Fisheries Leaflets." Anyone interested in receiving a free copy of the leaflets listed below may order them from the Division of International Fisheries Analysis (F41), Office of International Fisheries, NMFS, NOAA, U.S. Department of Commerce, Washington, DC 20235.

Requests will be honored as long as the supply lasts. Please enclose a self-addressed label to facilitate mailing. The available leaflets include: Persian Gulf Fisheries; The Commercial Shrimp Potential in West Africa, from Dakar to Douala; FFL 26—Industrial Outlook Report of the Taiwan Fishing Industry, 1969; FFL 56A—Norway, Fishery Landings, 1967-1970; FFL 120—Fisheries of the Democratic Republic of the Congo; FFL 150—The Fisheries of Equatorial Guinea, 1970; FFL 189—Canada's Fisheries Closing Lines, 1971; FFL 72-6—The Commercial Fisheries of Portugal, 1970; FFL 72-11—Thai-

land Fishery Trends, 1972; FFL 73-12—Marine Fisheries of the Federal Republic of Germany, 1970-1971; FFL 73-16—Review of the Indonesian Shrimp Fishery, and its Present Developments; FFL 73-21—Fisheries of Chile, 1971; FFL 74-3—Fisheries of the Gambia, 1973; FFL 74-9—Fisheries of Tanzania, 1972; and FFL 74-12—Fisheries of the Cameroons, 1973.

## A Sportsman's Guide to Blue Crabs and Crabbing

On the U.S. Atlantic coast the blue crab is avidly sought by sport crabbers with varying degrees of success. It is also accessible to those who know its habits and crabbing techniques. "**Successful Crabbing**," by Ernest J. Cottrell, Frank L. Mellaci, and John B. Cottrell, is a concise source of information on the life, and the catching, cleaning, and cooking of the blue crab.

The book is divided into three parts.

The crab's life, from birth through adulthood, is related in Part I. Part II, Crabbing for Fun, tells various ways to catch hard crabs (i.e., traps, seining, hand-lining, and taking them from piling under docks and bridges). Techniques for taking soft-shelled crabs include crabbing from a boat, walking or wading the edge of an estuary, and seining.

Part III, Cooking and Eating Crabs, lists techniques for both hard- and soft-shelled crabs. Lump (or backfin), flake, and claw meats are described. Cooking and picking methods are described and cleaning techniques for both hard- and soft-shelled crabs are illustrated with photographs. Recipes for both types are also included.

This is a good but brief (76-page) basic guide to sport crabbing. For those who want to know more about the blue crab, and extensive bibliography is provided. A glossary helps with the technical terms used. "Successful Crabbing" is published by, and available from, the International Marine Publishing Company, 21 Elm Street, Camden, ME 04843 and costs \$5.95.