

re-establishing abalone populations in other areas of the coast where their numbers have decreased in recent years.

The spot chosen by the Department of Fish and Game for the seeding was Abalone Cove, which received the name because of the great numbers of red abalones that once could be found there. Abalones and the kelp that helped support them disappeared from the cove in the early 1960s, probable victims of a succession of warm water years and pollution.

Since that time more effective controls have lessened the pollution hazard, and Fish and Game marine biologists have succeeded in establishing a kelp bed in the cove with transplants from Santa Catalina Island. Fragments of drifting kelp are an essential part of the abalone's diet as it matures. At their present stage of growth, however, the principal food of the juvenile abalones will be diatoms, minute, one-celled algae which are plentiful in the cove.

The juvenile abalones were flown from San Luis Obispo to Long Beach, then transported by boat to Abalone Cove. All survived the trip without incident. Biologists selected a small

reef in the cove as site for the seeding. This natural habitat will be augmented by the addition of concrete blocks, which will also help to provide hiding places from predators, such as starfish. Before placing the abalones in their new home, Fish and Game divers cleared the site of sea urchins which compete with abalone for food.

Two age groups of abalone were put on the reef. The older abalones, about 1½ years, measure from 1 to 2 inches in diameter. The younger abalones, about nine months old, measure on the average a little less than ½ inch in diameter. The older age group was purchased by the National Marine Fisheries Service and turned over to the DFG for planting under a cooperative program. The smaller abalones were purchased by the department.

Twenty percent of the older abalones have been tagged with stainless steel tags. The younger abalones, too small to be tagged, have been "color coded" by feeding them special foods which create color patterns in their shells that biologists can identify. The project at Abalone Cove offers no immediate bonanza to the sports diver. It will be 7 or 8 years before the red

abalones reach a legal size of 7 inches at greatest diameter.

## TEXAS TO GET NEW COASTAL FISHING PIER

Texas fishermen are due another top-quality saltwater fishing spot. The Texas Parks and Wildlife Commission recently approved a plan to convert Queen Isabella Causeway in Cameron County into a fishing pier. The causeway is to be acquired from the Texas Highway Department.

The Highway Department offered the causeway to the commission because of a new causeway being built just north of the old one. The Cameron County pier will be the third such fishing pier acquired in this way. One is in Port Lavaca and another is near Rockport on Copano Bay.

Pending favorable results of a public hearing to be held June 6, concerning the project, the pier would include fish-attracting lights, restrooms, a concession building, parking facilities and docking facilities.

The concession facilities will offer bait and tackle and vending machines.

### Publications

## Recent NMFS Scientific Publications

Data Report 82. Cook, Steven K., James F. Hebard, Merton C. Ingham, Ellsworth C. Smith, and Carlos Afonso Dias. "Oceanic conditions during the Joint Investigation of the Southeastern Tropical Atlantic (JISETA)—February, April, and September-December 1968." 358 p. (6 microfiche). For sale by U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Rd., Springfield, VA 22131.

Abstract—Oceanic conditions in the upper 1,000 meters in the water column off tropical western Africa are portrayed. The portrayal is comprised of vertical sections of temperature, salinity, sigma-t, oxygen, and phosphate. A description of methods of sampling, analysis, data processing, and quality control is presented.

Data Report 83. Lyon, James M.,

and Kenneth N. Baxter. "Sample catches of penaeid shrimp taken by trawling in the northwestern Gulf of Mexico, 1961-65." 50 p. (1 microfiche). For sale by U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Rd., Springfield, VA 22131.

Abstract—Data from a 5-year shrimp trawling survey of the northwestern Gulf of Mexico are reported by station, time, and depth. Numbers of 12 species of penaeid shrimp taken during 113 cruises are recorded.

NOAA Technical Report NMFS SSRF-676. Penn, Erwin S. "Price spreads and cost analyses for finfish and shellfish products at different marketing levels." March 1974. 74 p.

Abstract—The rapid increase of fish prices has recently caused public concern. To find the cause of the difference between the price the fisherman receives for his product and the ultimate price paid by the consumer, the report analyzes the distribution of the consumer's dollar paid to the retailer as well as to the wholesaler, processor, and fisherman.

Selected for this study are seven finfish, two canned fish, and four shellfish products. The difference or margin between selling and purchasing prices of each level and the share of the consumer's dollar by each level and each cost component are calculated for each fish product. The report also analyzes the costs and profits incurred by each marketing function and describes the major influence on margin differences.

The objective of the study is to give individual firms in the fishery a systematic guide to examine their margins, costs, and profits for each fish product; compare them with



the data presented in this study, as national averages for the same product; and determine whether there is room for improvement for their performance and services.

## **USSR, Polish Fishery Volumes Available**

A limited number of the following Russian and Polish publications translated and printed for the National Marine Fisheries Service (NMFS) under the Special Foreign Currency Program (financed with Public Law 480 funds) are available for free distribution from the Translation Program, Office of International Fisheries, F43, NMFS, NOAA, U.S. Department of Commerce, Washington, D.C. 20235. Please request by translation (TT) number. Translation numbers, titles, and authors include:

TT 69-59016, **Soviet-Cuban Fishery Research**, Bogdanov, A. S. (editor); TT 70-50028, **Exploratory Fishing and Scouting** by Yudovich, Yu. B., and A. A. Baral; TT 70-50065, **Vision and Near Orientation of Fish**, by Protasov, V.R.; TT 70-54020, **Pinnipeds of the North Pacific**, Arsen'ev, V. A., and K. I. Panin (editors); TT 70-55114, **Crayfish**, by Kossakowski, Jozef; TT 70-55115, **Manual for Crayfish Catchers**, by Paladino, Jerzy.

## **Marine Insurance Guidelines Noted**

A revised edition of a marine insurance guide is now available from the University of Rhode Island Sea Grant program. Author Samuel Snow, of the Medway Marine Corp., said in the introduction that the **Commercial Marine Insurance Guide** is designed to help steer commercial boat owners and marine businessmen through the complex field of marine insurance. Mr. Snow was assisted by Norman F. Wahl, of the American Universal Insurance Co.

The guide tells about the scope of available marine insurance coverage both to persons buying it and to insurance agents and brokers who may be less familiar with the subject. It can also serve as a checklist of insurable hazards that are common to boat dealers, boat service agencies, marine

supply dealers, dry dock and boat repair firms, and others.

**Commercial Marine Insurance Guide**, Publication P11, is available at no cost. Requests should be mailed to NEMRIP, University of Rhode Island, Narragansett Bay Campus, Narragansett, RI 02882.

## **ECONOMICS OF USSR FISHERIES PRINTED**

**Economics of the Soviet fishing industry**, by N. P. Sysoev, "Pishchevaya Promyshlennost" Publishers, Moscow, 1970. This is the 1970 edition of the standard Soviet textbook on socialist fisheries economics. It covers a broad range of topics, including basic history of the fishing industry of the U.S.S.R., the role of the fishing industry in the Soviet economy, the general structure of economy, and Soviet planning, management, and economic principles. Sysoev is primarily concerned with the technical, material, and theoretical bases of the fishing industry, rather than with actual fleet size and management or fishing strategy. Although the text contains data (the latest being for 1968-1969) on catch, CPUE (per

vessel and per crew member), plant production capacity, number of vessels and their capacity, it tells little about actual deployment and strategy of the fishing fleets.

There are, however, excellent and detailed discussions of prime cost and price formation, both essential to understanding Soviet supply and demand conditions for fishery products. Discussions of capital investment, fixed assets, and circulating capital within the fishing industry provide a solid theoretical base for understanding trends in the development of Soviet fisheries. The translation, 386 p., was produced by the Israel Program for Scientific Translations (IPST) for the National Marine Fisheries Service under the Special Foreign Science Information Program (financed with Public Law 480 funds). It is available in paper copy for \$8.25 (microfiche \$1.45) from the National Technical Information Service (NTIS), Springfield, VA 22151. Cite accession number TT 72-50086 when ordering. A limited number of free copies is available from the NOAA Translation Program, Office of International Fisheries, F4, NMFS, NOAA, Washington, DC 20235.

*In Brief . . . .*

## **Research, Appointments, Milestones**

. . . .Formal establishment of the **Great Lakes Environmental Research Laboratory** last summer brought all NOAA Great Lakes researchers under one roof at the Ann Arbor, Mich. facility, the Commerce Department reports. Scientists there represent the National Ocean Survey's Lake Survey Center and the International Field Year for the Great Lakes (IFYGL) . . . .

. . . .To determine the ratio of sport and commercial marine fish catches, **Texas is expanding its salt water creel survey** from Aransas Bay to the Galveston, San Antonio-Espiritu Santo, and Upper Laguna Madre Bay systems, reports the Parks and Wildlife Department. The April Aransas Bay survey showed about 265 sport fishermen per day landing on average of 329 pounds

of fish. Boat fishermen took some 10 pounds per person while lighted pier and wade fishermen averaged about 1 pound each . . . .

. . . . **A record 121,579 tons of raw anchovies** were landed for commercial reduction during California's 1973-74 season, Department of Fish and Game figures reveal. Last year 75,039 tons of anchovies were landed there . . . .

. . . . **A cooperative state-local coastal area management program** is called for by North Carolina's Coastal Area Management Act of 1974, according to **The Marine Newsletter**. Planning initiatives rest locally while the state has mainly a supportive, standard-setting and review role—unless local