World Fishery Trade Told for 1978

The enactment of 200-mile marine zones by coastal countries has resulted in a significant increase in the international trade of fishery commodities. Over $10.5 billion worth of edible fish was imported in 1978, a 21 percent increase over the $8.8 billion imported in 1977. West European countries imported $3.8 billion and Japan $3.0 billion in 1978, a 23 and 32 percent increase over 1977 imports, respectively. The United States, the other major international seafood importer, on the other hand, bought $2.2 billion in 1978, a 7 percent increase over 1977.

Developed countries have been the major beneficiaries of the new 200-mile zones. Shipments of seafood products from developed countries totaled $6.8 billion in 1978, a 21 percent increase from the $5.6 billion exported in 1977. Most of this increase was due to expanded shipments from Canada and the United States, although both the Netherlands and Ireland also reported sharp increases.

Developing countries, on the other hand, have reported export increases which have probably not even made up for inflation. Shipments of seafood products from developing countries totaled $3.4 billion, only an 8 percent increase over 1977 shipments of $3.1 billion. Almost all of the increase was due to expanded exports from Latin American countries, primarily Uruguay, Argentina, Chile, Peru, and Mexico.

The Food and Agriculture Organization (FAO) of the United Nations has prepared a 12-page study of the world trade in fishery products for 1978. The international trade in frozen seafoods (groundfish, other finfish, tuna, shrimp, squid, and octopus), dried fish, canned fish, fish meal, and oil are described in separate sections. A copy of the report can be obtained by requesting the attachment to IFR-80/15 from NMFS Regional Statistics and Market News Offices, enclosing a self-addressed mailing label. (Source: IFR-80/15.)

CHILE FISHING LICENSE REGULATIONS OUTLINED

Chile has established a de facto procedure whereby all offshore fishing must be done by a Chilean company, but not necessarily one owned by Chilean citizens. Foreign-flag vessels are not excluded by law from obtaining licenses, but in practice such licenses have not been issued since 1977. Parallel legislation under the merchant marine laws requires 51 percent Chilean ownership (among other conditions) for vessels granted Chilean registration. A liberal foreign investment law provides for tax-free importation of the capital equipment necessary to set up fishing concerns. Tuna fishing, however, is an exception and enjoys special legal provisions which permit licensing of foreign vessels to fish in Chilean waters.

Although no specific law forbids fishing in Chilean waters by foreign-flag vessels, no fishing licenses have been granted to vessels since 1977. At present, holders of unexpired licenses are the only foreigners authorized to carry out fishing activities in national waters. (As explained herein, tuna fishing is an exception.) In recent years, the Chilean Government has hardened its de facto exclusionary policy; it is not expected to soften its stance in the future, and may legitimize it soon by appropriate legislation. Ostensibly, fishing licenses can be obtained free of charge on a vessel-by-vessel basis from the Sub-secretariat for Fisheries (Director: Roberto Verdug). To obtain a license, an applicant must indicate: 1) Name and particulars of vessel, 2) the maritime area of operations, 3) the species to be fished and the expected catch tonnage. The Sub-secretariat has the power to grant licenses without restrictions and can also stop all fishing activities (for any fish species or for a fishing area) at its discretion for environmental or any other reasons.

Tuna fishing by foreign vessels is allowed under Decree No. 130 of the Ministry of Agriculture which was issued on 20 March 1959. Some legal experts claim that this law has been abrogated, but the Sub-secretariat maintains that it is still in effect and has continued granting licenses under its powers. No change is expected in this procedure. Decree 130 provides for licenses to be granted to foreign tuna vessels under the following conditions: 1) Payment of an initial license fee of U.S. $800.00 and 2) payment of a subsequent fee of U.S.$60.00 per net registered vessel ton. The license is valid for 100 days, at the end of which it may be renewed upon payment of the $60.00 per net-registered-ton fee. There are no tax liabilities other than the license fee itself and import duties on the catch which is considered as foreign imports to Chile for customs purposes.

Decree No. 432 of the Ministry of Economy states that only factory vessels of Chilean registry may operate in the country's territorial waters. (The only exception to this rule is in the 200-mile zone around Easter Island.) The Director Del Litoral (Commandant of the Coast Guard) may, however, grant restricted licenses to "special vessels" for reasons of: 1) Transfer of technology, 2) research, and 3) the development of unexploited resources, or the unavailability of Chilean facilities. These licenses are difficult to obtain and the Direccion Del Litoral has been increasingly reluctant to grant these restricted licenses.

In general, foreign firms and individuals wishing to register and operate factory and other fishing vessels under Chilean flag must comply with the fol-

lowing: 1) Form a company domiciled in Chile; 2) Comply with the requisites of Decree Law No. 2222 which state inter alia that vessels flying the Chilean flag must have 51 percent Chilean ownership and a Chilean captain and crew (the last two requirements may be waived for the same reasons "special vessels" above are granted exemptions from flying the Chilean flag); 3) Fishing vessels over 3,600 t are exempt from customs duty while other types of vessels may be imported pursuant to a foreign investment agreement. Under special circumstances, these vessels could be relieved of value added tax and customs duties, but are subject to all the provisions of the Foreign Investment Act (Decree Law No. 600); and 4) Onshore processing plants are not affected by maritime laws and are subject to the normal foreign investment procedures and regulations. (Source: U.S. Embassy, Santiago; IFR-80/2.)

Publications

New NMFS Scientific Reports Published

The publications listed below may be obtained from either the Superintendent of Documents (address given at the end of title paragraph on affected publications) 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-734. High, William L., and Donald D. Worlund. "**Escape of king crab, *Paralithodes camtschatica*, from derelict pots**." May 1979. 11 p.

Abstract

Loss of 10 percent per season of pots (traps) in the Alaskan fishery for the king crab, *Paralithodes camtschatica*, has raised the question of possible loss of crabs and fishes to the derelict, or lost, pots which continue to fish. We conducted a series of experiments during 1974 and 1975 in which tagged king crab were placed in several types of pots and returned to the bottom (soaked) for periods of 1-16 days. As controls, we released some tagged king crab in Chiniak Bay, Kodiak Island, Alaska. Tagged crab missing from the pots at time of recovery were credited with escape.

The experiments demonstrated that 92 percent of undersize and 80 percent of legal-size king crab readily escaped the derelict pots. Mortality among crab held in pots for various experiments ranged up to 12 percent. Crab that escaped within 1-4 days were recovered by commercial fishermen at about the same rate as those released in Chiniak Bay near the experiment site. However, those released after a 10- to 16-day confinement were returned at a much lower rate. Some commercially valuable fishes—such as Pacific halibut, *Hippoglossus stenolepis*—were also caught in the experimental pots.

NOAA Technical Report NMFS SSRF-738. Reid, R. N., A. B. Frame, and A. F. Draxler. "**Environmental baselines in Long Island Sound, 1972-73**." December 1979. 31 p. For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

Abstract

Quasi-synoptic surveys of water column temperature, salinity, nutrients and dissolved oxygen, sediment grain sizes and organic content, and benthic macrofauna were conducted throughout Long Island Sound in July-August 1972 and April and September 1973. Temperatures were fairly uniform both vertically and horizontally except for some vertical stratification in July-August 1972. Salinities increased gradually from east to west, while depth-related differences were minor. Concentrations of all nutrients measured indicated that inputs at the western end dominated nutrient distributions for the Sound. Dissolved oxygen decreased from east to west and with increasing water temperature. Bottom dissolved oxygen values below 2 mg/liter were recorded at several stations in the western Sound in summer 1972. As a rule, sediments of deep waters in the central and western Sound consisted of silts and clays, whereas sands predominated along the Long Island shoreline and in the eastern basin. Sediments organic matter reached highest values (to 10 percent) in the westernmost Sound. Three assemblages of benthic macrofauna were identified via cluster analyses of 1972 data: A bivalve (especially *Mulinia lateralis*) dominated group in muddy, deepwater regions; a shallow sandy assemblage in which the bivalves *Spisula solidissima, Tellina agilis,* and *Ensis directus* predominated; and a third assemblage transitional in both sediment characteristics and species composition, but with increased dominance by several polychaete species. The mud-bottom and transitional fauna underwent large decreases in numbers of species and individuals from 1972 to 1973.

NOAA Technical Report NMFS SSRF-739. Davis, Clarence W. "**Bottom-water temperature trends in the Middle Atlantic Bight during spring and autumn, 1964-76**." December 1979. 13 p.

Abstract

Annual variations of bottom-water temperatures on the continental shelf between Cape Cod and Cape Hatteras were examined for the spring and autumn from 1964 to 1976. Temperatures generally were highest since 1972 during both seasons. For waters between Cape Cod and Hudson Canyon, maximum temperatures occurred in the spring of 1976 (8.3°C) and autumn of 1972 (12.8°); between Cape Hatteras and Hudson Canyon, temperatures peaked in the spring of 1974 (9.0°C) and the autumn of 1972 (15.7°C). Minimum temperatures were in the spring of 1970 (5.1°C) and autumn of